

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

VERTEX, INC.

(Exact name of registrant as specified in its charter)

Pennsylvania (State or other jurisdiction of incorporation or organization)	7372 (Primary Standard Industrial Classification Code Number)	23-2081753 (I.R.S. Employer Identification Number)
---	--	---

2301 Renaissance Blvd
King of Prussia, Pennsylvania 19406
(800) 355-3500
(Address, including zip code, and telephone number, including
area code, of registrant's principal executive offices)

David DeStefano
President, Chief Executive Officer and Chairperson
Vertex, Inc.
2301 Renaissance Blvd
King of Prussia, Pennsylvania 19406
(800) 355-3500
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Marc D. Jaffe
Joel H. Trotter
Latham & Watkins LLP
555 Eleventh Street, NW
Washington, DC 20004
(202) 637-2200

Bryan T. R. Rowland
Vertex, Inc.
2301 Renaissance Blvd
King of Prussia, PA 19406
(800) 355-3500

Gregory A. Fernicola
Ryan J. Dzierniejko
Skadden, Arps, Slate, Meagher &
Flom LLP
One Manhattan West
New York, NY 10001
(212) 735-3000

Approximate date of commencement of proposed sale to public:
As soon as practicable after this Registration Statement is declared effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price ⁽¹⁾⁽²⁾	Amount of Registration Fee ⁽²⁾
Class A common stock, \$0.001 par value per share	\$ 100,000,000	\$ 12,980

- (1) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended (the "Securities Act").
 - (2) Includes the additional shares that the underwriters have the option to purchase from the Registrant.
-

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act, or until the registration statement shall become effective on such date as the Securities and Exchange Commission (the "SEC"), acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion dated July 2, 2020

Shares



VERTEX, INC. Class A Common Stock

This is Vertex, Inc.'s initial public offering. We are selling _____ shares of our Class A common stock. We expect the public offering price to be between \$ _____ and \$ _____ per share. Currently, no public market exists for our Class A common stock. After pricing of the offering, we expect that the shares of our Class A common stock will trade on the Nasdaq Global Market under the symbol "VERX."

Following this offering, we will have two classes of authorized common stock, Class A common stock and Class B common stock. The rights of the holders of Class A common stock and Class B common stock will be identical, except with respect to voting, conversion and transfer rights. Each share of Class A common stock will be entitled to one vote per share. Each share of Class B common stock will be entitled to ten votes per share and will be convertible into one share of Class A common stock. Outstanding shares of Class B common stock will represent approximately _____ % of the voting power of our outstanding capital stock immediately following the completion of this offering, with members of our founder's family, and their respective affiliates, holding approximately _____ % of the voting power of our capital stock following this offering. As a result, we will be a "controlled company" within the meaning of the corporate governance standards of the Nasdaq Global Market.

We are an "emerging growth company" as defined under the federal securities laws and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings.

Investing in our Class A common stock involves risks. See the "Risk Factors" section beginning on page 16 of this prospectus for factors you should consider before investing in our Class A common stock.

	Per Share	Total
Public offering price	\$ _____	\$ _____
Underwriting discounts and commissions ⁽¹⁾	\$ _____	\$ _____
Proceeds, before expenses, to us	\$ _____	\$ _____

(1) See "Underwriting" for additional disclosure regarding underwriting compensation and estimated offering expenses payable by us.

To the extent that the underwriters sell more than _____ shares of our Class A common stock, the underwriters have the option for a period of 30 days to purchase up to an additional _____ shares of Class A common stock from us at the initial public offering price less underwriting discounts and commissions.

Neither the Securities and Exchange Commission nor any state securities commission has approved, or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver shares of our Class A common stock against payment in New York, New York on _____, 2020.

(in alphabetical order)

Goldman Sachs & Co. LLC

Morgan Stanley

BofA Securities

Citigroup

Jefferies

JMP Securities

Stifel

William Blair

CastleOak Securities, L.P.

The date of this prospectus is _____, 2020.



Our vision is to accelerate
global commerce.

Pioneers in tax technology for 40 years

4,000+

Customers⁽¹⁾

> 130

Countries supported⁽¹⁾

> 50%

of the Fortune 500⁽¹⁾

\$322MM

2019 Revenue

86%

Subscription revenue⁽²⁾

109%

Net revenue retention rate⁽¹⁾

\$7Bn

Total addressable market⁽³⁾

Notes:

1. As of 12/31/2019

2. Based on 2019 revenue

3. TAM based on internal estimates

Companies around the
world trust our solutions to
transact, comply and grow
with confidence.

Connecting with what matters most



ONE TEAM
BUILT UPON
CORE VALUES
& COMMON
PURPOSE



*We build trusted
relationships at
work, in business
and in our communities.*

TABLE OF CONTENTS

	<u>Page</u>
Market and Industry Data	i
Trademarks	i
Explanatory Note	i
Basis of Presentation	i
S Corporation Status	ii
Non-GAAP Measures and Other Data	ii
Prospectus Summary	1
Risk Factors	16
Cautionary Note Regarding Forward-Looking Statements	39
Use of Proceeds	41
Dividend Policy	42
Capitalization	43
Dilution	46
Selected Consolidated Financial Information	48
Management's Discussion and Analysis of Financial Condition and Results of Operations	51
Business	84
Management	100
Executive and Director Compensation	106
Certain Relationships and Related Party Transactions	123
Principal and Selling Stockholders	127
Description of Capital Stock	129
Shares Eligible for Future Sale	134
Material U.S. Federal Income Tax Consequences to Non-U.S. Holders	136
Underwriting	140
Legal Matters	148
Experts	148
Where You Can Find More Information	148
Index to Consolidated Financial Statements	F-1

Neither we, the selling stockholders, nor the underwriters have authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses we have prepared or that have been prepared on our behalf, or to which we have referred you. Neither we, the selling stockholders nor the underwriters take responsibility for, and cannot provide assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares offered by this prospectus, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside the United States: Neither we, the selling stockholders nor the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of Class A common stock and the distribution of this prospectus outside of the United States.

MARKET AND INDUSTRY DATA

The market data and other statistical information used throughout this prospectus are based on independent industry publications, reports by market research firms or other published independent sources. Certain market, ranking and industry data included in this prospectus, including the size of certain markets, our size or position and the positions of our competitors within these markets, and our solutions relative to our competitors, are based on estimates of our management. These estimates have been derived from our management's knowledge and experience in the markets in which we operate, as well as information obtained from surveys, reports by market research firms, trade and business organizations and other contacts in the markets in which we operate. Unless otherwise noted, all of our market share and market position information presented in this prospectus is an approximation based on management's knowledge. References herein to our being a leader in a market refer to our belief that we have a leading market share position in each such specified market, unless the context otherwise requires. In addition, the discussion herein regarding our various markets is based on how we define the markets for our solutions.

This prospectus includes industry data that we obtained from periodic industry publications. Such data includes materials published by the Organisation for Economic Cooperation and Development ("OECD"), including the 2019 OECD tax database ("2019 OECD Tax Database") and OECD Revenue Statistics—the United States (2019) ("OECD Revenue Statistics"). Industry publications generally state that the information contained therein has been obtained from sources believed to be reliable, but there can be no assurance as to the accuracy or completeness of included information. We have not independently verified any of the data from third-party sources, nor have we ascertained the underlying economic assumptions relied upon therein.

TRADEMARKS

We own or otherwise have rights to the trademarks, copyrights and service marks, including those mentioned in this prospectus, used in conjunction with the marketing and sale of our solutions. This prospectus includes trademarks, such as VERTEX™ and O Series™, which are protected under applicable intellectual property laws and are our property and/or the property of our subsidiaries. This prospectus also contains trademarks, service marks, copyrights and trade names of other companies, which are the property of their respective owners. We do not intend our use or display of other companies' trademarks, service marks, copyrights or trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies. Solely for convenience, our trademarks and tradenames referred to in this prospectus may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and tradenames.

EXPLANATORY NOTE

Vertex, Inc., the registrant whose name appears on the cover page of this registration statement, is a Pennsylvania corporation. Prior to the sale and issuance of any shares of Class A common stock subject to this registration statement, Vertex, Inc. will reincorporate as a Delaware corporation and will retain its current name, Vertex, Inc.

BASIS OF PRESENTATION

References herein to the "Company," "Registrant," "we," "us," "our" and "our company" refer, prior to the reincorporation, to Vertex, Inc., a Pennsylvania corporation, and, after the reincorporation, to Vertex, Inc., a Delaware corporation.

Certain monetary amounts, percentages and other figures included in this prospectus have been subject to rounding adjustments. Accordingly, figures shown as totals in certain tables or charts and

figures expressed as percentages in the text may not total 100% or, as applicable, when aggregated may not be the arithmetic aggregation of the percentages that precede them.

S CORPORATION STATUS

Since October 1, 1985, we have elected to be taxed for U.S. federal income tax purposes as an "S corporation" or "S Corporation" under the provisions of Sections 1361 to 1379 of the Internal Revenue Code of 1986, as amended (the "Code"). As a result, our taxable earnings have not been subject to, and we have not paid, U.S. federal income tax, and no provision or liability for U.S. federal income tax has been included in our consolidated financial statements. Instead, for U.S. federal income tax purposes, our taxable income is "passed through" to our existing stockholders who are required to pay income tax attributable to such income. Unless specifically noted otherwise, no amount of our consolidated net income or our earnings per share presented in this prospectus, including in our consolidated financial statements and the accompanying notes appearing in this prospectus, reflects any provision for or accrual of any expense for U.S. federal income tax liability for any period presented. In connection with this offering, our status as an S Corporation will terminate. Thereafter, our taxable earnings will be subject to U.S. federal income tax and we will bear the liability for those taxes.

NON-GAAP MEASURES AND OTHER DATA

We believe that our financial statements and the other financial data included in this prospectus have been prepared in a manner that complies, in all material respects, with generally accepted accounting principles in the United States ("GAAP") and the regulations published by the Securities and Exchange Commission ("SEC"). However, we use Adjusted EBITDA, Adjusted EBITDA margin, free cash flow and free cash flow margin, as described in "Prospectus Summary—Summary Consolidated Financial and Operating Information," in various places in this prospectus. These non-GAAP financial measures are presented as supplemental disclosure and should not be considered in isolation from, or as a substitute for, the financial information prepared in accordance with GAAP, and should be read in conjunction with the financial statements included elsewhere in this prospectus. Adjusted EBITDA, Adjusted EBITDA margin, free cash flow and free cash flow margin may differ from similarly titled measures presented by other companies.

See "Prospectus Summary—Summary Consolidated Financial and Operating Information" for a reconciliation of non-GAAP financial measures to the most directly comparable financial measure calculated in accordance with GAAP, and a discussion of our management's use of Adjusted EBITDA, Adjusted EBITDA margin, free cash flow and free cash flow margin.

Throughout this prospectus, we also provide a number of key business metrics used by management and typically used by our competitors in our industry. These and other key business metrics are discussed in more detail in the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Business Metrics."

PROSPECTUS SUMMARY

Overview

Our vision is to accelerate global commerce, one transaction at a time.

Vertex delivers comprehensive tax solutions that enable global businesses to transact, comply and grow with confidence. Companies with complex tax operations rely on Vertex to automate their end-to-end indirect tax processes. Indirect tax is the largest corporate tax category, encompassing sales tax, seller's use tax, consumer use tax and value-added tax ("VAT"), among others. Indirect tax accounts for more than \$3.5 trillion of annual tax revenue, which is 2.5 times the amount of corporate income taxes, according to the 2019 OECD Tax Database. Our software, content and services address the increasing complexities of global commerce and compliance by reducing friction, enhancing transparency and enabling greater confidence in meeting indirect tax obligations. As a result, our software is ubiquitous within our customers' business systems, touching nearly every line item of every transaction that an enterprise can conduct. Today, we have more than 4,000 customers, including over half of the Fortune 500, and provide our customers with tax support in over 130 countries.

Tax complexity is driven by the number of jurisdictions, products, distribution channels and systems of record within an organization. Each transaction must be tax-assessed for compliance purposes in real time and indirect taxes generally require filing each month, in every jurisdiction in which a company does business. Despite these complexities, there are still businesses that attempt to manage the tax lifecycle through a patchwork of static tax rate tables in spreadsheets, home-built systems or business applications, such as enterprise resources planning ("ERP") software, that were not designed for complex tax management. Each of these approaches relies heavily on finance personnel or outside professional services.

The rapid changes taking place in today's global business, technology and regulatory environments are having a compounding effect on the complexity of indirect tax management. As companies expand their business models, enter new geographies and extend their distribution channels, they widen the aperture of their indirect tax obligations. Additionally, as they expand their core offerings to incorporate new digital products and services, they are increasingly impacted by new tax regulations being pursued by jurisdictions. For example, in the United States, nearly 40 states have now enacted marketplace facilitator regulations, requiring online marketplaces to collect and remit taxes for first- and third-party sales on their websites. This complexity demands intelligent solutions that enable businesses to satisfy tax obligations and support growth opportunities.

We have pioneered tax technology for over 40 years. We first began electronic delivery of tax rules in the early 1980s and we first sold transaction tax processing software in 1982. Today, our software enables tax determination, compliance and reporting, tax data management and document management with powerful pre-built integrations to core business applications used by most companies, particularly those applications that have a significant impact on global commerce. Our software is fueled by over 300 million data-driven effective tax rules and supports indirect tax compliance in more than 19,000 jurisdictions worldwide. In order to maintain the quality of our content, our team includes many global tax and regulatory experts from industry and the public sector, who deliver monthly updates to our tax content, which are then incorporated directly into our software. Our solutions can be deployed on-premise, in the cloud, or both, with implementation services available to enable optimal customer outcomes and satisfy unique business requirements.

Our customers include the majority of the Fortune 500, as well as a majority of the top 10 companies by revenue in multiple industries such as retail, technology and manufacturing, in addition to leading marketplaces. As these companies expand geographically and pursue omnichannel business models, their tax determination and compliance requirements increase and become more complex. Our

trusted brand and strong relationships with our customers enable us to capitalize on these sustainable organic growth opportunities.

Our partner ecosystem is a differentiating, competitive strength in both our software development and our sales and marketing activities. We integrate with key technology partners that span ERP, customer relationship management ("CRM"), procurement, billing, point of sale ("POS") and eCommerce. These partners include Adobe/Magento, Coupa, Microsoft Dynamics, NetSuite, Oracle, Salesforce, SAP, SAP Ariba, Workday and Zuora. We also collaborate with numerous accounting firms who have built implementation practices around our software to serve their customer base.

We believe that global commerce and compliance environment provides durable and accelerating growth opportunities for our business. We generated revenue of \$272.4 million and \$321.5 million in 2018 and 2019, respectively, and \$74.6 million and \$89.2 million for the three months ended March 31, 2019 and 2020, respectively. We had a net loss of \$6.1 million and net income of \$31.1 million in 2018 and 2019, respectively, and net income of \$7.3 million and a net loss of \$29.1 million for the three months ended March 31, 2019 and 2020, respectively. Adjusted EBITDA was \$61.5 million and \$67.9 million in 2018 and 2019, respectively, and \$15.6 million and \$15.3 million for the three months ended March 31, 2019 and 2020, respectively. Additionally, we generated net cash provided by operating activities of \$80.4 million and \$92.5 million in 2018 and 2019, respectively, and \$9.9 million and \$(6.4) million in the three months ended March 31, 2019 and 2020, respectively. Our free cash flow was \$47.1 million and \$54.9 million in 2018 and 2019, respectively, and \$1.8 million and \$(15.8) million in the three months ended March 31, 2019 and 2020, respectively. Adjusted EBITDA and free cash flow are non-GAAP financial measures. For more information about how we use these non-GAAP financial measures in our business, the limitations of these measures and reconciliations to the most directly comparable GAAP measures, see "Prospectus Summary—Summary Consolidated Financial and Operating Information." In connection with the offering, we will convert from an S Corporation to a C Corporation ("C Corporation"), which will result in net income of the Company being taxed at the corporate level. For additional information on the effect of such conversion, see "Prospectus Summary—Summary Consolidated Financial and Operating Information."

Industry Background

Indirect taxes are significant and growing revenue streams for governments around the world

Indirect taxes are part of everyday commerce in many countries—they are levied on items such as food, clothing, business supplies and even data transmissions from mobile phones. According to the 2019 OECD Tax Database, more than \$3.5 trillion of indirect taxes were collected by national, state and local governments around the world in 2018, which is 2.5 times the amount of corporate income taxes collected. Indirect taxes on goods and services represented more than 10% of GDP for OECD countries in 2018 and governments continuously seek new ways to increase this revenue stream. In the United States, sales and use taxes are the largest component of indirect taxes. According to OECD Revenue Statistics, the United States collected more than \$800.0 billion in tax revenue from goods and services taxes in 2018.

Tax reporting and compliance pose tenacious challenges for all businesses

In today's global economy, indirect taxation is highly nuanced and growing in its complexity for most businesses. In order to calculate taxes accurately, enterprises must identify every jurisdiction in which they operate, determine and maintain the applicable rates for each of those jurisdictions and map the applicable taxability to the products and services they deliver. Cross-border transactions increase the complexity of taxes. Understanding the variables surrounding transactions and how they change applicable taxes becomes difficult for tax departments to manage given the volume of purchasing, sourcing and sales activities conducted by large enterprises.

Indirect tax returns generally need to be filed on a monthly basis and noncompliance exposes companies to significant monetary liability, poor customer experiences and reputational risk. Tax audits can look back many years, creating a greater level of accountability for managing tax data than for typical business data. Additionally, it is not unusual for a large enterprise to have a substantial number of tax audits across numerous jurisdictions ongoing at any point in time. Each audit may require detailed traceability to individual transactions to defend historical tax positions taken.

Dynamic business, regulatory and technology drivers have a compounding effect on tax compliance

We believe that trends in the digital economy are accelerating the need for adoption of sophisticated tax solutions among a broader and growing number of enterprises and global commerce platforms.

- Governments are increasingly adopting new and expanded indirect tax measures.
- Governments are mandating more frequent and more detailed tax reporting, using advanced technologies to scrutinize business tax filings.
- Businesses' geographic and channel expansion are creating new tax exposures.
- Governments are enacting new taxation on digital goods and services.
- Business-to-consumer ("B2C") and business-to-business ("B2B") marketplaces are increasingly responsible for collecting and remitting taxes for their third-party sellers.
- The expanded number of business applications being used by enterprises has increased the number of data sources necessary for indirect tax compliance.

Legacy approaches are insufficient

Over the past several decades, many tax departments have addressed their indirect tax needs by relying on a patchwork of static tax rate tables in spreadsheets, home-built systems or business applications not designed for tax compliance. Each requires heavy reliance on finance personnel or outside professional services. As taxation becomes more complicated, we believe these approaches will begin to fracture as they are error-prone, inefficient and cannot scale, thus increasing exposure to fines, raising reserves and heightening the risk of tax audits across multiple jurisdictions.

Our Opportunity

We believe the total addressable market for solutions that enable global commerce and compliance is robust, global and growing. We estimate our addressable market among global enterprises and other businesses with greater than \$1.0 million in annual sales to be over \$7.0 billion in the United States. We believe this potentially understates our total addressable market because it does not include businesses domiciled outside of the United States.

Key Benefits of Our Solutions

We deliver comprehensive tax solutions that automate end-to-end indirect tax processes for enterprises and mid-market companies with complex tax operations. Our software includes tax determination, compliance and reporting, tax data management and document management fueled by our powerful and proprietary content database, which includes over 300 million data-driven effective tax rules supporting indirect tax compliance in more than 19,000 jurisdictions worldwide. Our solutions also include powerful pre-built integrations to core business applications, such as SAP and Oracle.

Our solutions deliver the following key benefits to our customers:

Comprehensive, efficient and accurate indirect tax management. Our solutions provide our customers with powerful tools to manage their end-to-end indirect tax processes and manage their indirect tax obligations accurately and efficiently, while reducing risk.

Reduction in tax audit risk and tax audit-induced costs. We believe that customers implement our solutions to increase accuracy and transparency in supporting the tax audit process, and to lower their overall costs of tax audit defense. This is driven by rich documentation and data support during tax audit discovery, which can mitigate tax audit-related adjustments and fines.

Wide jurisdiction coverage to support geographic expansion. Economic nexus for indirect taxes is often based on the geographic location of either operations or sales. We maintain expansive coverage of jurisdictions and continually update our global content database, allowing our customers to expand their operations around the world while maintaining compliance with the relevant indirect tax laws of each jurisdiction.

Support of new business models. As digital transformation continues to change our economy, many enterprises are adopting new business models and incorporating new technology in their products and operations to fuel growth, including diversified supply chains and omnichannel retail strategies. Many of these digital transformations result in new, complex indirect tax challenges. For example, data transmissions from internet-connected devices are subject to telecom taxes, which are often new and unfamiliar obligations to traditional manufacturers and retailers.

Our Competitive Strengths

We have pioneered tax technology for over 40 years. We deliver comprehensive tax solutions that enable global businesses to transact, comply and grow with confidence. Companies with complex tax operations rely on us to automate their end-to-end indirect tax processes. Our key competitive strengths include:

We provide a differentiated portfolio of end-to-end solutions for indirect tax globally. Our solutions automate the end-to-end indirect tax processes for enterprises with complex tax operations and audit risk. Our software includes tax determination, compliance and reporting, tax data management, and document management tools, as well as pre-built integrations to major business applications. Customers can purchase these solutions individually or as part of a broader suite and can choose the delivery model that best aligns to their enterprise technology environments.

Our software is underpinned by a comprehensive proprietary tax content database. Our proprietary tax content database is significant and includes educational content, best practices guidance and over 300 million data-driven effective tax rules supporting indirect tax compliance in more than 19,000 jurisdictions worldwide, which are then embedded into our software. Our tax content provides meaningful insights and guidance to enterprises looking to address their tax exposure and we provide solutions by embedding these tax rules into our software. We employ over 70 tax professionals on our tax content team, which is comprised of subject matter experts with significant experience and includes Certified Public Accountants ("CPAs"), attorneys and chartered accountants, among others. Our content team combines legislative research, analysis, technical logic and automation to embed updated rules into our software. We believe that the knowledge, depth and breadth of our content database is a differentiated asset that gives us a competitive advantage.

Our strong brand makes us a recognized and trusted provider in tax software. We pioneered the first indirect tax software over 40 years ago and since then have built innovative tax software, a marquee customer base and a trusted brand. We continue to adapt to meet our customers' needs—from mainframe-based software to cloud and mobile technologies. Our culture of innovation, the name-brand

recognition of our customer base and the mission-critical nature of our software for tax departments, provide leverage to our sales and marketing teams and enable us to successfully attract new customers.

Powerful, robust technology with enterprise-grade scale and speed. Our solutions are built upon a technology foundation purpose-built to meet the needs of highly discerning enterprises with complex indirect tax obligations. For example, our software is used by some of the largest companies in the world to automate indirect tax calculation in hundreds of locations, among thousands of suppliers and millions of customers, across tens of thousands of jurisdictions, and through multiple systems of record. By utilizing a common engine and data design, we offer consistency regardless of the technical infrastructure of our customers and partners. Our technology architecture and engineering expertise allow us to continue providing solutions with the enterprise scale and speed our customers expect, realizing rapid-time-to-value from our software and monthly content updates.

Flexible delivery and configuration to meet the needs of our customers. Our customers need software that allows them to automate tax but also allows for tax configurability that accommodates their specific company needs. Our configurability allows users to create their own taxability rules that can act as an override providing more flexibility and ensuring that all individual, company-specific tax scenarios can be met. We also offer a flexible delivery model that includes on-premise, cloud or a hybrid of both delivery models, giving our customers the ability to choose how to manage their tax determination and system deployments.

Deep and high-quality partnerships and integrations. Our partner ecosystem is a distinct strength to support both software development and our sales and marketing activities. We integrate with key technology partners that span ERP, CRM, procurement, billing, POS and eCommerce platforms. Our teams are embedded at a deep technical level and we conduct joint roadmap development with our partners. In addition, we collaborate with over 50 tax, accounting and consulting firms, which not only complement our global tax and technology expertise, but also help us identify new growth opportunities.

Our Growth Strategies

We believe today's global commerce environment provides durable growth opportunities for our business. Our growth strategies include:

- **Expand existing customer revenues.** The breadth of our solutions allows us to continually meet our customer needs, even as their needs expand in scope. As businesses continue to evolve through acquisitions and expand products and services, enter new geographies or expand their distribution channels, we believe they will need our software, services and content. We plan to continue to invest in new offerings and enhance our solutions to support the ongoing retention and expansion of revenue from our existing customers.
- **Acquire new customers.** As enterprise and mid-market companies continue to expand and their tax complexity grows, we expect demand for our solutions to increase among new customers and partners. We also expect these companies to adopt our solutions much earlier in their corporate lifecycle. This adoption is driven by advances in cloud computing and digital commerce, which enable more companies to accelerate new product delivery and scale their business through online marketplaces and emerging commerce platforms.
- **Broaden and deepen our partner ecosystem.** Our partners enhance our go-to-market capacity and extend our brand leadership and reach. We leverage our partnerships to maximize the benefits of our solutions for our customers and to identify new growth opportunities. We believe expanding our strategic alliances with emerging participants who are fueling global commerce, such as payment and digital commerce platforms, will create new value for our customers and new sources of revenue.

- **Extend global footprint.** We have a significant opportunity to further expand internationally, in terms of our regional operations, content depth and go-to-market coverage. By extending our global footprint, we believe we will also expand account penetration of existing customers with operations around the globe.
- **Sustained investment in new product innovation.** Our approach to innovation is driven by our relationships with our customers and partners, with whom we create new solutions, align product roadmaps and embed our software within their platforms. We have also established an innovation lab where we design, test and incubate next-generation tax solutions and adjacent market opportunities like blockchain, payment platforms and machine learning technologies. Over time, we expect this will bring additional value to existing customers and help us acquire new customers.

Summary Risk Factors

Investing in our Class A common stock involves substantial risk. Our ability to execute our strategy is also subject to certain risks. The risks described under the heading "Risk Factors" in this prospectus may cause us not to realize the full benefits of our strengths or may cause us to be unable to successfully execute all or part of our strategy. Some of the most significant challenges and risks we face include the following:

- A large portion of our revenue depends on maintaining and growing our revenue from existing customers, and if we fail to retain our customers or expand their usage of our solutions, our business, results of operations, financial condition and cash flows would be harmed.
- Our business and success depend in part on our strategic relationships with third parties, including our partner ecosystem, and our business would be harmed if we fail to maintain or expand these relationships.
- If we are unable to adapt to technological change by successfully introducing new and enhanced solutions and services, our business, results of operations, financial condition and cash flows would be adversely affected.
- Any failures in information technology or infrastructure could lead to disruptions of our software, loss of customer data or untimely remittance of taxes, any of which could adversely affect our reputation and financial condition.
- Incorrect or improper implementation, integration or use of our solutions could result in customer dissatisfaction and negatively affect our business, results of operations, financial condition and cash flows.
- If we fail to attract and retain qualified technical and tax-content personnel, our business could be harmed.

The Offering

Class A common stock offered by us	shares (or shares if the underwriters exercise in full their option to purchase additional shares).
Class A common stock to be outstanding after this offering	shares (or shares if the underwriters exercise in full their option to purchase additional shares).
Class B common stock to be outstanding after this offering	shares.
Option to purchase additional shares of Class A common stock	The underwriters have an option to purchase up to an aggregate of additional shares of Class A common stock from us and the selling stockholders at the initial public offering price, less underwriting discounts and commissions. Of these shares, will be offered and sold by the selling stockholders. The underwriters can exercise this option at any time within 30 days from the date of this prospectus. We will not receive any proceeds from any sale of our shares of Class A common stock in this offering by the selling stockholders. The selling stockholders will only sell shares of Class A common stock in this offering if the underwriters exercise their option to purchase additional shares.
Use of proceeds	We estimate that the net proceeds to us from the sale of the shares of our Class A common stock in this offering will be approximately \$ million, based upon an initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise their option to purchase additional shares in this offering in full, we estimate that our net proceeds will be approximately \$ million, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We will not receive any of the proceeds from any sale of shares in this offering by the selling stockholders.

Dividend policy	<p>We intend to use a portion of the net proceeds to repay all outstanding indebtedness under our existing credit agreement (the "New Credit Agreement") and to pay related fees and expenses. Prior to this offering, proceeds from the term loan entered into under the New Credit Agreement were used to repay amounts outstanding under the Company's previous credit agreement of \$61.7 million, with the balance being used to fund a portion of a \$123.0 million dividend to our stockholders on May 29, 2020 \$122.8 million of which was paid to our directors Amanda Westphal Radcliffe, Stefanie Westphal Thompson and Jeffrey Westphal or trusts for their respective benefit or the benefit of their immediate family. The remainder of the net proceeds will be used for working capital and other general corporate purposes, including investments in our solutions, technology and sales force. See "Use of Proceeds."</p>
Voting rights	<p>Historically, we have been an S Corporation, and, as such, we have paid distributions to our existing stockholders, which have assisted them in paying the U.S. federal and state income taxes on our taxable income that is "passed through" to them, and we have historically made additional distributions to them for returns on capital. After this offering, our dividend policy and practice will change because we will no longer be taxed as an S Corporation. We do not currently anticipate paying dividends on our Class A or Class B common stock. Any declaration and payment of future dividends to holders of our Class A or Class B common stock may be limited by restrictive covenants in the agreements governing our indebtedness, will be at the sole discretion of our board of directors and will depend on many factors, including our financial condition, earnings, capital requirements, level of indebtedness, statutory and contractual restrictions applying to the payment of dividends and other considerations that our board of directors deems relevant. See "Dividend Policy."</p> <p>Shares of our Class A common stock will be entitled to one vote per share. Shares of our Class B common stock will be entitled to ten votes per share.</p>

Directed share program	<p>The holders of our Class A common stock and Class B common stock will generally vote together as a single class on all matters submitted to a vote of our stockholders unless otherwise required by Delaware law or our amended and restated certificate of incorporation. See "Description of Capital Stock."</p> <p>At our request, the underwriters have reserved for sale, at the initial public offering price, up to % of the Class A common stock offered by this prospectus for sale to some of our directors, officers, employees, business associates and related persons. If these persons purchase reserved shares, it will reduce the number of shares available for sale to the general public. Any reserved shares that are not so purchased will be offered by the underwriters to the general public on the same terms as the other shares offered by this prospectus. See "Underwriting."</p>
Proposed stock exchange symbol	"VERX."
Risk factors	See "Risk Factors" for a discussion of factors you should carefully consider before deciding to invest in our Class A common stock.
<hr/> <p>The number of shares of our Class A and Class B common stock to be outstanding after completion of this offering is based on shares of our Class A common stock and shares of our Class B common stock outstanding as of , 2020 and reflects:</p>	
<ul style="list-style-type: none">• the reclassification of our existing share capital into shares of Class A and Class B common stock (the "reclassification");• the issuance of shares of Class A common stock under the 2020 Plan (assuming an initial public offering price of \$ per share of Class A common stock, which is the midpoint of the price range set forth on the cover page of this prospectus) in connection with the amendment and exercise of certain fully vested stock appreciation rights ("SAR(s)"); and• the issuance of shares of Class A common stock and restricted stock under the 2020 Plan (assuming an initial public offering price of \$ per share of Class A common stock, which is the midpoint of the price range set forth on the cover page of this prospectus) to certain of our employees and directors in connection with this offering.	
<p>The shares of our common stock outstanding as of , 2020 exclude the following:</p>	
<ul style="list-style-type: none">• shares of Class A common stock that will be issuable upon the exercise of options to purchase shares of our Class A common stock following the amendment of outstanding options to purchase shares of our common stock and SARs covering shares of our common stock in connection with this offering, based on the number of such options and SARS outstanding as of , 2020, with a weighted-average exercise price of \$ per share, of which are vested;• shares of Class A common stock (assuming an initial public offering price of \$ per share of Class A common stock, which is the midpoint of the price range set forth on	

the cover page of this prospectus) that are available for issuance as awards under the 2020 Incentive Award Plan (the "2020 Plan"), as well as any additional shares of Class A common stock that may become available under the 2020 Plan pursuant to provisions in the 2020 Plan that automatically increase the Class A common stock reserve thereunder, which number excludes the number of shares subject to awards granted under the 2020 Plan in connection with this offering;

- _____ shares of Class A common stock (assuming an initial public offering price of \$ _____ per share of Class A common stock, which is the midpoint of the price range set forth on the cover page of this prospectus) that will be issuable upon the vesting of RSUs to be awarded under the 2020 Plan to certain non-U.S. employees and directors in connection this offering; and
- _____ shares of Class A common stock (assuming an initial public offering price of \$ _____ per share of Class A common stock, which is the midpoint of the price range set forth on the cover page of this prospectus) that are available for issuance under the 2020 Employee Stock Purchase Plan (the "2020 ESPP"), as well as any additional shares of Class A common stock that may become available under the 2020 ESPP pursuant to provisions in the 2020 ESPP that automatically increase the Class A common stock reserve thereunder.

Unless otherwise stated, information in this prospectus (except for the historical financial statements and the related discussion of such financial information) assumes:

- our reincorporation from Pennsylvania to Delaware and the adoption of our amended and restated certificate of incorporation and amended and restated bylaws prior to the closing of this offering;
- consummation of the reclassification;
- the termination of our status as an S Corporation in connection with this offering;
- no exercise by the underwriters of their option to purchase up to an additional _____ shares of our Class A common stock from us and the selling stockholders; and
- an initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus.

Summary Consolidated Financial and Operating Information

The following table sets forth our summary historical consolidated financial information for the periods and dates indicated. The consolidated balance sheet data as of December 31, 2019 and 2018 and the consolidated statements of comprehensive income (loss) for the years ended December 31, 2019 and 2018 have been derived from our audited consolidated financial statements included elsewhere in this prospectus. The consolidated balance sheet data as of March 31, 2020 and the consolidated statements of comprehensive income (loss) for the three months ended March 31, 2020 and 2019 have been derived from our unaudited consolidated financial statements appearing elsewhere in this prospectus. The unaudited interim consolidated financial statements have been prepared on the same basis as the audited annual consolidated financial statements and reflect, in the opinion of management, all adjustments of a normal, recurring nature that are necessary for a fair statement of the unaudited interim consolidated financial statements.

The financial information set forth below is not necessarily indicative of future results of operations. In particular, we have historically been taxed as an S Corporation for U.S. federal income tax purposes and for income tax purposes in most states. As a result, net income or loss has been allocated to our stockholders and included on their individual income tax returns. In connection with the offering, we will convert to a C Corporation, which will result in net income of the Company being taxed at the corporate level. As such, our provision for taxes will change. Assuming the conversion to a C Corporation, we estimate that the Company's effective tax rate will be approximately 25%, inclusive of all applicable U.S. federal, state, local and foreign income taxes. In addition, based on the deferred tax asset balances at March 31, 2020, we would anticipate recording a tax benefit of approximately \$8.5 million upon such conversion.

This data should be read in conjunction with, and is qualified in its entirety by reference to, the "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Capitalization" sections of this prospectus and our audited consolidated financial statements and notes thereto for the periods and dates indicated included elsewhere in this prospectus. Revenue is reflected in accordance with Accounting Standards Update ("ASU") 2014-09, *Revenue from Contracts with Customers*, ("ASC 606"), which we adopted on January 1, 2018.

	For the Year Ended December 31,		Three Months Ended March 31,	
	2019	2018	2020	2019
	(In thousands except per share data)			
Revenue:				
Software subscriptions	\$ 275,629	\$ 235,663	\$ 75,760	\$ 64,384
Services	45,871	36,740	13,485	10,230
Total revenues	321,500	272,403	89,245	74,614
Cost of revenues:				
Software subscriptions ⁽¹⁾	77,259	68,945	24,684	18,426
Services ⁽¹⁾	33,119	26,753	14,778	7,138
Total cost of revenues	110,378	95,698	39,462	25,564
Gross profit	211,122	176,705	49,783	49,050
Operating expenses:				
Research and development ⁽¹⁾	30,557	23,755	13,079	7,573
Selling and marketing ⁽¹⁾	68,127	56,898	24,333	16,047
General and administrative ⁽¹⁾	71,014	58,947	37,636	15,448
Depreciation and amortization	8,996	7,937	2,869	2,045
Impairment of asset	—	32,692	—	—
Other operating (income) expense, net	573	(691)	111	163
Total operating expenses	179,267	179,538	78,028	41,276
Income (loss) from operations	31,855	(2,833)	(28,245)	7,774
Other (income) expense:				
Interest income	(1,083)	(526)	(355)	(292)
Interest expense	2,036	2,120	924	537
Total other expense, net	953	1,594	569	245
Income (loss) before income taxes	30,902	(4,427)	(28,814)	7,529
Income tax (benefit) expense	(155)	1,679	250	204
Net income (loss)	31,057	(6,106)	(29,064)	7,325
Other comprehensive (income) loss from foreign currency translation adjustments and revaluations, net of tax	(5)	355	2,998	(21)
Total comprehensive income (loss)	\$ 31,062	\$ (6,461)	\$ (32,062)	\$ 7,346
Net income (loss) attributable to Class A stockholders	\$ 38	\$ (7)	\$ (35)	\$ 9
Net income (loss) per Class A share, basic and diluted	\$ 0.77	\$ (0.15)	\$ (0.72)	\$ 0.18
Weighted average Class A common stock, basic and diluted	49	49	49	49
Net income (loss) attributable to Class B stockholders	\$ 31,019	\$ (6,099)	\$ (29,029)	\$ 7,316
Net income (loss) per Class B share, basic	\$ 0.77	\$ (0.15)	\$ (0.72)	\$ 0.18
Weighted average Class B common stock, basic	40,129	40,160	40,090	40,090
Net income (loss) per Class B share, diluted	\$ 0.75	\$ (0.15)	\$ (0.72)	\$ 0.18
Weighted average Class B common stock, diluted	41,373	40,160	40,090	41,393

(1) Includes stock-based compensation expenses as follows in the table below. For more details, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Seasonality and Quarterly Trends."

	For the Year Ended December 31,		Three Months Ended March 31,	
	2019	2018	2020	2019
	(In thousands)			
Cost of revenues, software subscriptions	\$ 946	\$ 512	\$ 3,492	\$ 131
Cost of revenues, services	1,419	765	5,238	197
Research and development	946	511	3,492	131
Selling and marketing	1,892	1,022	6,984	261
General and administrative	4,257	2,298	15,714	590
Total stock-based compensation	\$ 9,460	\$ 5,108	\$ 34,920	\$ 1,310

	As of December 31,		As of March 31,	
	2019	2018	2020	2020
	(In thousands)			
Consolidated Balance Sheet Data:				
Cash and cash equivalents	\$ 75,903	\$ 55,838	\$ 40,416	
Funds held for stockholder dividends	—	—	110,000	
Total assets	264,623	215,072	356,129	
Deferred revenue (current and non-current)	205,791	178,703	201,484	
Debt (current and non-current)	51,486	54,883	173,823	
Total liabilities	377,055	326,768	504,633	
Options for redeemable shares	17,344	14,581	32,586	
Total stockholders' deficit	(129,776)	(126,277)	(181,090)	

	For the Year Ended December 31,		Three Months Ended March 31,	
	2019	2018	2020	2019
	(In thousands)			
Consolidated Statement of Cash Flows				
Net cash provided by (used in) operating activities	\$ 92,498	\$ 80,449	\$ (6,417)	\$ 9,899
Net cash used in investing activities	(37,560)	(33,314)	(21,656)	(8,115)
Net cash provided by (used in) financing activities	(30,629)	(30,697)	103,654	(12,392)
Effect of foreign exchange rate changes	12	(402)	(249)	21
Net increase in cash, cash equivalents and restricted cash	\$ 24,321	\$ 16,036	\$ 75,332	\$ (10,587)

	For the Year Ended December 31,		Three Months Ended March 31,	
	2019	2018	2020 (unaudited)	2019 (unaudited)
(In thousands except percentages)				
Financial Metrics:				
Net income (loss)	\$ 31,057	\$ (6,106)	\$ (29,064)	\$ 7,325
Net income (loss) margin	9.7%	(2.2)%	(32.7)%	9.9%
Net cash provided by (used in) operating activities	\$ 92,498	\$ 80,449	\$ (6,417)	\$ 9,899
Operating cash flow margin	29%	30%	(7)%	13%
Non-GAAP Financial Data (unaudited):				
Adjusted EBITDA ⁽¹⁾	\$ 67,913	\$ 61,471	\$ 15,294	\$ 15,596
Adjusted EBITDA margin ⁽¹⁾	21%	23%	17%	21%
Free cash flow ⁽²⁾	\$ 54,938	\$ 47,135	\$ (15,755)	\$ 1,784
Free cash flow margin ⁽²⁾	17%	17%	(18)%	2%

- (1) Adjusted EBITDA and Adjusted EBITDA margin are a non-GAAP financial measure used by our management and board of directors in measuring trends and our financial performance. In addition, we believe that Adjusted EBITDA and Adjusted EBITDA margin are measures widely used by securities analysts and investors to evaluate the financial performance of our company and other companies. We consider Adjusted EBITDA and Adjusted EBITDA margin to be important measures because we believe that they provide useful information in understanding and evaluating our operating results on a period over period basis without the impact of certain expenses that do not directly correlate to our operating performance and that can vary significantly from period to period. In addition, we base certain of our forward-looking estimates and budgets on Adjusted EBITDA and Adjusted EBITDA margin. We define Adjusted EBITDA as net income or loss before interest, taxes, depreciation and amortization, asset impairments, share-based compensation expense and severance charges. We define Adjusted EBITDA margin as Adjusted EBITDA divided by total revenues for the same period.

Our definitions of Adjusted EBITDA and Adjusted EBITDA margin may differ from the definitions used by other companies and therefore comparability may be limited. In addition, other companies may not publish these or similar metrics. Thus, our Adjusted EBITDA and Adjusted EBITDA margin should be considered in addition to, not as a substitute for, or in isolation from, measures prepared in accordance with GAAP. The following table reconciles Adjusted EBITDA to the most directly comparable GAAP financial performance measure, which is net income (loss):

	For the Year Ended December 31,		Three Months Ended March 31,	
	2019	2018	2020 (unaudited)	2019 (unaudited)
(In thousands except percentages)				
Adjusted EBITDA				
Net income (loss)	\$ 31,057	\$ (6,106)	\$ (29,064)	\$ 7,325
Interest, net	953	1,594	569	245
Income tax (benefit) expense	(155)	1,679	250	204
Depreciation and amortization—cost of subscription revenues	16,194	16,964	4,567	3,929
Depreciation and amortization	8,996	7,937	2,869	2,045
Impairment charge	—	32,692	—	—
Stock-based compensation	9,460	5,108	34,920	1,310
Severance charges	1,408	1,603	1,183	538
Adjusted EBITDA	\$ 67,913	\$ 61,471	\$ 15,294	\$ 15,596
Adjusted EBITDA margin				
Total revenues	\$ 321,500	\$ 272,403	\$ 89,245	\$ 74,614
Adjusted EBITDA margin	21%	23%	17%	21%

- (2) Our management uses free cash flow as a critical measure in the evaluation of liquidity in conjunction with related GAAP amounts. It also uses the measure when considering available cash, including for decision making purposes related to dividends and discretionary investments. We consider free cash flow to be an important measure for investors because it measures the amount of cash we generate from operating activities after our capital expenditures and capitalization of

software development costs. In addition, we base certain of our forward-looking estimates and budgets on free cash flow and free cash flow margin. We define free cash flow as the total of net cash provided by operating activities less purchases of property and equipment and capitalized software. We define free cash flow margin as free cash flow divided by total revenues for the same period.

Our definitions of free cash flow and free cash flow margin may differ from the definitions used by other companies and therefore comparability may be limited. In addition, other companies may not publish these or similar metrics. Thus, our free cash flow and free cash flow margin should be considered in addition to, not as a substitute for, or in isolation from, measures prepared in accordance with GAAP. The following table reconciles free cash flow to the most directly comparable GAAP financial performance measure, which is net cash provided by operating activities:

	For the Year Ended		Three Months Ended	
	December 31,		March 31,	
	<u>2019</u>	<u>2018</u>	<u>2020</u>	<u>2019</u>
	(unaudited)			
	(In thousands except percentages)			
Free cash flow				
Net cash provided by (used in) operating activities	\$ 92,498	\$ 80,449	\$ (6,417)	\$ 9,899
Property and equipment additions	(20,339)	(21,053)	(5,632)	(4,200)
Capitalized software additions	(17,221)	(12,261)	(3,706)	(3,915)
Free cash flow	<u>\$ 54,938</u>	<u>\$ 47,135</u>	<u>\$ (15,755)</u>	<u>\$ 1,784</u>
Free cash flow margin				
Total revenues	<u>\$ 321,500</u>	<u>\$ 272,403</u>	<u>\$ 89,245</u>	<u>\$ 74,614</u>
Free cash flow margin	<u>17%</u>	<u>17%</u>	<u>(18)%</u>	<u>2%</u>

RISK FACTORS

An investment in our Class A common stock involves a high degree of risk. You should consider carefully the following risks, together with the information under the caption "Business—Competition," our financial statements and the related notes and the other information contained in this prospectus before you decide whether to buy our Class A common stock. If any of the events contemplated by the following discussion of risks should occur, our business, results of operations, financial condition and cash flows could suffer significantly. As a result, the market price of our Class A common stock could decline, and you may lose all or part of the money you paid to buy our Class A common stock. The risks described below are those that we believe are the material risks that we face but other risks may arise from time to time. See "Cautionary Note Regarding Forward-Looking Statements" elsewhere in this prospectus.

Risks Relating to Our Business and Industry

A large portion of our revenue depends on maintaining and growing our revenue from existing customers, and if we fail to retain our customers or expand their usage of our solutions, our business, results of operations, financial condition and cash flows would be harmed.

We cannot accurately predict customer behavior. Our customers have no obligation to renew their subscriptions for our solutions after the expiration of their subscription periods and our customers may not renew subscriptions for a similar mix of solutions. Our retention rates would decline as a result of a number of factors, including customer dissatisfaction, decreased customer spending levels, decreased customer transaction volumes, increased competition, changes in tax laws or rules, pricing changes or legislative changes affecting tax compliance providers. If our customers do not renew their subscriptions, or our customers reduce the solutions purchased under their subscriptions, our revenue would decline and our business may be harmed.

Our future success also depends in part on our ability to sell additional solutions to existing customers and on our customers' expanded use of our solutions. If our efforts to sell our additional solutions to our customers are not successful or if our customers do not expand their use of our solutions, it would decrease our revenue growth and harm our business, results of operations, financial condition and cash flows.

Our business and success depend in part on our strategic relationships with third parties, including our partner ecosystem, and our business would be harmed if we fail to maintain or expand these relationships.

We depend in part on, and anticipate that we will continue to depend in part on, various third-party relationships to sustain and grow our business. Our relationships with third-party publishers of software business applications, including accounting, ERP, eCommerce, POS, recurring billing and CRM systems, help drive our business because the integration of our solutions with their applications allows us to reach their sizeable customer bases. Our customers' user experience is dependent on our ability to connect easily to such third-party software applications. We may fail to retain and expand these integrations or relationships for many reasons, including due to failures by third parties to maintain, support or secure their technology platforms in general and our integrations in particular, or errors, bugs or defects in such third party technology, or changes in our technology platform. Any such failure could harm our relationship with our customers, our reputation and brand and our business and results of operations.

In addition, integrating third-party technology can be complex, costly and time-consuming. Third parties may be unwilling to build integrations, and we may be required to devote additional resources to develop integrations for business applications on our own. Providers of business applications with which we have integrations may decide to compete with us or enter into arrangements with our competitors, resulting in such providers withdrawing support for our integrations. In addition, any failure of our solutions to operate effectively with business applications could reduce the demand for

our solutions, resulting in customer dissatisfaction and harm to our business. If we are unable to respond to these changes or failures in a cost-effective manner, our solutions may become less marketable, less competitive or obsolete and our results of operations may be negatively impacted.

If we are unable to adapt to technological change by successfully introducing new and enhanced solutions and services, our business, results of operations, financial condition and cash flows would be adversely affected.

The market for our solutions is characterized by rapid technological change, frequent new product and service introductions and enhancements, changing customer demands and evolving industry standards. The introduction of software embodying new technologies can quickly make existing software obsolete and unmarketable. Software solutions are inherently complex, and it can take a long time and require significant research and development expenditures to develop and test new or enhanced solutions. The success of any enhancements or improvements to our software solutions or any new solutions and services depends on several factors, including timely completion, competitive pricing, adequate quality testing, integration with existing technologies and our platform and overall market acceptance. We cannot be sure that we will succeed in developing, marketing and delivering on a timely and cost-effective basis enhancements or improvements to our software or any new solutions and services that respond to technological change or new customer requirements, nor can we be sure that any enhancements or improvements to our software or any new solutions and services will be free of errors and defects or that they will achieve market acceptance. Moreover, even if we introduce new solutions, we would experience a decline in revenue of our existing solutions that is not offset by revenue from the solutions. Customers may delay making purchases of new solutions to permit them to make a more thorough evaluation of these solutions or until industry and marketplace reviews become widely available. In addition, we may lose existing customers who choose a competitor's solutions rather than migrate to our new solutions. This could result in a temporary or permanent revenue shortfall and adversely affect our business.

Any failures in information technology or infrastructure could lead to disruptions of our software, loss of customer data or untimely remittance of taxes, any of which could adversely affect our reputation and financial condition.

Our software depends on uninterrupted, high-speed access to the internet in order to provide real-time tax determinations and processing of indirect tax data. Failures in our or our customers' and partners' information technology and infrastructure or service outages at third-party internet providers could lead to disruptions to our software. Such failures may be caused by numerous factors, including mechanical failure, power outage, human error, physical or electronic security breaches, war, terrorism, fire, earthquake, hurricane, flood and other natural disasters, sabotage and vandalism. Disruptions to our software could cause customers to lose sensitive or confidential information and could also lead to our or our customers' inability to timely remit taxes to the appropriate authorities. Any of these outcomes could lead customers to switch to our competitors or avoid using our solutions, which would negatively impact our revenue and harm our opportunities for growth.

Incorrect or improper implementation, integration or use of our solutions could result in customer dissatisfaction and negatively affect our business, results of operations, financial condition and cash flows.

Our customers may need training or education in the proper use of, and the variety of benefits that can be derived from, our solutions to maximize their potential benefits. If our solutions are not implemented or used correctly or as intended, inadequate performance may result. Because our customers rely on our solutions to manage a wide range of tax compliance operations, the incorrect or improper implementation or use of our solutions, or our failure to provide adequate support to our customers, may result in negative publicity or legal claims against us, which could harm our business, results of operations, financial condition and cash flows. Also, as we continue to expand our customer

base, any failure by us to properly provide training and support will likely result in lost opportunities for additional subscriptions for our solutions.

If we fail to attract and retain qualified technical and tax-content personnel, our business could be harmed.

Our technology is complex and our success depends in large part on our ability to attract and retain highly qualified personnel, particularly tax-content specialists, software developers, technical support and research and development personnel. Competition for skilled personnel is intense and we may not be successful in attracting, motivating and retaining needed personnel. We also may be unable to attract or integrate into our operations qualified personnel on the schedule we desire. Any inability to attract, integrate, motivate and retain the necessary personnel could harm our business. Dealing with the loss of the services of our executive officers or key personnel and the process to replace any of our executive officers or key personnel may involve significant time and expense, take longer than anticipated, and significantly delay or prevent the achievement of our business objectives, which would harm our financial condition, results of operations, and business.

We face competitive pressures from other tax software and services providers, as well as the challenge of convincing businesses using manual processes and native ERP functions to switch to our software.

We face significant competitive challenges from other tax-specific software vendors and from outsourced transaction tax compliance services offered by accounting and specialized consulting firms. There are a number of competing tax-specific software vendors, some of which have substantially greater revenue, personnel and other resources than we do. Corporate competitors, as well as the state and local tax services offered by accounting firms, have historically targeted our customer base of large enterprise companies. In addition, our competitors who currently focus their tax compliance services on small- to medium-sized businesses may be better positioned to increase their market share with small- to medium-sized businesses and may choose to enter our markets, whether competing based on price, service or otherwise. We also face a growing number of competing private transaction tax compliance businesses focused primarily on eCommerce. Increased competition may impact our ability to add new customers and to retain and expand revenues from existing customers. It is also possible that large enterprises with substantial resources that operate in adjacent compliance, finance or eCommerce verticals may decide to pursue transaction tax compliance automation and become immediate, significant competitors. Our failure to successfully and effectively compete with current or future competitors could lead to lost business and negatively affect our revenue.

In addition, many companies continue to employ manual processes that often rely on transaction-specific research, static tax tables, non-tax specific software or rate calculator services, as well as manual filing and remittance activities. Many businesses using manual approaches believe that these processes are adequate and may be unaware that there is an alternative that is more effective, resulting in an inertia that can be difficult to overcome. In addition, the upfront costs of our solutions can limit our sales to businesses using manual processes.

Our recent success may not be indicative of our future results of operations.

We cannot predict with certainty our customers' future usage or retention given the diversity of our customer base across industries, geographies, customer size and other factors. Accordingly, we may be unable to accurately forecast our revenues notwithstanding our substantial investments in sales and marketing, tax content infrastructure and research and development in anticipation of continued growth in our business. If we do not realize returns on these investments in our growth, our results of operations could differ materially from our prior results, which could cause our stock price to decline.

We currently derive a substantial portion of our revenue from our indirect tax software, and any failure of our software to satisfy customer requirements or to achieve increased market penetration could adversely affect our business, results of operations, financial condition and growth prospects.

We currently derive a substantial portion of our revenue from subscriptions to our indirect tax software. We have added, and will continue to add, additional solutions to expand our offerings, but, at least in the near term, we expect to continue to derive the majority of our revenue from our indirect tax software. As such, the ability of our indirect tax software to meet our customers' requirements is critical to our success. Demand for our solutions is affected by a number of factors, many of which are beyond our control, such as continued market acceptance and continued employment of our solutions by existing and new customers, the timing of the development and release of upgraded or new solutions, the introduction or upgrading of products and services by our competitors, technological change and growth or contraction in our addressable market. If our indirect tax software does not continue to meet customer requirements, our business, results of operations, financial condition and growth prospects will suffer.

Changes to customers' and partners' software systems may impact our ability to offer a specific software deployment method to existing customers, which could cause a termination of customer contracts utilizing that deployment method, or otherwise effect our results of operations, financial condition and cash flow.

Our solutions are integrated with the software systems and complex workflows of our customers and partners. In the event that such software systems are modified or updated in a way that is incompatible with our software, we may be unable to continue to support the operations of our customers and partners. If our customers are unable to implement our solutions successfully or in a timely manner, or if our partners are unable to integrate with our solutions through our integrations, customer perceptions of our solutions may be impaired, our reputation and brand may suffer and customers may choose not to renew or expand the use of our solutions. In addition, if we fail to anticipate technological changes that our customers and partners may look to adopt, our solutions may be perceived as being less effective or obsolete. Any of these changes could have a material adverse effect on our results of operations and financial condition.

We need to continue making significant investments in software development and equipment to improve our business.

To improve the scalability, security and efficiency of our solutions, and to support the expansion of our software into other tax types, we will need to continue making significant capital expenditures and also invest in additional software and infrastructure development. If we experience increasing demand in subscriptions, we may not be able to augment our infrastructure quickly enough to accommodate such increasing demand. In the event of decreases in subscription sales, certain of our fixed costs, such as for capital expenditures, may make it difficult for us to quickly adjust our expenses downward. Additionally, we are continually updating our software and content, which increases expenses for us. We may also need to review or revise our software architecture as we grow, which may require significant resources and investments. As a result, although we may have significant research and development expenditures, which may be incurred and certain of which may be capitalized, there is no guarantee our solutions will be accepted by the market. This could result in increased costs or an impairment of capitalized development costs with no resulting future revenue benefit.

Our continued growth depends in part on our ability to continue to grow our customer base.

Increasing our customer base will depend, to a significant extent, on our ability to effectively expand our sales and marketing activities, as well as our partner ecosystem and other customer referral sources. We may not be able to recruit qualified sales and marketing personnel, train them to perform and achieve an acceptable level of sales production from them on a timely basis or at all. In the past, it

has usually taken new members of our sales force at least six months to integrate into our operations and start converting sales leads at our expected levels. In addition, if we cannot continue to maintain or expand our relationships with our partners, we may receive fewer referrals, the set of integrations we offer may not keep up with the market and our customer expansion strategy may become less effective. If we are unable to maintain effective sales and marketing activities and maintain and expand our partner network, our ability to attract new customers could be harmed and our business, results of operations, financial condition and cash flows would suffer.

If we fail to effectively manage our growth, our business, results of operations, financial condition and cash flows will be harmed.

We have experienced, and may continue to experience, growth in our headcount and operations, both domestically and internationally, which has placed, and may continue to place, significant demands on our management and our administrative, operational and financial reporting resources. We have also experienced significant growth in the number of customers, number of transactions and the amount of tax content that our platform and solutions support. Our growth will require us to hire additional employees and make significant expenditures, particularly in sales and marketing but also in our technology, professional services, finance and administration teams, as well as in our facilities and infrastructure. Our ability to effectively manage our growth will also require the allocation of valuable management and employee resources and improvements to our operational and financial controls and our reporting procedures and systems. In addition, as we seek to continue to expand internationally, we will likely encounter unexpected challenges and expenses due to unfamiliarity with local requirements, practices and markets. Our expenses may increase more than we plan, and we may fail to hire qualified personnel, expand our customer base, enhance our existing solutions, develop new solutions, integrate any acquisitions, satisfy the requirements of our existing customers, respond to competitive challenges or otherwise execute our strategies. If we are unable to effectively manage our growth, our business, results of operations, financial condition and cash flows would likely be harmed.

Future acquisitions of, and investments in, other businesses, software, tax content or technologies may not yield expected benefits, and our inability to successfully integrate acquisitions may negatively impact our business, results of operations, financial condition and cash flows.

We may in the future seek to grow our operations by pursuing acquisitions of businesses, software and technologies. We may not realize the anticipated benefits, or any benefits, from future acquisitions. In addition, if we finance acquisitions by incurring debt or by issuing equity or convertible or debt securities, our existing stockholder may be diluted or we could face constraints related to covenants in the agreements governing the indebtedness, which could affect the market value of our capital stock. To the extent that the acquisition consideration is paid in the form of an earnout on future financial results, the success of such an acquisition will not be fully realized by us for a period of time as it is shared with the sellers. Further, if we fail to properly evaluate and execute acquisitions or investments, our business and prospects may be seriously harmed and the value of your investment may decline. For us to realize the benefits of future acquisitions, we must successfully integrate the acquired businesses, software or technologies with ours. This may take time and divert management's attention from our day-to-day operations, which could negatively impact our business, results of operations, financial condition and cash flows.

Our quarterly and annual results of operations will fluctuate in future periods.

We will experience quarterly or annual fluctuations in our results of operations due to a number of factors, many of which are outside of our control. This makes our future results difficult to predict and

could cause our results of operations to fall below expectations or our predictions. Factors that might cause quarterly or annual fluctuations in our results of operations include:

- our ability to attract new customers and retain and grow revenue from existing customers;
- our ability to maintain, expand, train and achieve an acceptable level of production from our sales and marketing teams;
- our ability to find and nurture successful sales opportunities;
- the timing of our introduction of new solutions or updates to existing solutions;
- our ability to grow and maintain our relationships with our ecosystem of third-party partners, including integration partners and referral partners;
- the success of our customers' businesses;
- the timing of large subscriptions and customer renewal rates;
- new government regulations;
- changes in our pricing policies or those of our competitors;
- the amount and timing of our expenses related to the expansion of our business, operations and infrastructure;
- any impairment of our intangible assets, capitalized software, long-lived assets and goodwill;
- any seasonality in connection with new customer agreements, as well as renewal and upgrade agreements, each of which have historically occurred at a higher rate in the fourth quarter of each year;
- future costs related to acquisitions of content, technologies or businesses and their integration; and
- general economic conditions.

Any one of the factors above, or the cumulative effect of some or all of the factors referred to above, may result in significant fluctuations in our quarterly and annual results of operations. This variability and unpredictability could result in our failure to meet or exceed our internal operating plan. In addition, a percentage of our operating expenses is fixed in nature and is based on forecasted financial performance. In the event of revenue shortfalls, we may not be able to mitigate the negative impact on our results of operations quickly enough to avoid short-term impacts.

We generally recognize revenue from subscription fees paid by customers ratably over the subscription term. As a result, most of the subscription revenue we report in each quarter is the result of agreements entered into during previous quarters. Consequently, a decline in new or renewed subscriptions in any one quarter will not be fully reflected in our revenue results for that quarter. Any such decline, however, will negatively affect our revenue in future quarters. Our subscription model also makes it difficult for us to rapidly increase our revenue through additional sales in any period, as subscription revenue from new customers is generally recognized over the applicable subscription terms.

Operating globally involves challenges that may adversely affect our ability to grow.

We plan to continue expanding our business operations globally and to enter new markets where we have limited or no experience in marketing, selling and deploying our solutions. If we fail to deploy or manage our operations in international markets successfully, our business may suffer. In the future, as our international operations increase, or more of our expenses are denominated in currencies other than the U.S. dollar, our results of operations may become more sensitive to fluctuations in the

exchange rates of the currencies in which we do business. In addition, we are subject to a variety of risks inherent in doing business internationally, including:

- political, social and economic instability;
- risks related to the legal and regulatory environment in foreign jurisdictions, including with respect to privacy, localization and content laws as well as unexpected changes in laws, regulatory requirements and enforcement due to the wide discretion given to some local lawmakers and regulators regarding the enactment, interpretation and implementation of local regulations;
- potential damage to our brand and reputation due to compliance with local laws, including potential censorship and requirements to provide user information to local authorities;
- fluctuations in currency exchange rates;
- higher levels of credit risk and payment fraud;
- complying with the tax laws and regulations of multiple tax jurisdictions;
- enhanced difficulties of integrating any foreign acquisitions;
- complying with a variety of foreign laws, including certain employment laws requiring national collective bargaining agreements that set minimum salaries, benefits, working conditions and termination requirements;
- reduced protection for intellectual property rights in some countries;
- difficulties in staffing and managing global operations and the increased travel, infrastructure and compliance costs associated with multiple international locations;
- regulations that might add difficulties in repatriating cash earned outside our core markets and otherwise prevent us from freely moving cash;
- import and export restrictions and changes in trade regulation;
- complying with statutory equity requirements;
- complying with the U.S. Foreign Corrupt Practices Act (the "FCPA"), the U.K. Bribery Act and similar laws in other jurisdictions; and
- complying with export controls and economic sanctions administered by the relevant local authorities, including in the United States and European Union, in our international business.

If we are unable to expand internationally and manage the complexity of our global operations successfully, our business could be seriously harmed.

We hold significant amounts of money that we remit to taxing authorities on behalf of our customers, and this may expose us to liability from errors, delays, fraud or system failures, which may not be covered by insurance.

We handle significant amounts of our customers' money so that we can remit those amounts to various taxing jurisdictions on their behalf. If we make mistakes in the determination or remittance of tax payments to the appropriate jurisdictions, our reputation and results of operations could suffer. Moreover, if our banks' or our own internal compliance procedures regarding cash management fail, are hacked or sabotaged, or if our banks or we are the subject of fraudulent behavior by personnel or third parties, we could face significant financial losses. Our efforts to remit tax payments to applicable taxing jurisdictions after receiving the corresponding funds from our customers may fail, which would

expose us to the financial risk of collecting from our customers after we have remitted funds on their behalf.

Additionally, we are subject to risk from concentration of cash and cash equivalent accounts, including cash from our customers that is to be remitted to taxing jurisdictions, with financial institutions where deposits routinely exceed federal insurance limits. If the financial institutions in which we deposit our customers' cash were to experience insolvency or other financial difficulty, our access to cash deposits could be limited, any deposit insurance may not be adequate, we could lose our cash deposits entirely and we could be exposed to liability to our customers. Any of these events would negatively impact our liquidity, results of operations and our reputation.

If we are unable to successfully adapt to organizational changes and effectively implement strategic initiatives, our reputation and results of operations could be impacted.

We have a dynamic organization and routinely implement changes to our priorities and workforce in order to keep up with the constantly evolving market in which we operate. We expect these types of changes to continue for the foreseeable future. Successfully managing these changes, including retention of key employees, is critical to our business success. In addition, we are generally a build-from-within company, and our success is dependent on identifying, developing and retaining key employees to provide uninterrupted leadership and direction for our business. This includes developing organizational capabilities in key growth markets where the depth of skilled employees is limited and competition for these resources is intense. Further, business and organizational changes may result in more reliance on third parties for various services, and that reliance may increase reputational, operational and compliance risks.

Errors in our customers' transaction tax determinations and reporting functions, or delays in the remittance of their tax payments, could harm our reputation, results of operations and growth prospects.

The tax determinations functions that our customers have to perform are complicated from a data management standpoint, time-sensitive and dependent on the accuracy of the database of tax content underlying our solutions. Some of our processes are not fully automated, such as our process for monitoring updates to tax rates and rules, and even to the extent our processes are automated, our solutions are not proven to be without any possibility of errors. If errors are made in our customers' tax determinations and reporting functions, or delays occur in the remittance of their tax payments, our customers may be assessed interest and penalties. Although our agreements generally have disclaimers of warranties and limit our liability, a court could determine that such disclaimers and limitations are unenforceable as a matter of law and hold us liable for these errors. Additionally, erroneous tax determinations could result in overpayments to taxing authorities that are difficult to reclaim from the applicable taxing authorities or underpayments that could result in penalties. Any history of erroneous tax determinations for our customers could also harm our reputation, could result in negative publicity, loss of or delay in market acceptance of our solutions, loss of customer renewals and loss of competitive position. In addition, our insurance coverage may not cover all amounts claimed against us if such errors or failures occur. The financial and reputational costs associated with any erroneous tax determinations may be substantial and could harm our results of operations.

Changes in tax laws and regulations, or their interpretation or enforcement, may cause us to invest substantial amounts to modify our software, cause us to change our business model or draw new competitors to the market.

Changes in tax laws or regulations or interpretations of existing taxation requirements in the United States or in other countries may require us to change the manner in which we conduct some aspects of our business and could harm our ability to attract and retain customers. For example, a material portion of our revenue is generated by performing what can be complex transaction tax

determinations and the corresponding preparation of tax returns and remittance of taxes. Changes in tax laws or regulations that reduce complexity or decrease the frequency of tax filings could negatively impact our revenue. In addition, there is considerable uncertainty as to if, when and how tax laws and regulations might change. As a result, we may need to invest substantial funds to modify our solutions to adapt to new tax laws or regulations. If our software solutions are not flexible enough to adapt to changes in tax laws and regulations, our financial condition and results of operations may suffer.

A number of states have considered or adopted laws that attempt to require out-of-state retailers to collect sales taxes on their behalf or to provide the jurisdiction with information enabling it to more easily collect use tax. On June 21, 2018, the U.S. Supreme Court issued its opinion in *South Dakota v. Wayfair, Inc.*, upholding South Dakota's economic nexus law, which requires certain out-of-state retailers to collect and remit sales taxes on sales into South Dakota. Following the Supreme Court's decision, certain states with pre-existing economic nexus provisions announced that they would begin enforcing these provisions on out-of-state retailers and additional states have proceeded with similar efforts. There also has been consideration of federal legislation related to taxation of interstate sales, which, if enacted into law, would place guidelines or restrictions on states' authority to require online and other out of state merchants to collect and remit indirect tax on products and services that they may sell. Similar issues exist outside of the United States, where the application of value-added taxes or other indirect taxes on online retailers is uncertain and evolving. The effect of changes in tax laws and regulations is uncertain and dependent on a number of factors. Depending on the content of any indirect tax legislation, the role of third-party compliance vendors may change, we may need to invest substantial amounts to modify our solutions or our business model, we could see a decrease in demand, we could see new competitors enter the market, or we could be negatively impacted by such legislation in a way not yet known.

We are exposed to cybersecurity and data privacy risks that, if realized, could expose us to legal liability, damage our reputation and harm our business.

We face risks of cyber-attacks, computer hacks, theft, viruses, malicious software, phishing, employee error, denial-of-service attacks and other security breaches that could jeopardize the performance of our software and expose us to financial and reputational harm. Any of these occurrences could create liability for us, put our reputation in jeopardy and harm our business. Such harm could be in the form of theft of our or our customers' confidential information, the inability of our customers to access our systems or the improper re-routing of customer funds through fraudulent transactions or other frauds perpetrated to obtain inappropriate payments. In some cases, we rely on the safeguards put in place by third parties to protect against security threats. These third parties, including vendors that provide products and services for our operations, could also be a source of security risk to us in the event of a failure or a security incident affecting their own security systems and infrastructure. Our network of ecosystem partners could also be a source of vulnerability to the extent their applications interface with ours, whether unintentionally or through a malicious backdoor. We do not review the software code included in third-party integrations in all instances. Because the techniques used to obtain unauthorized access or to sabotage systems change frequently and generally are not recognized until launched against a target, we or these third parties may be unable to anticipate these techniques or to implement adequate preventative measures. We have internal controls designed to prevent cyber-related frauds related to authorizing the transfer of funds, but such internal controls may not be adequate. With the increasing frequency of cyber-related frauds to obtain inappropriate payments and other threats related to cyber-attacks, we may find it necessary to expend resources to remediate cyber-related incidents or to enhance and strengthen our cybersecurity. Our remediation efforts may not be successful and could result in interruptions, delays or cessation of service. Although we have insurance coverage for losses associated with cyber-attacks, as with all insurance policies, there are coverage exclusions and limitations, and our coverage may not be sufficient to cover all possible

claims, and we may still suffer losses that could have a material adverse effect on our reputation and business.

Our customers provide us with information that our solutions store, some of which may be confidential information about them or their financial transactions. In addition, we store personal information about our employees and, to a lesser extent, those who purchase products or services from our customers. We have security systems and information technology infrastructure designed to protect against unauthorized access to such information. The security systems and infrastructure we maintain may not be successful in protecting against all security breaches and cyber-attacks, social-engineering attacks, computer break-ins, theft and other improper activity. Threats to our information technology security can take various forms, including viruses, worms and other malicious software programs that attempt to attack our solutions or platform or to gain access to the data of our customers or their customers. Like other companies, we have on occasion and will continue to experience threats to our data and systems. Any significant data breach could result in the loss of business, litigation and regulatory investigations, loss of customers and fines and penalties that could damage our reputation and brand and adversely affect the growth of our business.

We may become involved in material legal proceedings and audits, the outcomes which could adversely affect our business, results of operations, financial condition and cash flows.

From time to time, we are involved in claims, suits, investigations, audits and proceedings arising in the ordinary course of our business, and we may in the future become involved in legal proceedings and audits that could have a material adverse effect on our business, results of operations, financial condition and cash flows. Claims, suits, investigations, audits and proceedings are inherently difficult to predict and their results are subject to significant uncertainties, many of which are outside of our control. Regardless of the outcome, such legal proceedings could have a negative impact on us due to legal costs, diversion of management resources and other factors. In addition, it is possible that a resolution of one or more such proceedings could result in reputational harm, substantial settlements, judgments, fines or penalties, criminal sanctions, consent decrees or orders preventing us from offering certain features, functionalities, products or services, requiring us to change our development process or other business practices.

There is also inherent uncertainty in determining reserves for these matters. There is significant judgment required in the analysis of these matters, including assessing the probability of potential outcomes and determining whether a potential exposure can be reasonably estimated. Further, it may take time to develop factors on which reasonable judgments and estimates can be based. If we fail to establish appropriate reserves, our business could be negatively impacted.

Undetected errors, bugs or defects in our software could harm our reputation or decrease market acceptance of our software, which would harm our business and results of operations.

Our software may contain undetected errors, bugs or defects. We have experienced these errors, bugs or defects in the past in connection with new software and software upgrades and we expect that errors, bugs or defects may be found from time to time in the future in new or enhanced software after their commercial release. Our software is often used in connection with large-scale computing environments with different operating systems, system management software, equipment and networking configurations, which may cause or reveal errors or failures in our software or in the computing environments in which they are deployed. Despite testing by us, errors, bugs or defects may not be found in our software until they are used by our customers. In the past, we have discovered errors, bugs and defects in our software after they have been deployed to customers.

Any errors, bugs, defects, disruptions in service or other performance problems with our software may damage our customers' businesses and could hurt our reputation, brand and business. We may also

be required, or may choose, for customer relations or other reasons, to expend additional resources to correct actual or perceived errors, bugs or defects in our software. If errors, bugs or defects are detected or perceived to exist in our software, we may experience negative publicity, loss of competitive position or diversion of the attention of our key personnel, our customers may delay or withhold payment to us or elect not to renew their subscriptions, or other significant customer relations problems may arise. We may also be subject to liability claims for damages related to errors, bugs or defects in our software. A material liability claim or other occurrence that harms our reputation or decreases market acceptance of our software may harm our business and results of operations.

Our software utilizes open-source software, and any defects or security vulnerabilities in the open-source software could negatively affect our business.

Certain of our software employs open-source software and we expect to use open-source software in the future. To the extent that our software depends upon the successful operation of open-source software, any undetected errors or defects in this open-source software could prevent the deployment or impair the functionality of our software, delay the introduction of new solutions, result in a failure of our software, and injure our reputation. For example, undetected errors or defects in open source software could render it vulnerable to breaches or security attacks, and, in conjunction, make our systems more vulnerable to data breaches.

In addition, the terms of various open-source licenses have not been interpreted by United States courts, and there is a risk that such licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to market certain of our software solutions. Some open-source licenses might require us to make our source code available for no cost, to make publicly available source code for modifications or derivative works that we create based upon, incorporating or using the open source software, and/or to license such modifications or derivative works under the terms of the particular open source license. While we try to insulate our proprietary code from the effects of such open-source license provisions, we cannot guarantee we will be successful. In addition to risks related to open-source license requirements, usage of open-source software can lead to greater risks than use of third-party commercial software, as open-source licensors generally do not provide warranties or controls on the origin of the software. Many of the risks associated with usage of open-source software cannot be eliminated and could negatively affect our business, financial condition and results of operations.

We rely on third-party data centers, systems and technologies to operate our business, and interruptions or performance problems with these third-party providers may adversely affect our business and results of operations.

We rely on data centers and other technologies and services provided by third parties in order to operate our business. If any of these services becomes unavailable or otherwise is unable to serve our requirements, there could be interruptions to our software and provision of services to our customers. Our business depends on our ability to protect the growing amount of information stored in data centers and related systems, offices and hosting facilities against damage from earthquakes, floods, fires, other extreme weather conditions, power loss, telecommunications failures, hardware failures, viruses, terrorist attacks, acts of war, unauthorized electronic or physical intrusion, overload conditions and other events. If our data centers or related systems fail to operate properly or become disabled even for a brief period of time, we could suffer financial loss, a disruption of our business, liability to customers or damage to our reputation. Our response to any type of disaster may not be successful in preventing the loss of customer data, service interruptions, disruptions to our operations or damage to our important facilities. Our data center providers have no obligations to renew their agreements with us on commercially reasonable terms, or at all, and it is possible that we will not be able to switch our operations to another provider in a timely and cost-effective manner should the need arise. If we are unable to renew our agreements with these providers on commercially reasonable terms, or if in the future we add additional data center facility providers, we may face additional costs or expenses or downtime, which could harm our business.

We also rely on computer hardware purchased or leased from, software licensed from, content licensed from and services provided by a variety of third parties, which include database, operating system, virtualization software, tax requirement content and geolocation content and services. Any errors, bugs or defects in such third-party hardware, software, content or services could result in errors or a failure of our solutions, which could harm our business. In the future, we might need to license other hardware, software, content or services to enhance our solutions and meet evolving customer requirements. Any inability to license or otherwise obtain such hardware or software could result in a reduction in functionality, or errors or failures of our products, until equivalent technology is either developed by us or, if available, is identified, obtained through purchase or license, and integrated into our solutions, any of which may reduce demand for our solutions and increase our expenses. In addition, third-party licenses may expose us to increased risks, including risks associated with the integration of new technology, the diversion of resources from the development of our own proprietary technology, and our inability to generate revenue from new technology sufficient to offset associated acquisition and maintenance costs, all of which may increase our expenses and harm our results of operations.

If we fail to effectively protect, maintain and enhance our brand, our business may suffer.

As a leader in our industry for over 40 years, our brand is one of our most valuable assets, and any failure to protect our brand could cause our business to suffer. In addition, the promotion of our brand requires us to make substantial expenditures, and we anticipate that the expenditures will increase as our market becomes more competitive and as we expand into new regions. The demand for and cost of online and traditional advertising have been increasing and may continue to increase. Our brand promotion efforts will require investment not just in our indirect tax solutions, but also in our full suite of software and services. To the extent that these activities yield increased revenue, this revenue may not offset the increased expenses we incur. If we do not successfully maintain and enhance our brand, our business may not grow, we may have reduced pricing power relative to competitors and we could lose customers or fail to attract potential new customers, all of which would adversely affect our business, results of operations, financial condition and cash flows.

Changes in the application, scope, interpretation or enforcement of laws and regulations pertaining to our operations may harm our business or results of operations, subject us to liabilities and require us to implement new compliance programs or business methods.

We perform a number of critical business functions for our customers, including remittance of the taxes our customers owe to taxing authorities. Our electronic payment of customers' taxes may be subject to federal or state laws or regulations relating to money transmission. The Federal Bank Secrecy Act requires that financial institutions, of which money transmitters are a subset, register with the U.S. Department of Treasury's Financial Crimes Enforcement Network and maintain policies and procedures reasonably designed to monitor, identify, report and, where possible, avoid money laundering and criminal or terrorist financing by customers. Most U.S. states also have laws that apply to money transmitters, and impose various licensure, examination and bonding requirements on them. We believe these federal and state laws and regulations were not intended to cover the business activity of remitting transaction taxes that taxpayers owe to the various states and localities. However, if federal or state regulators were to apply these laws and regulations to this business activity, whether through expansion of enforcement activities, new interpretations of the scope of certain of these laws or regulations or of available exemptions, or if our activities are held by a court to be covered by such laws or regulations, we could be required to expend time, money and other resources to deal with enforcement actions and any penalties that might be asserted, to institute and maintain a compliance program specific to money transmission laws, and possibly to change aspects of how we conduct our business to achieve compliance or minimize regulation. Application of these laws to our business could also make it more difficult or costly for us to maintain our banking relationships. Financial institutions

may also be unwilling to provide banking services to us due to concerns about the large dollar volume moving in and out of our accounts on behalf of our customers in the ordinary course of our business. As we continue to expand the solutions we offer and the jurisdictions in which we offer them, we could become subject to other licensing, examination or regulatory requirements relating to financial services.

Determining the taxes owed by our customers involves providing solutions tailored to the types and prices of products our customers sell, as well as information regarding addresses that products are shipped from and delivered to. Numerous federal, state and local laws and regulations govern the collection, dissemination, use and safeguarding of personal information and other data, the scope of which is changing, subject to differing interpretations, and which may be costly to comply with, inconsistent between jurisdictions or conflicting with other rules. We may be subject to these laws in certain circumstances. Most states have also adopted laws that require notice be given to affected consumers in the event of a security breach. In the event of a security breach, our compliance with these laws may subject us to costs associated with notice and remediation, as well as potential investigations from federal regulatory agencies and state attorneys general. A failure on our part to safeguard consumer data adequately or to destroy data securely may subject us, depending on the personal information in question, to costs associated with notice and remediation, as well as to potential regulatory investigations or enforcement actions, and possibly to civil liability, under federal or state data security or unfair practices or consumer protection laws. If federal or state regulators were to expand their enforcement activities, or change their interpretation of the applicability of these laws, or if new laws regarding privacy and protection of consumer data were to be adopted, the burdens and costs of complying with them could increase significantly, negatively affecting our results of operations and possibly the manner in which we conduct our business. For example, the European Union's General Data Protection Regulation requires certain operational changes for companies that receive or process personal data of residents of the EU and includes significant penalties for noncompliance. In addition, other governmental authorities around the world are considering implementing similar types of legislative and regulatory proposals concerning data protection. We may incur significant costs to comply with these mandatory privacy and security standards.

If economic conditions worsen, it may negatively affect our business and financial performance.

Our financial performance depends, in part, on the state of the economy, both in the United States and globally. Declining levels of economic activity may lead to declines in spending and customer revenue, which may result in decreased revenue for us. Concern about the strength of the economy may slow the rate at which businesses of all sizes are willing to hire an outside vendor to perform the determination and remittance of their transaction taxes and filing of related returns. If our customers and potential customers experience financial hardship as a result of a weak economy, industry consolidation or other factors, the overall demand for our solutions could decrease. If economic conditions worsen, our business, results of operations, financial condition and cash flows could be harmed.

Natural disasters, epidemic outbreaks, terrorist acts and political events could disrupt business and result in lower sales and otherwise have a material adverse effect on our business, financial performance and results of operations.

The occurrence of one or more major natural disasters, unusual weather conditions, epidemic outbreaks, terrorist attacks or disruptive political events, each of which is out of our control, may result in reduced consumer and supplier spending and transactions, which in turn could cause our revenues to decline and our business to suffer. Natural disasters including tornados, hurricanes, floods and earthquakes may damage the facilities of our customers or those of their suppliers or retailers or their other operations, which could lead to reduced revenue for our customers and thus less transaction tax due. In addition, a global epidemic outbreak may have a material adverse effect on global economic conditions, consumer spending and the stability of global financial markets. For example, in December

2019, a novel strain of coronavirus ("COVID-19") appeared. The COVID-19 pandemic is having widespread, rapidly evolving and unpredictable impacts on global society, economies, financial markets and business practices. Federal and state governments have implemented measures in an effort to contain the virus, including social distancing, travel restrictions, border closures, limitations on public gatherings, work-from-home, supply chain logistical changes and closure of non-essential businesses. To protect the health and well-being of our employees and customers, we have made substantial modifications to employee travel policies, closed our offices as employees are advised to work-from-home and cancelled or shifted our conferences and other marketing events to virtual-only. The COVID-19 pandemic has impacted and may continue to adversely impact our business operations, including our employees, customers and partners, and there is substantial uncertainty in the nature and degree of its continued effects over time. The extent to which the COVID-19 pandemic impacts our business going forward will depend on numerous evolving factors that we cannot reliably predict, including (i) the duration and scope of the pandemic; (ii) actions of governments, businesses and individuals in response to the pandemic and (iii) the impact on economic activity including the possibility of recession or financial market instability. These factors may adversely impact consumer and business spending as well as customers' ability to pay for our software and solutions on an ongoing basis. Similarly, terrorist attacks or disruptive political events, such as the imposition of retaliatory tariffs or governmental trade or price manipulation, could cause our customers, or their customers, to defer spending plans or otherwise reduce their economic activity. If any of the foregoing risks were to be realized, it could have a material adverse effect on our business, financial performance and results of operations.

We are subject to anti-corruption, anti-bribery and similar laws and noncompliance with such laws can subject us to criminal penalties or significant fines and harm our business and reputation.

We are subject to requirements under the U.S. Treasury Department's Office of Foreign Assets Control, anti-corruption, anti-bribery and similar laws, such as the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, the U.K. Bribery Act 2010, and other anti-corruption, anti-bribery and anti-money laundering laws in countries in which we conduct activities. Anti-corruption and anti-bribery laws have been enforced aggressively in recent years and are interpreted broadly and prohibit companies and their employees and agents from promising, authorizing, making, offering or providing anything of value to a "foreign official" for the purposes of influencing official decisions or obtaining or retaining business, or otherwise obtaining favorable treatment. As we increase our international operations, our risks under these laws may increase. Non-compliance with these laws could subject us to investigations, sanctions, settlements, prosecution, other enforcement actions, disgorgement of profits, significant fines, damages, other civil and criminal penalties or injunctions, adverse media coverage and other consequences. Any investigations, actions or sanctions could harm our business, results of operations, financial condition and cash flows.

In addition, in the future we may use third parties to sell access to our software and conduct business on our behalf abroad. We or such future third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities, and we can be held liable for the corrupt or other illegal activities of such future third-party intermediaries, and our employees, representatives, contractors, partners and agents, even if we do not explicitly authorize such activities. We cannot provide assurance that our internal controls and compliance systems will always protect us from liability for acts committed by employees, agents or business partners of ours (or of businesses we acquire or partner with) that would violate U.S. and/or non-U.S. laws, including the laws governing payments to government officials, bribery, fraud, kickbacks, false claims, pricing, sales and marketing practices, conflicts of interest, competition, employment practices and workplace behavior, export and import compliance, economic and trade sanctions, money laundering, data privacy and other related laws. Any such improper actions or allegations of such acts

could subject us to significant sanctions, including civil or criminal fines and penalties, disgorgement of profits, injunctions and debarment from government contracts, as well as related stockholder lawsuits and other remedial measures, all of which could adversely affect our reputation, business, results of operations and financial condition.

Any violation of economic and trade sanction laws, export and import laws, the FCPA or other applicable anti-corruption laws or anti-money laundering laws could also result in whistleblower complaints, adverse media coverage, investigations and severe criminal or civil sanctions, any of which could have a materially adverse effect on our reputation, business, results of operations and prospects.

Our ability to protect our intellectual property is limited, and we may be subject to claims of infringement by third parties.

Our success depends, in part, upon our proprietary technology, processes, trade secrets, and other proprietary information and our ability to protect this information from unauthorized disclosure and use. We primarily rely upon a combination of copyright, trademark and trade secret laws, as well as confidentiality procedures, contractual provisions and other similar measures to protect our proprietary or confidential information and intellectual property. Our trademarks and service marks include VERTEX™ and O Series™, which is our flagship indirect tax solution. Despite our efforts to protect our proprietary rights and intellectual property, unauthorized parties may attempt to copy aspects of our solutions or to obtain and use information that we regard as proprietary, and third parties may attempt to independently develop similar technology, and policing unauthorized use of our technology and intellectual property rights may be difficult and may not be effective.

In addition, third parties may claim infringement by us with respect to current or future solutions or other intellectual property rights. The software and technology industries are characterized by the existence of a large number of patents, trademarks and copyrights and by frequent litigation based on allegations of infringement or other violations of intellectual property rights. The outcome of any claims or litigation, regardless of the merits, is inherently uncertain. Any claims and lawsuits to enforce our intellectual property rights or to defend ourselves against claims of infringement of third-party intellectual property rights, and the disposition of such claims and lawsuits, whether through settlement or licensing discussions, or litigation, could be time-consuming and expensive to resolve, divert management attention from executing our strategies, result in efforts to enjoin our activities, lead to attempts on the part of other parties to pursue similar claims, and, in the case of intellectual property claims, require us to change our technology, change our business practices, pay monetary damages, or enter into short- or long-term royalty or licensing agreements. Any adverse determination related to intellectual property claims or other litigation could prevent us from offering our solutions to others, could be material to our financial condition or cash flows, or both, or could otherwise harm our results of operations.

Our ability to obtain additional capital on commercially reasonable terms may be limited.

We intend to continue to make investments to support our business growth and may require additional funds, beyond those generated by this offering, to respond to business challenges, including to better support and serve our customers, develop new software or enhance our existing solutions, improve our operating and technology infrastructure or acquire complementary businesses and technologies. Accordingly, we may need to engage in public or private equity, equity-linked or debt financings to secure additional funds. If we raise additional funds through future issuances of equity or convertible debt securities, our existing stockholders could suffer significant dilution, and any new equity securities we issue could have rights, preferences and privileges superior to those of holders of our Class A common stock. Any debt financing that we secure in the future could involve restrictive covenants relating to our capital raising activities and other financial and operational matters, including the ability to pay dividends. This may make it more difficult for us to obtain additional capital and to

pursue business opportunities, including potential acquisitions. We may not be able to obtain additional financing on terms favorable to us, if at all. If we are unable to obtain adequate financing on terms satisfactory to us when we require it, our ability to continue to support our business growth and respond to business challenges could be significantly impaired, and our business and prospects could be adversely affected.

Risks Related to Being a Public Company

If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, our ability to produce timely and accurate financial statements or comply with applicable regulations could be impaired.

Ensuring that we have adequate internal financial and accounting controls and procedures in place to produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be re-evaluated frequently. The rapid growth of our operations and the planned initial public offering has created a need for additional resources within the accounting and finance functions due to the increasing need to produce timely financial information and to ensure the level of segregation of duties customary for a U.S. public company. We continue to reassess the sufficiency of finance personnel in response to these increasing demands and expectations.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our management does not expect that our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within our company will have been detected.

We have identified material weaknesses in our internal control over financial reporting and may experience additional material weaknesses in the future. Our failure to remediate these material weaknesses and maintain effective internal control over financial reporting could result in material misstatements in our financial statements, the inability to timely report our financial condition or results of operations, investors losing confidence in our reported financial information and our stock price being adversely affected.

Management and our independent registered public accounting firm have identified material weaknesses in our internal control over financial reporting that affected our financial statements for each of the years in the two year period ended December 31, 2019. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Internal Control Over Financial Reporting."

The material weaknesses in our internal control over financial reporting during each of the years ended December 31, 2018 and 2019 related to the implementation of ASC 606, application of software capitalization guidance and recording of impairments, and our procedures for segregating user access to financially significant systems, which resulted in a lack of segregation of incompatible duties.

We cannot assure you that additional material weaknesses in our internal control over financial reporting will not be identified in the future. The failure to maintain effective internal control over financial reporting could result in errors in our financial statements that could result in a restatement of financial statements, cause us to fail to meet our periodic reporting obligations and cause investors to lose confidence in our reported financial information, which could lead to a decline in our stock price.

We are an "emerging growth company" and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our Class A common stock less attractive to investors.

We are an "emerging growth company" as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates. We have elected to use this extended transition period and we intend to utilize this related to the FASB issued ASU No. 2016-02, *Leases*. This standard amends several aspects of lease accounting, including requiring lessees to recognize operating leases with a term greater than one year on their balance sheet as a right-of-use asset, and a corresponding lease liability, measured at the present value of the future minimum lease payments. The standard is effective for public companies for fiscal years beginning after December 15, 2018, and after December 15, 2020 for all other companies, with early adoption permitted. We intend to adopt this standard effective January 1, 2021 using the modified retrospective transition method and therefore will not restate comparative periods. While we have not yet quantified the impact, resulting adjustments are expected to materially increase total assets and total liabilities relative to such amounts reported prior to adoption, but not have a material impact on the consolidated statements of comprehensive income (loss) or consolidated statements of cash flows.

For as long as we continue to be an emerging growth company, we also intend to take advantage of certain other exemptions from various reporting requirements that are applicable to other public companies including, but not limited to, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a non-binding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We cannot predict if investors will find our Class A common stock less attractive because we will rely on these exemptions. If some investors find our Class A common stock less attractive as a result, there may be a less active trading market for our Class A common stock and our stock price may be more volatile.

We will remain an emerging growth company until the earliest of (i) the last day of the year in which we have total annual gross revenue of \$1.07 billion or more; (ii) the last day of the year following the fifth anniversary of the date of the closing of this offering; (iii) the date on which we have issued more than \$1.0 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

The requirements of being a public company may strain our resources, divert management's attention and affect our ability to attract and retain qualified board members.

As a public company, we will be subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, (the "Exchange Act"), the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of the Nasdaq Global Market on which our Class A common stock will be traded and other applicable securities rules and regulations. The SEC and other regulators have continued to adopt new rules and regulations and make additional changes to existing regulations that require our compliance. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact, in ways we cannot currently anticipate, the manner in which we operate our business. We will need to institute a comprehensive compliance function and establish internal policies to ensure we have the ability to prepare financial statements

that are fully compliant with all SEC reporting requirements on a timely basis and establish an investor relations function. Compliance with these rules and regulations may cause us to incur additional accounting, legal and other expenses that we did not incur as a private company. We also anticipate that we will incur costs associated with corporate governance requirements, including requirements under securities laws, as well as rules and regulations implemented by the SEC and the Nasdaq Global Market, particularly after we are no longer an "emerging growth company." We expect these rules and regulations to increase our legal and financial compliance costs and to make some activities more time-consuming and costly, while also diverting some of management's time and attention from revenue-generating activities. Furthermore, these rules and regulations could make it more difficult or more costly for us to obtain certain types of insurance, including director and officer liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers. We are currently evaluating and monitoring developments with respect to these rules and regulations, and we cannot predict or estimate the amount of additional costs we may incur or the timing of such costs.

Our management team has limited experience managing a public company.

Most members of our management team have limited experience managing a publicly traded company, interacting with public company investors and complying with the increasingly complex laws pertaining to public companies. Our management team may not successfully or efficiently manage our transition to being a public company that is subject to significant regulatory oversight and reporting obligations under the federal securities laws and the continuous scrutiny of securities analysts and investors. These new obligations and constituents will require significant attention from our senior management and could divert their attention away from the day-to-day management of our business, which could harm our business, results of operations, and financial condition.

Risks Related to This Offering and Ownership of Our Class A Common Stock

There is no existing market for our Class A common stock, and we do not know if one will develop to provide you with adequate liquidity to sell our Class A common stock at prices equal to or greater than the price you paid in this offering.

Prior to this offering, there has been no public market for our Class A common stock. We cannot predict the extent to which investor interest in our company will lead to the development of an active trading market or how liquid that market may become. If an active trading market does not develop, you may have difficulty selling any of our shares that you purchase. The initial public offering price of our Class A common stock was determined by negotiation between the underwriters, us and the selling stockholders, and may not be indicative of prices that will prevail after the completion of this offering. The market price of our Class A common stock may decline below the initial public offering price, and you may not be able to resell your shares at, or above, the initial public offering price.

Substantial future sales of shares of our Class A common stock could cause the market price of our Class A common stock to decline.

Sales of a substantial number of shares of our Class A common stock following the closing of this offering, particularly sales by our directors, executive officers and significant stockholders, or the perception that these sales might occur, could depress the market price of our Class A common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that such sales may have on the prevailing market price of our common stock.

All of our executive officers, directors and the holders of all of our capital stock are subject to lock-up agreements that restrict their ability to transfer shares of our capital stock for 180 days from the date of this prospectus. Subject to certain exceptions, the lock-up agreements limit the number of shares of capital stock that may be sold immediately following this offering. Goldman Sachs & Co. LLC and Morgan Stanley & Co. LLC may, in their sole discretion, permit our stockholders who are subject to these lock-up agreements to sell shares prior to the expiration of the lock-up agreements. Upon the closing of this offering, we will have _____ outstanding shares of our Class B common stock (all of which are convertible into Class A common stock on a one-for-one basis) and _____ outstanding shares of our Class A common stock, based on the number of shares outstanding as of _____, 2020. This includes the shares included in this offering, which may be sold in the public market immediately without restriction or further registration under the Securities Act of 1933, as amended (the "Securities Act"), except for any shares held by our affiliates as defined in Rule 144 under the Securities Act.

The dual class structure of our common stock will have the effect of concentrating voting control with those stockholders who held our capital stock prior to the completion of this offering, including our existing stockholders, who will hold in the aggregate _____ % of the voting power of our capital stock following the completion of this offering. This will limit or preclude your ability to influence corporate matters, including the election of directors, amendments to our organizational documents and any merger, consolidation, sale of all or substantially all of our assets, or other major corporate transaction requiring stockholder approval.

Our Class B common stock has ten votes per share and our Class A common stock, which is the stock we are offering in this initial public offering, has one vote per share. The dual class structure of our common stock has the effect of concentrating voting control with those stockholders who held our capital stock prior to the completion of this offering, including our current principal stockholders and their affiliates, which will limit your ability to influence the outcome of matters submitted to our stockholders for approval, including the election of our directors and the approval of any change in control transaction. Future transfers by holders of Class B common stock will generally result in those shares converting to Class A common stock, which will have the effect, over time, of increasing the relative voting power of those holders of Class B common stock who retain their shares in the long term.

Upon the completion of this offering, our current principal stockholders and their respective affiliates will hold, in aggregate, _____ % of the voting power of our outstanding capital stock. For more information, see "Principal Stockholders." As a result, these stockholders, acting together, will have control over most matters that require approval by our stockholders, including the election of directors and approval of significant corporate transactions. They may also have interests that differ from yours and may vote in a way with which you disagree and which may be adverse to your interests. Corporate action might be taken even if other stockholders, including those who purchase shares in this offering, oppose them. This concentration of ownership may have the effect of delaying, preventing or deterring a change of control or other liquidity event of our company, could deprive our stockholders of an opportunity to receive a premium for their shares of common stock as part of a sale or other liquidity event and might ultimately affect the market price of our common stock.

We cannot predict the impact our capital structure may have on our stock price.

We cannot predict whether our dual class structure will result in a lower or more volatile market price of our Class A common stock, in adverse publicity or other adverse consequences. For example, certain index providers have announced restrictions on including companies with multiple-class share structures in certain of their indices. In July 2017, the FTSE Russell announced that it plans to require new constituents of its indices to have greater than 5% of the company's voting rights in the hands of public stockholders, and S&P Dow Jones announced that it will no longer admit companies with multiple-class share structures to certain of its indices. Affected indices include the Russell 2000 and

the S&P 500, S&P MidCap 400 and S&P SmallCap 600, which together make up the S&P Composite 1500. Also in 2017, Morgan Stanley Capital International ("MSCI"), a leading stock index provider, opened public consultations on their treatment of no-vote and multi-class structures and temporarily barred new multi-class listings from certain of its indices; however, in October 2018, MSCI announced its decision to include equity securities "with unequal voting structures" in its indices and to launch a new index that specifically includes voting rights in its eligibility criteria. Under such announced policies, the dual class structure of our common stock would make us ineligible for inclusion in certain indices and, as a result, mutual funds, exchange-traded funds and other investment vehicles that attempt to passively track those indices would not invest in our Class A common stock. It is unclear what effect, if any, these policies will have on the valuations of publicly traded companies excluded from such indices, but it is possible that they may depress valuations, as compared to similar companies that are included. As a result, the market price of our Class A common stock could be adversely affected.

The price of our Class A common stock may fluctuate significantly, and you could lose all or part of your investment.

The market price of our Class A common stock is likely to be volatile and could be subject to wide fluctuations in response to many risk factors listed in this section, and others beyond our control, including:

- actual or anticipated fluctuations in our results of operations and financial condition;
- variance in our financial performance from expectations of securities analysts;
- changes in our software subscription revenue;
- changes in our projected operating and financial results;
- changes in tax laws or regulations;
- announcements by us or our competitors of significant business developments, acquisitions or new offerings;
- our involvement in any litigation;
- our sale of our Class A common stock or other securities in the future;
- changes in senior management or key personnel;
- the trading volume of our Class A common stock;
- changes in the anticipated future size and growth rate of our market; and
- general economic, regulatory and market conditions.

Recently, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry fluctuations, as well as general economic, political, regulatory and market conditions, may negatively impact the market price of our Class A common stock. If the market price of our Class A common stock after this offering does not exceed the public offering price, you may lose some or all of your investment. In the past, companies that have experienced volatility in the market price of their securities have been subject to securities class action litigation. We may be the target of this type of litigation in the future, which could result in substantial costs and divert our management's attention.

We intend to enter into a tax sharing agreement with our existing stockholders and could become obligated to make payments to our existing stockholders for any additional federal, state or local income taxes assessed against them for tax periods prior to the completion of this offering.

Prior to this offering, we have elected to be treated as an S Corporation for U.S. federal income tax purposes, as a result of which, our existing stockholders have been required to pay income taxes attributable to our earnings. We have historically paid distributions to our existing stockholders, which have assisted them in paying such income taxes. In connection with this offering, our S Corporation status will terminate and we will thereafter be subject to federal and increased state income taxes. Our existing stockholders may be required to pay additional income taxes for periods prior to the termination of our S Corporation status as a result of an adjustment to our taxable income for periods beginning after our S corporation status terminates. Accordingly, we intend to enter into an agreement with our existing stockholders in connection with this offering pursuant to which we may be required to make payments in material amounts to our existing stockholders with respect to any incremental income taxes resulting from an adjustment to our taxable income for any period beginning after our S Corporation status terminates. Furthermore, this agreement requires us to indemnify our existing stockholders with respect to unpaid income tax liabilities attributable to our taxable income for any period after the termination of our S Corporation status. We will also indemnify our existing stockholders for any interest, penalties, losses, costs or expenses arising out of any claim under the agreement. However, our existing stockholders will indemnify us with respect to our unpaid tax liabilities (including interest and penalties) to the extent that such unpaid tax liabilities are attributable to a decrease in our existing stockholders' taxable income for any period and a corresponding increase in our taxable income for any period. See "Certain Relationships and Related Party Transactions—Tax Sharing Agreement."

Prior to this offering, we were treated as an S Corporation, and claims of taxing authorities related to our prior status as an S Corporation could harm us.

In connection with this offering, our status as an S Corporation will terminate and we will be taxed as a C Corporation, which is subject to entity-level federal income taxes under the Code. If one or more tax years for which we filed a tax return as an S Corporation are audited by the IRS, and we are determined not to have qualified for, or not to have properly maintained, our S Corporation status, we may be obligated to pay entity-level income tax, plus interest and possible penalties. The amounts that we could be obligated to pay could include taxes with respect to all of our taxable income for periods when we believed we properly were treated as an S Corporation. Any such claims could result in additional costs to us and could have a material adverse effect on our financial results.

We do not intend to pay dividends on our Class A common stock for the foreseeable future and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our Class A common stock.

We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends on our Class A common stock in the foreseeable future. Any determination to pay dividends in the future will be at the discretion of our board of directors. Consequently, your only opportunity to achieve a return on your investment in our company will be if the market price of our Class A common stock appreciates and you sell your shares at a profit. There is no guarantee that the price of our Class A common stock that will prevail in the market will ever exceed the price that you paid.

If securities or industry analysts do not publish or cease publishing research or reports about us, our business or our market, or if they change their recommendations regarding our Class A common stock adversely, the trading price of our Class A common stock and trading volume could decline.

The trading market for our Class A common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. We do not control these analysts. If any of the analysts who cover us downgrade our Class A common stock or our industry, or the stock of any of our competitors, or publish inaccurate or unfavorable research about our business, the price of our Class A common stock may decline. If analysts cease coverage of us or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause the price or trading volume of our Class A common stock to decline and our Class A common stock to be less liquid.

Purchasers in this offering will experience immediate and substantial dilution in the net tangible book value of their investment.

The offering price of our Class A common stock is substantially higher than the net tangible book value per share of our Class A common stock, which after giving effect to this offering was \$ _____ per share of our Class A common stock as of _____, 2020. As a result, you will incur immediate and substantial dilution in net tangible book value when you buy our Class A common stock in this offering. This means that you will pay a higher price per share than the amount of our total tangible assets, less our total liabilities, divided by the number of shares of all of our common stock outstanding. In addition, you may also experience additional dilution if rights to purchase our common stock that are outstanding or that we may issue in the future are exercised or converted or we issue additional shares of our common stock at prices lower than our net tangible book value at such time. See "Dilution."

Anti-takeover provisions contained in our charter documents and Delaware law could prevent a takeover that stockholders consider favorable and could also reduce the market price of our stock.

Our amended and restated certificate of incorporation and our amended and restated bylaws will contain provisions that could delay or prevent a change in control of our company. These provisions could also make it more difficult for stockholders to elect directors and take other corporate actions. These provisions include:

- authorizing blank check preferred stock, which could be issued with voting, liquidation, dividend and other rights superior to our common stock;
- staggering the terms of our directors by providing that our board of directors will be divided into three classes, with the classes as nearly equal in number as possible and each class serving three-year staggered terms;
- limiting the ability of our stockholders to call and bring business before special meetings and to take action by written consent in lieu of a meeting;
- requiring advance notice of stockholder proposals for business to be conducted at meetings of our stockholders and for nominations of candidates for election to our board of directors;
- providing our board of directors with the express power to postpone previously scheduled annual meetings and to cancel previously scheduled special meetings; and
- limiting the determination of the number of directors on our board of directors and the filling of vacancies or newly created seats on the board to our board of directors then in office.

These and other provisions in our amended and restated certificate of incorporation and our amended and restated bylaws and under Delaware law could discourage potential takeover attempts, reduce the price investors might be willing to pay in the future for shares of our Class A common stock

and result in the market price of our Class A common stock being lower than it would be without these provisions. For more information, see the section of this prospectus captioned "Description of Capital Stock—Anti-Takeover Provisions."

Our amended and restated bylaws will provide, subject to certain exceptions, that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for certain stockholder litigation matters, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or stockholders.

Our amended and restated certificate of incorporation that will become effective immediately prior to the closing of this offering provides that the Court of Chancery of the State of Delaware is the exclusive forum for:

- any derivative action or proceeding brought on our behalf;
- any action asserting a claim of breach of a fiduciary duty owed by, or other wrongdoing by, any of our current or former directors, officers, employees or our stockholders;
- any action asserting a claim against us arising under the Delaware General Corporation Law ("DGCL"), our amended and restated certificate of incorporation, or our amended and restated bylaws (as either may be amended from time to time) or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware; and
- any action asserting a claim against us that is governed by the internal-affairs doctrine.

By becoming a stockholder in our Company, you will be deemed to have notice of and have consented to the provisions of our amended and restated certificate of incorporation related to choice of forum. This exclusive forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage lawsuits against us and our directors, officers and other employees. This provision will not apply to claims arising under the Securities Act, the Exchange Act or other federal securities laws for which there is exclusive federal or concurrent federal and state jurisdiction. If a court were to find the exclusive forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could seriously harm our business.

We are a "controlled company" within the meaning of the Nasdaq Global Market and, as a result, expect to qualify for, and intend to rely on, exemptions from certain corporate governance requirements. You will not have the same protections afforded to stockholders of companies that are subject to such requirements.

After this offering, our current principal stockholders will continue to beneficially own a majority of the combined voting power of all classes of our outstanding voting stock. As a result, we will continue to be a controlled company within the meaning of the applicable stock exchange corporate governance standards. Under the _____, a company of which more than 50% of the voting power is held by another person or group of persons acting together is a controlled company and may elect not to comply with certain corporate governance requirements, including the requirements that:

- a majority of the board of directors consist of independent directors as defined under the rules of the Nasdaq Global Market;
- the nominating and governance committee be composed entirely of independent directors with a written charter addressing the committee's purpose and responsibilities; and
- the compensation committee be composed entirely of independent directors with a written charter addressing the committee's purpose and responsibilities.

These requirements will not apply to us as long as we remain a controlled company. We have elected to take advantage of the exemption from the requirement that a majority of our board of directors consist of independent directors and that our nominating and corporate governance committee consist entirely of independent directors. Accordingly, you may not have the same protections afforded to stockholders of companies that are subject to all of the corporate governance requirements of the Nasdaq Global Market.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Any statements made in this prospectus that are not statements of historical fact, including statements about our beliefs and expectations, are forward-looking statements and should be evaluated as such. Forward-looking statements include information concerning possible or assumed future results of operations, including descriptions of our business plan and strategies. These statements often include words such as "anticipate," "expect," "suggests," "plan," "believe," "intend," "estimates," "targets," "projects," "should," "could," "would," "may," "will," "forecast" and other similar expressions. These forward-looking statements are contained throughout this prospectus, including the sections entitled "Prospectus Summary," "Risk Factors," "Capitalization," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business." We base these forward-looking statements on our current expectations, plans and assumptions that we have made in light of our experience in the industry, as well as our perceptions of historical trends, current conditions, expected future developments and other factors we believe are appropriate under the circumstances at such time. As you read and consider this prospectus, you should understand that these statements are not guarantees of future performance or results. The forward-looking statements are subject to and involve risks, uncertainties and assumptions, and you should not place undue reliance on these forward-looking statements. Although we believe that these forward-looking statements are based on reasonable assumptions at the time they are made, you should be aware that many factors could affect our actual results or results of operations and could cause actual results to differ materially from those expressed in the forward-looking statements. Factors that may materially affect such forward-looking statements include:

- our ability to attract new customers on a cost-effective basis and the extent to which existing customers renew and upgrade their subscriptions;
- our ability to sustain and expand revenues, maintain profitability, and to effectively manage our anticipated growth;
- the timing of our introduction of new solutions or updates to existing solutions;
- our ability to successfully diversify our solutions by developing or introducing new solutions or acquiring and integrating additional businesses, products, services or content;
- our ability to maintain and expand our strategic relationships with third parties;
- risks related to our expanding international operations;
- our ability to deliver our solutions to customers without disruption or delay;
- our exposure to liability from errors, delays, fraud or system failures, which may not be covered by insurance;
- risks related to our determinations of customers' transaction tax and tax payments;
- risks related to changes in tax laws and regulations or their interpretation or enforcement;
- our ability to manage cybersecurity and data privacy risks;
- risks related to failures in information technology, infrastructure and third party service providers;
- our ability to effectively protect, maintain and enhance our brand;
- global economic weakness and uncertainties, and disruption in the capital and credit markets;
- business disruptions related to natural disasters, epidemic outbreaks, terrorist acts, political events or other events outside of our control;

- our ability to comply with anti-corruption, anti-bribery and similar laws;
- changes in interest rates, security ratings and market perceptions of the industry in which we operate, or our ability to obtain capital on commercially reasonable terms or at all;
- any statements of belief and any statements of assumptions underlying any of the foregoing;
- other factors disclosed in this prospectus; and
- other factors beyond our control.

These cautionary statements should not be construed by you to be exhaustive and are made only as of the date of this prospectus. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law.

USE OF PROCEEDS

We estimate that the net proceeds to us from the sale of the shares of our Class A common stock in this offering will be approximately \$ _____ million, based upon an initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise their over-allotment option to purchase additional shares in this offering in full, we estimate that our net proceeds will be approximately \$ _____ million, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We will not receive any of the proceeds from any sale of shares in this offering by the selling stockholders.

We intend to use a portion of the net proceeds to repay all outstanding indebtedness under our existing New Credit Agreement and to pay related fees and expenses. As of March 31, 2020, our indebtedness includes \$175.0 million outstanding under the term loan entered into under the New Credit Agreement. Proceeds from the term loan were used to repay amounts outstanding under the Company's previous credit agreement of \$61.7 million, with the balance being used to fund a portion of a \$123.0 million dividend to our stockholders on May 29, 2020, \$122.8 million of which was paid to our directors Amanda Westphal Radcliffe, Stefanie Westphal Thompson and Jeffrey Westphal and, in each case, related trusts held for his or her benefit or the benefit of his or her immediate family. The term loan bears interest at a rate of 2.50% and will become due in March 2023. The remainder of the net proceeds will be used for working capital and other general corporate purposes, including investments in our products, technology and sales force. Under the terms of the New Credit Agreement, this offering will constitute a triggering event, which will require the immediate repayment of the New Term Loan.

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ _____ per share would increase (decrease) the net proceeds that we receive from this offering by approximately \$ _____ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase (decrease) of 1,000,000 shares in the number of shares of Class A common stock offered by us would increase (decrease) the net proceeds that we receive from this offering by approximately \$ _____ million, assuming the assumed initial public offering price remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

DIVIDEND POLICY

Historically, we have been an S Corporation, and as such, we have paid distributions to our existing stockholders, which have assisted them in paying the U.S. federal and state income taxes on our taxable income that is "passed through" to them, and we have historically made additional distributions to them for returns on capital.

We do not currently anticipate paying dividends on our Class A or Class B common stock. Any declaration and payment of future dividends to holders of our Class A and Class B common stock will be at the discretion of our board of directors and will depend on many factors, including our financial condition, earnings, capital requirements, level of indebtedness, statutory and contractual restrictions applying to the payment of dividends and other considerations that our board of directors deems relevant. In addition, the terms of the agreements governing our indebtedness may limit our ability to pay dividends.

CAPITALIZATION

The following table sets forth our consolidated cash and cash equivalents and capitalization as of March 31, 2020, as follows

- (a) on an actual basis;
- (b) on a pro forma basis to give effect to (i) the termination of our status as an S Corporation in connection with and prior to the closing of this offering, which we expect will result in an approximate \$8.5 million tax benefit with an equal decrease in stockholders' deficit based on our estimate of the impact of the conversion as of March 31, 2020, (ii) prior to the closing of this offering, the reclassification of our existing Class A common stock and Class B common stock into shares of Class A common stock and shares of Class B common stock and (iii) the payment of a dividend in the amount of \$123.0 million to our existing stockholders (which was completed on May 29, 2020); and
- (c) on a pro forma as adjusted basis to give effect to the (i) the pro forma adjustments described in the preceding clause, and (ii) the issuance and sale by us of shares of Class A common stock in this offering at an assumed initial public offering price of \$ per share (which is the midpoint of the range set forth on the cover page of this prospectus), after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, and the use of proceeds therefrom as set forth under the heading "Use of Proceeds."

The information in this table should be read in conjunction with "Use of Proceeds," "Selected Consolidated Financial Information," "Management's Discussion and Analysis of Financial Condition

and Results of Operations" and our financial statements and related notes thereto appearing elsewhere in this prospectus.

	As of March 31, 2020		
	Actual	Pro forma (Unaudited)	Pro forma as adjusted
	(amounts in thousands, except share and per share data)		
Cash and cash equivalents ⁽¹⁾⁽²⁾	\$ 40,416		
Funds held for stockholder dividends	110,000	—	—
Total cash, cash equivalents and funds held for stockholder dividends	<u>\$ 150,416</u>	<u>—</u>	<u>—</u>
Debt:			
New Credit Agreement	\$ 173,153		
Capitalized leases	670		
Total debt	<u>173,823</u>		
Total stockholders' deficit:			
Existing voting common stock, \$0.001 par value; 200,000 shares authorized; 100,000 shares issued; 49,000 shares outstanding, actual; no shares authorized, issued or outstanding, as adjusted	—	—	—
Existing non-voting common stock, \$0.001 par value, 99,800,000 shares authorized; 54,099,000 shares issued; 40,090,000 shares outstanding, actual; no shares authorized, issued or outstanding, as adjusted	54	—	—
Class A common stock, \$0.001 par value; no shares authorized or issued, actual; authorized and shares issued and outstanding, as adjusted	—		
Class B common stock, \$0.001 par value; no shares authorized or issued, actual; authorized and shares issued and outstanding, as adjusted	—		
Additional paid in capital	—	—	
Accumulated deficit	(139,017)		
Accumulated other comprehensive loss	(3,489)		
Treasury stock	(38,638)		
Total stockholders' deficit ⁽¹⁾⁽²⁾	<u>(181,090)</u>		
Total capitalization⁽¹⁾⁽²⁾	<u>\$ (7,267)</u>		

- (1) Each \$1.00 increase or decrease in the assumed initial public offering price of \$ per share (which is the midpoint of the price range set forth on the cover page of this prospectus) would increase or decrease each of cash and cash equivalents, total stockholders' deficit and total capitalization on a pro forma as adjusted basis by approximately \$ million, assuming the number of shares offered, as set forth on the cover page of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.
- (2) Each 1,000,000 share increase or decrease in the number of shares offered in this offering would increase or decrease each of cash and cash equivalents, total stockholders' deficit and total capitalization on a pro forma as adjusted basis by approximately \$ million, assuming that the price per share for the offering remains at \$ (which is the midpoint of the price range set forth on the cover page of this prospectus), and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The number of shares of our Class A and Class B common stock to be outstanding after completion of this offering is based on _____ shares of our Class A common stock and _____ shares of our Class B common stock outstanding as of March 31, 2020 after giving effect to the reclassification, which excludes shares of Class A common stock reserved for issuance under the 2020 Plan and the 2020 ESPP, which we plan to adopt in connection with this offering.

DILUTION

If you invest in our Class A common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the initial public offering price per share of our Class A common stock and the pro forma as adjusted net tangible book value per share of our Class A common stock after this offering. Dilution results from the fact that the per share public offering price of the Class A common stock is substantially in excess of the book value per share of our Class A common stock after this offering. Our pro forma net tangible book value as of March 31, 2020 was \$ million, or \$ per share of our Class A common stock, after giving effect to (i) the termination of our status as an S Corporation in connection with and prior to the closing of this offering, (ii) prior to the closing of this offering, the reclassification of our existing Class A common stock and Class B common stock into shares of Class A common stock and shares of Class B common stock and (iii) the payment of a dividend in the amount of \$123.0 million to our existing stockholders (which was completed on May 29, 2020). Net tangible book value per share represents our total tangible assets reduced by the amount of our total liabilities, divided by the total number of shares of our Class A common stock outstanding.

After giving effect to (a) the sale of shares of Class A common stock that we are offering at an assumed initial public offering price of \$ per share, which is the midpoint of the price range listed on the cover page of this prospectus, and (b) the application of the proceeds from this offering as described in "Use of Proceeds," after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, as if each had occurred on March 31, 2020, our pro forma as adjusted net tangible book value as of March 31, 2020 would have been \$ million, or \$ per share of Class A common stock. This amount represents an immediate increase in net tangible book value of \$ per share of Class A common stock to our existing stockholders before this offering and an immediate and substantial dilution in net tangible book value of \$ per share of Class A common stock to new investors purchasing shares of Class A common stock in this offering. We determine dilution by subtracting the pro forma as adjusted net tangible book value per share of Class A common stock after this offering from the amount of cash that a new investor paid for a share of Class A common stock in this offering. The following table illustrates this dilution, assuming the underwriters do not exercise their option to purchase additional shares of Class A common stock:

Assumed initial public offering price per share of Class A common stock	\$
Pro forma net tangible book value per share of Class A common stock as of March 31, 2020	\$
Increase in pro forma net tangible book value per share of Class A common stock attributable to new investors in this offering	—
Pro forma as adjusted net tangible book value per share of Class A common stock immediately after this offering	—
Dilution in pro forma net tangible book value per share of Class A common stock to new investors in this offering	<u>\$</u>

A \$1.00 increase or decrease in the assumed initial public offering price of \$ per share, which is the midpoint of the price range listed on the cover page of this prospectus, would increase or decrease the pro forma as adjusted net tangible book value per share of Class A common stock after this offering by approximately \$, and the dilution in pro forma as adjusted net tangible book value per share of Class A common stock to new investors by approximately \$, assuming that the number of shares of Class A common stock offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of

1,000,000 shares of Class A common stock in the number of shares offered by us would increase or decrease, as applicable, the pro forma as adjusted net tangible book value by \$ _____ per share of Class A common stock and increase or decrease, as applicable, the dilution in pro forma as adjusted net tangible book value to new investors by \$ _____ per share of Class A common stock, assuming the assumed initial public offering price remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters' option to purchase additional shares of Class A common stock is exercised in full, the as pro forma adjusted net tangible book value per share of Class A common stock would be \$ _____ per share, and the dilution in pro forma as adjusted net tangible book value per share of Class A common stock to new investors in this offering would be \$ _____ per share.

The following table summarizes, on a pro forma as adjusted basis as of March 31, 2020, the differences between the number of shares of Class A common stock purchased from us, the total consideration paid to us in cash and the average price per share that existing investors and new investors paid. The calculation below is based on an assumed initial public offering price of \$ _____ per share of Class A common stock, which is the midpoint of the price range listed on the cover page of this prospectus, before deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

	Shares of Class A Common Stock Purchased		Total Consideration		Average Price Per Share of Class A Common Stock
	Number	Percent	Amount	Percent	
Existing stockholders			__\$		__\$
New investors					
Total		100.0%	\$	100.0%	

A \$1.00 increase (decrease) in the assumed initial offering price would increase (decrease) total consideration paid by new investors, total consideration paid by all stockholders and average price per share paid by all stockholders by \$ _____ million, \$ _____ million and \$ _____ per share, respectively. An increase (decrease) of 1,000,000 in the number of shares of Class A common stock offered by us in this offering would increase (decrease) total consideration paid by new investors, total consideration paid by all stockholders and average price per share paid by all stockholders by \$ _____ million, \$ _____ million and \$ _____ per share, respectively.

Except as otherwise indicated, the above discussion and tables assume no exercise of the underwriters' option to purchase additional shares of our Class A common stock from us. If the underwriters' option to purchase additional shares of our Class A common stock were exercised in full, our existing stockholders would own _____ % and our new investors would own _____ % of the total number of shares of our Class A common stock outstanding upon completion of this offering.

SELECTED CONSOLIDATED FINANCIAL INFORMATION

The following table sets forth our selected historical consolidated financial information for the periods and dates indicated. The consolidated balance sheet data as of December 31, 2019 and 2018 and the consolidated statements of comprehensive income (loss) for the years ended December 31, 2019 and 2018 have been derived from our audited consolidated financial statements included elsewhere in this prospectus. The consolidated balance sheet data as of March 31, 2020 and the consolidated statements of comprehensive income (loss) for the three months ended March 31, 2020 and 2019 have been derived from our unaudited consolidated financial statements appearing elsewhere in this prospectus. The unaudited interim consolidated financial statements have been prepared on the same basis as the audited annual consolidated financial statements and reflect, in the opinion of management, all adjustments of a normal, recurring nature that are necessary for a fair statement of the unaudited interim consolidated financial statements.

The financial information set forth below is not necessarily indicative of future results of operations. In particular, we have historically been taxed as an S Corporation for U.S. federal income tax purposes and for income tax purposes in most states. As a result, net income or loss has been allocated to our stockholders and included on their individual income tax returns. In connection with this offering, we will convert to a C Corporation, which will result in our net income being taxed at the corporate level. As such, our provision for taxes will change. Assuming the conversion to a C Corporation, we estimate that our effective tax rate will be approximately 25%, inclusive of all applicable U.S. federal, state, local and foreign income taxes. In addition, based on the deferred tax asset balances at March 31, 2020, we would anticipate recording a tax benefit of approximately \$8.5 million upon such conversion.

This data should be read in conjunction with, and is qualified in its entirety by reference to, the "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Capitalization" sections of this prospectus and our audited consolidated financial statements and notes thereto for the periods and dates indicated included elsewhere in this prospectus. Revenue is reflected in accordance with ASC 606, which we adopted on January 1, 2018.

	For the Year Ended December 31,		Three Months Ended March 31,	
	2019	2018	2020	2019
	(In thousands except per share data)			
Revenue:				
Software subscriptions	\$ 275,629	\$ 235,663	\$ 75,760	\$ 64,384
Services	45,871	36,740	13,485	10,230
Total revenues	<u>321,500</u>	<u>272,403</u>	<u>89,245</u>	<u>74,614</u>
Cost of revenues:				
Software subscriptions ⁽¹⁾	77,259	68,945	24,684	18,426
Services ⁽¹⁾	33,119	26,753	14,778	7,138
Total cost of revenues	<u>110,378</u>	<u>95,698</u>	<u>39,462</u>	<u>25,564</u>
Gross profit	<u>211,122</u>	<u>176,705</u>	<u>49,783</u>	<u>49,050</u>
Operating expenses:				
Research and development ⁽¹⁾	30,557	23,755	13,079	7,573
Selling and marketing ⁽¹⁾	68,127	56,898	24,333	16,047
General and administrative ⁽¹⁾	71,014	58,947	37,636	15,448
Depreciation and amortization	8,996	7,937	2,869	2,045
Impairment of asset	—	32,692	—	—
Other operating (income) expense, net	573	(691)	111	163
Total operating expenses	<u>179,267</u>	<u>179,538</u>	<u>78,028</u>	<u>41,276</u>
Income (loss) from operations	<u>31,855</u>	<u>(2,833)</u>	<u>(28,245)</u>	<u>7,774</u>
Other (income) expense:				
Interest income	(1,083)	(526)	(355)	(292)
Interest expense	2,036	2,120	924	537
Total other expense, net	953	1,594	569	245
Income (loss) before income taxes	30,902	(4,427)	(28,814)	7,529
Income tax (benefit) expense	(155)	1,679	250	204
Net income (loss)	31,057	(6,106)	(29,064)	7,325
Other comprehensive (income) loss from foreign currency translation adjustments and revaluations, net of tax	(5)	355	2,998	(21)
Total comprehensive income (loss)	<u>\$ 31,062</u>	<u>\$ (6,461)</u>	<u>\$ (32,062)</u>	<u>\$ 7,346</u>
Net income (loss) attributable to Class A stockholders	\$ 38	\$ (7)	\$ (35)	\$ 9
Net income (loss) per Class A share, basic and diluted	\$ 0.77	\$ (0.15)	\$ (0.72)	\$ 0.18
Weighted average Class A common stock, basic and diluted	49	49	49	49
Net income (loss) attributable to Class B stockholders	\$ 31,019	\$ (6,099)	\$ (29,029)	\$ 7,316
Net income (loss) per Class B share, basic	\$ 0.77	\$ (0.15)	\$ (0.72)	\$ 0.18
Weighted average Class B common stock, basic	40,129	40,160	40,090	40,090
Net income (loss) per Class B share, diluted	\$ 0.75	\$ (0.15)	\$ (0.72)	\$ 0.18
Weighted average Class B common stock, diluted	41,373	40,160	40,090	41,393

	<u>As of December 31,</u>		<u>As of March</u>
	<u>2019</u>	<u>2018</u>	<u>31,</u>
	(In thousands)		<u>2020</u>
	(unaudited)		
Consolidated Balance Sheet Data:			
Cash and cash equivalents	\$ 75,903	\$ 55,838	\$ 40,416
Funds held for stockholder dividends	—	—	110,000
Total assets	264,623	215,072	356,129
Deferred revenue (current and non-current)	205,791	178,703	201,484
Debt (current and non-current)	51,486	54,883	173,823
Total liabilities	377,055	326,768	504,633
Options for redeemable shares	17,344	14,581	32,586
Total stockholders' deficit	(129,776)	(126,277)	(181,090)

(1) Includes stock-based compensation expenses as follows in the table below. For more details, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Seasonality and Quarterly Trends."

	<u>For the Year Ended</u>		<u>Three Months Ended</u>	
	<u>December 31,</u>		<u>March 31,</u>	
	<u>2019</u>	<u>2018</u>	<u>2020</u>	<u>2019</u>
	(In thousands)			
	(unaudited)			
Cost of revenues, software subscriptions	\$ 946	\$ 512	\$ 3,492	\$ 131
Cost of revenues, services	1,419	765	5,238	197
Research and development	946	511	3,492	131
Selling and marketing	1,892	1,022	6,984	261
General and administrative	4,257	2,298	15,714	590
Total stock-based compensation	<u>\$ 9,460</u>	<u>\$ 5,108</u>	<u>\$ 34,920</u>	<u>\$ 1,310</u>

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

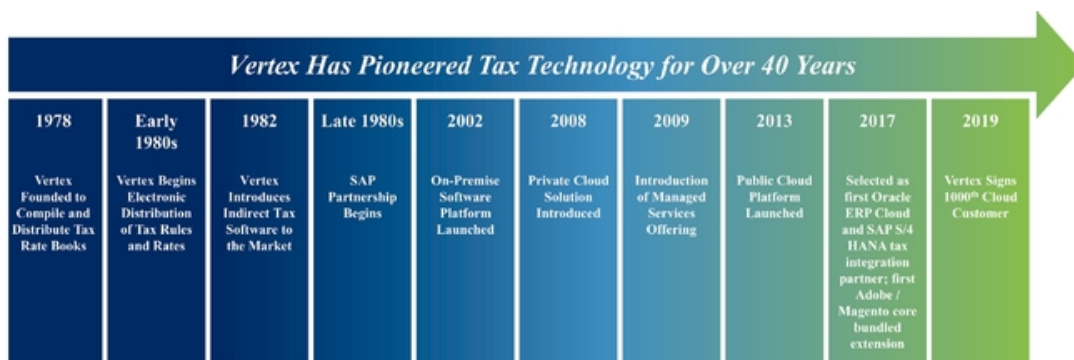
You should read the following discussion and analysis of our financial condition and results of operations in conjunction with the consolidated financial statements and the notes thereto included elsewhere in this prospectus. In addition to historical financial information, the following discussion contains forward-looking statements that reflect our plans, estimates, beliefs and expectations that involve risks and uncertainties. Our actual results and the timing of events could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this prospectus, particularly in the sections of this prospectus titled "Risk Factors" and "Special Note Regarding Forward-Looking Statements."

Overview

Vertex delivers comprehensive tax solutions that enable global businesses to transact, comply and grow with confidence. Companies with complex tax operations rely on Vertex to automate their end-to-end indirect tax processes. Indirect tax is the largest corporate tax category, encompassing sales tax, seller's use tax, consumer use tax and VAT, among others. Indirect tax accounts for more than \$3.5 trillion of annual tax revenue, which is 2.5 times the amount of corporate income taxes, according to the 2019 OECD Tax Database. Our software, content and services address the increasing complexities of global commerce and compliance by reducing friction, enhancing transparency and enabling greater confidence in meeting indirect tax obligations. As a result, our software is ubiquitous within our customers' business systems, touching nearly every line item of every transaction that an enterprise can conduct.

We have pioneered tax technology for over 40 years. We first began electronic delivery of tax rules in the early 1980s and we first sold transaction tax processing software in 1982. Today, our software enables tax determination, compliance and reporting, tax data management and document management with powerful pre-built integrations to core business applications used by most companies, particularly those applications that have a significant impact on global commerce. Our software is fueled by over 300 million data-driven effective tax rules and supports indirect tax compliance in more than 19,000 jurisdictions worldwide. In order to maintain the quality of our content, our team includes many global tax and regulatory experts from industry and the public sector, who deliver monthly updates to our tax content, which are then incorporated directly into our software. Our solutions can be deployed on-premise, in the cloud, or both, with implementation services available to enable optimal customer outcomes and satisfy their unique business requirements.

We have accumulated industry-specific tax knowledge for over four decades and our customers leverage our in-depth content through their use of our software. This allows our customers to comply with the dynamic regulatory landscape in real time and mitigates our customers' risk exposure. As our customers expand their global footprint and business models, we are actively supporting their expansion by continuously strengthening our content offering and allowing for additional jurisdiction-specific tax compliance.



We derive the majority of our revenue from software subscriptions. These subscriptions include use of our software and ongoing monthly content updates. Our software is offered on a subscription basis to our customers, regardless of their deployment preferences. On-premise subscriptions are typically sold through one-year contracts and cloud-based subscriptions are typically sold through one- to three-year contracts. We bill almost all of our customers annually in advance of the subscription period.

We have over 4,000 customers, including the majority of the Fortune 500, as well as a majority of the top 10 companies by revenue in multiple industries such as retail, technology and manufacturing, in addition to leading marketplaces. At March 31, 2020, we had over 4,000 customers and our average annual recurring revenue ("ARR") per customer was over \$70,000, while at March 31, 2019, we had over 4,000 customers and our ARR per customer was over \$59,000. As our customers expand geographically and pursue omnichannel business models, their tax determination and compliance requirements increase and become more complex, providing sustainable organic growth opportunities for our business. Our pricing model is aligned with our customers' objectives by adjusting with their growth over time. We principally price our solutions based on a customer's revenue base, in addition to a number of other factors.

We employ a hybrid deployment model to align to our customers' technology preferences for their core financial management software across on-premise, cloud deployments or any combination of these models. Over time, we expect both existing and newly acquired customers to continue to shift towards cloud deployment models. Cloud-based subscription sales to new customers have grown at a significantly faster rate than on-premise software subscription sales, which is a trend that we expect to continue over time. We generated 12.9% and 19.1% of software subscription revenue from cloud-based subscriptions in 2018 and 2019, respectively, and 16.6% and 24.1% for the three months ended March 31, 2019 and 2020, respectively. While our on-premise software subscription revenue comprises 80.9% of our 2019 software subscription revenue, we anticipate that it will decrease as a percentage of total software subscription revenue as cloud-based subscriptions accelerate.

We sell our solutions primarily through our direct sales force, which focuses on selling to qualified leads provided by our marketing efforts, and through our network of referral partners. We also utilize indirect sales to a lesser extent to efficiently grow and scale our enterprise and mid-market revenues.

Our partner ecosystem is a differentiating, competitive strength in both our software development and our sales and marketing activities. We integrate with key technology partners that span ERP, CRM, procurement, billing, POS and eCommerce. These partners include Adobe/Magento, Coupa, Microsoft Dynamics, NetSuite, Oracle, Salesforce, SAP, SAP Ariba, Workday and Zuora. We also collaborate with numerous accounting firms who have built implementation practices around our software to serve their customer base.

We believe that global commerce and compliance environment provides durable and accelerating growth opportunities for our business. We generated revenue of \$272.4 million and \$321.5 million in

2018 and 2019, respectively, and \$74.6 million and \$89.2 million for the three months ended March 31, 2019 and 2020, respectively. We had a net loss of \$6.1 million and net income of \$31.1 million in 2018 and 2019, respectively, and net income of \$7.3 million and a net loss of \$29.1 million for the three months ended March 31, 2019 and 2020, respectively. Adjusted EBITDA was \$61.5 million and \$67.9 million in 2018 and 2019, respectively, and \$15.6 million and \$15.3 million for the three months ended March 31, 2019 and 2020, respectively. Additionally, we generated net cash provided by operating activities of \$80.4 million and \$92.5 million in 2018 and 2019, respectively, and \$9.9 million and \$(6.4) million in the three months ended March 31, 2019 and 2020, respectively. Our free cash flow was \$47.1 million and \$54.9 million in 2018 and 2019, respectively, and \$1.8 million and \$(15.8) million in the three months ended March 31, 2019 and 2020, respectively. Adjusted EBITDA and free cash flow are non-GAAP financial measures. For more information about how we use these non-GAAP financial measures in our business, the limitations of these measures and reconciliations to the most directly comparable GAAP measures, see "Prospectus Summary—Summary Consolidated Financial and Operating Information." In connection with the offering, we will convert from an S Corporation to a C Corporation, which will result in net income of the Company being taxed at the corporate level. For additional information on the effect of such conversion, see "Prospectus Summary—Summary Consolidated Financial and Operating Information."

Key Factors Affecting Performance

The growth of our business and our future success depends on many factors, including our ability to retain and expand our revenue from existing customers, acquire new customers, deepen our partner ecosystem, continually innovate our software and invest in growth and scale our business. While these areas represent significant opportunities for us, we also face significant risks and challenges that we must successfully address in order to sustain the growth of our business and improve our operating results. We anticipate that we will continue to expand our operations and headcount. The expected addition of new personnel and the investments that we anticipate will be necessary to manage our anticipated growth may make it more difficult for us to achieve or maintain profitability. Many of these investments will occur in advance of experiencing any direct benefit and will make it difficult to determine if we are allocating our resources efficiently.

Retention and expansion of revenue from existing customers. Given the breadth of our customer base and their own internal growth, the majority of our revenue and revenue growth comes from existing customers. This revenue growth is comprised of the acquisition of new licenses for additional products, increases in subscription fees due to expanded usage of currently licensed software and price increases. We plan to continue to invest in new innovations and offerings and in our sales and marketing teams in order to support the ongoing strong retention and expansion of revenue with our existing customers. We track net revenue retention rate ("NRR") in order to understand our ability to retain and grow revenue from our customers. Our NRR was 109% as of December 31, 2019 and March 31, 2020.

Acquire new customers. Our solutions address the complexity of aligning commerce and compliance and we believe the market for our solutions is large and underpenetrated, both in the United States and globally. As enterprise and mid-market companies continue to expand their business operations—both through their product and service offerings and their global footprint—we expect demand for our tax solutions to increase due to the fact that legacy solutions such as spreadsheets, manual processes, native ERP functionality or home-built solutions are error prone, inefficient and cannot scale. We plan to continue to invest in our sales and marketing teams and our solution development in order to address this increased demand from new customers. This increased investment will result in increases in expenses in advance of revenues attributable to these investments.

Broaden and deepen our partner ecosystem. We have an extensive network of partners that spans ERP, CRM, procurement, billing, POS and eCommerce platforms. Our partners enhance the coverage

and adoption of our solutions and promote our thought leadership. We leverage our partnerships to maximize the benefits of our solutions for our customers and to identify new customer opportunities. By forming additional strategic alliances with participants in the global digital transformation, such as payments and eCommerce platforms, we can continue to expand our exposure to all transactions, both B2C and B2B. Future partnerships with large-scale digital payments companies will allow us to develop additional customer-centric solutions and further expand our customer base.

Continued innovation of our software. With the pace of change in commerce and compliance, we believe it is important to continue innovating and extending the functionality and breadth of our software. We plan on investing to further enhance our content and the speed and usability of our software. We believe continuing to enhance our existing software will increase our ability to generate revenue by broadening the appeal of our software to new customers as well as increasing our engagement with existing customers.

Investing in growth and scaling our business. We believe that our market opportunity is large, and we will continue to invest significantly in scaling across organizational functions in order to support the anticipated growth in our operations both domestically and internationally. Any investments we make in our research and development and our sales and marketing organization will occur in advance of experiencing the benefits from such investments, so it may be difficult for us to determine if we are efficiently allocating resources in those areas.

Customer migration to cloud solutions. Over time, we expect a continued shift to our cloud solutions from existing and newly acquired customers. Over the past two years, cloud sales to new customers have grown at a significantly faster rate than sales of on-premise solutions, which is a trend that we expect to continue over time. We generated 12.9% and 19.1% of software subscription revenue from cloud-based subscriptions in 2018 and 2019, respectively. For the three months ended March 31, 2020, we generated 24.1% of software subscription revenue from cloud-based subscriptions, an increase from 16.6% for the three months ended March 31, 2019. We recognize revenue from the sale of cloud-based subscriptions ratably over the life of the contract, whereas for on-premise subscriptions, the first year pricing includes a premium that is not included in future renewal pricing. The premium is recognized ratably over the estimated period of benefit to the customer, which is generally three years. Therefore, as more of our sales shift to cloud-based subscriptions, our revenue growth rate may increase. We provide hosting for our cloud-based subscriptions. To the extent that revenue from our cloud offerings increase as a percentage of total revenue, our gross margin may decrease due to the associated hosting costs of those offerings.

Recent Developments—Impact of COVID-19

In March 2020, the World Health Organization declared the outbreak of COVID-19 to be a pandemic. The COVID-19 pandemic is having widespread, rapidly evolving and unpredictable impacts on global society, economies, financial markets and business practices. Federal and state governments have implemented measures in an effort to contain the virus, including social distancing, travel restrictions, border closures, limitations on public gatherings, work from home, supply chain logistical changes and closure of non-essential businesses. To protect the health and well-being of our employees and customers, we have made substantial modifications to employee travel policies, closed our offices as employees are advised to work from home and cancelled or shifted our conferences and other marketing events to virtual-only. The COVID-19 pandemic has impacted and may continue to impact our business operations, including our employees, customers and partners, and there is substantial uncertainty in the nature and degree of its continued effects over time.

During the first quarter of 2020, the COVID-19 pandemic had minimal impact on our revenue or results of operations, as we continue to derive the significant majority of our revenue from our existing software subscriptions. As we principally price our solutions based on our customers' revenues within

certain revenue bands, elongated declines in our existing customers' revenues may impact our ability to grow our existing customer revenues. We did not experience an abnormal number of non-renewals in March or April, nor any declines in revenue associated with declines in our customers' revenues, and we currently expect our existing customer base to remain largely stable, as it did through the recession in 2008 and 2009. However, significant decreases in non-renewals or concessions to renewal customers would have a material impact on our revenues and cash flows. We did see a decline in new software subscription sales during the month of March, with billings from new software subscription sales decreasing 29% as compared to management's expectations. It is important to note that our sales metrics are assessed quarterly, and given the size and complexity of our sales process we often see variances from month to month due to legal or procurement processes. In the case of the first quarter of 2020 we achieved our new software billings targets as several deals were completed earlier in the quarter. The Company did experience a negative variance in new software billings in April, with actual new software billings 33% below management's expectations. In May new software billings were in excess of our original 2020 expectations. We have seen some delay due to prospects shifting to working remotely, and some due to economic uncertainty. We expect that the uncertainty caused by the COVID-19 pandemic will continue to impact our billings to new customers for the remainder of 2020, and it may also negatively impact our efforts to expand revenues from our existing customers as they continue to evaluate certain long-term projects and budget constraints. However, we do not anticipate that overall demand for our software and solutions, our ability to deliver such software and solutions, or that our growth strategies will be materially impacted by the COVID-19 pandemic, as companies continue to rely on the Company for their indirect tax solutions. There is potential for an increase in demand for our products over the long-term considering the amount of state debt being accumulated during the pandemic, which may result in increases in taxes and revenue department audits which our products are positioned to address customer needs.

In addition to the impacts on our sales, our cash collections from existing customers were lower than expected in the month of March. In April and May, our collections exceeded our expectation as some of the procedural disruptions that customers experienced as they shifted to remote work in March had stabilized. We believe that we may see delays in collections over the coming months. However, we do not believe that these delays will materially impact our business; we continue to expect that we will be able to collect amounts due under subscription contracts from customer experiencing issues as a result of COVID-19, and we have not recorded an additional allowance for doubtful accounts in connection with any delays. Given that customers cannot forgo our monthly content updates, which are necessary to remain compliant with the most current regulations, we believe customers will continue to pay our renewal invoices in a timely, even if slightly elongated manner. We believe that we currently have ample liquidity and capital resources to continue to meet our operating needs, and our ability to continue to service our debt or other financial obligations is not currently impaired. For a further description of our liquidity, including the New Credit Agreement entered into on March 31, 2020, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources."

The extent to which the COVID-19 pandemic impacts our business going forward will depend on numerous evolving factors we cannot reliably predict, including the duration and scope of the pandemic; governmental, business, and individuals' actions in response to the pandemic; and the impact on economic activity, including the possibility of recession or financial market instability. These factors may adversely impact consumer, business and government spending on technology as well as customers' ability to pay for our products and services on an ongoing basis. This uncertainty also affects management's accounting estimates and assumptions, which could result in greater variability in a variety of areas that depend on these estimates and assumptions, including estimated allowance for subscription cancellations, product life cycles and estimated lives of long lived assets.

Key Business Metrics

We regularly review several metrics identified below to evaluate growth trends, measure our performance, formulate financial projections and make strategic decisions.

Annual Recurring Revenue. We derive the vast majority of our revenue from recurring software subscriptions. We believe ARR provides us with visibility to our projected software subscription revenue in order to evaluate the health of our business. Because we recognize subscription revenue ratably, we believe investors can use ARR to measure our expansion of existing customer revenues, new customer activity, and as an indicator of future software subscription revenues. ARR is based on monthly recurring revenue ("MRR") from software subscriptions for the most recent month at period end, multiplied by twelve. MRR is calculated by dividing the software subscription price, inclusive of discounts, by the number of subscription covered months. MRR only includes customers with MRR at the end of the last month of the measurement period.

(In millions)	For the Year Ended December 31		Year-Over-Year Change	Three Months Ended March 31		Period-Over- Period Change		
	2019	2018		2020	2019			
Annual Recurring Revenue	\$ 278.5	\$ 233.5	\$ 45.0	19.2%	\$ 284.2	\$ 242.3	\$ 41.9	17.3%

ARR increased by \$45.0 million or 19.2% from 2018 to 2019. The increase was primarily driven by \$21.6 million of growth in revenues from existing customers through their expanded use of our solutions as well as price increases and \$23.4 million of on-premise and cloud-based subscription sales of our tax solutions to new customers.

ARR increased by \$41.9 million or 17.3% during the three months ended March 31, 2020, as compared to the same period in 2019. The increase was primarily driven by \$20.6 million of growth in revenues from existing customers through their expanded use of our solutions as well as price increases and \$21.3 million of on-premise and cloud-based subscription sales of our tax solutions to new customers.

Net Revenue Retention Rate. We believe that our NRR provides insight into our ability to retain and grow revenue from our customers, as well as their potential long-term value to us. We also believe it demonstrates to investors our ability to expand existing customer revenues, which is one of our key growth strategies. Our NRR refers to the ARR expansion during the 12 months of a reporting period for all customers who were part of our customer base at the beginning of the reporting period. Our NRR calculation takes into account any revenue lost from departing customers or customers who have downgraded as well as any revenue expansion from upgrades, cross-sells or upsells of our software.

	For the Year Ended December 31		For the Three Months Ended March 31	
	2019	2018	2020	2019
Net Revenue Retention Rate	109%	104%	109%	106%

The 500 basis point increase in NRR from 2018 to 2019 was primarily driven by growth of \$21.6 million in recurring subscription revenues from existing customers through their expanded use of our solutions.

The 300 basis point increase in NRR during the three months ended March 31, 2020, as compared to the same period in 2019, was primarily driven by growth of \$20.6 million in recurring subscription revenues from existing customers through their expanded use of our solutions as well as price increases.

Adjusted EBITDA and Adjusted EBITDA Margin. We believe that Adjusted EBITDA is a measure widely used by securities analysts and investors to evaluate the financial performance of our company

and other companies. We believe that Adjusted EBITDA and Adjusted EBITDA margin are useful as supplemental measures to evaluate our overall operating performance as they measure business performance focusing on cash related charges and because they are important metrics to lenders under our New Credit Agreement. We define Adjusted EBITDA as net income or loss before interest, taxes, depreciation, and amortization, as adjusted to exclude charges for asset impairments, gains or losses on assets and liabilities denominated in a foreign currency, share-based compensation expense, severance charges and transaction costs. Adjusted EBITDA margin represents Adjusted EBITDA divided by total revenues for the same period. For purposes of comparison, our net income (loss) in 2019 was \$31.1 million and \$(6.1) million in 2018, while our net income (loss) margin was 9.7% and (2.2)% over the same periods, respectively. Additionally, our net income (loss) was \$(29.1) million and \$7.3 million for the three months ended March 31, 2020 and 2019, respectively, while our net income margin was (32.7)% and 9.9% over the same periods, respectively.

	For the Year Ended December 31		Three Months Ended March 31	
	2019	2018	2020	2019
Adjusted EBITDA (in thousands)	\$ 67,913	\$ 61,471	\$ 15,294	\$ 15,596
Adjusted EBITDA margin	21%	23%	17%	21%

The increase in Adjusted EBITDA of \$6.4 million in 2019 is primarily driven by an increase in gross profit, offset by an increase in operating expenses including additional sales and marketing and research and development investments. Adjusted EBITDA margin decreased in 2019, primarily because operating expenses increased at a higher rate than our increase in revenue. This growth in operating expenses is driven primarily by our ongoing investment in our research and development, sales and marketing organization and technology infrastructure to support our future growth.

The decrease in Adjusted EBITDA for the three months ended March 31, 2020 of \$0.3 million is primarily driven by an increase in operating expenses, including additional research and development and internal infrastructure investments, partially offset by an increase in gross profit. Adjusted EBITDA margin decreased for the three months ended March 31, 2020, primarily because operating expenses increased at a higher rate than our increase in revenue. This growth in operating expenses is driven primarily by our ongoing investment in our research and development, sales and marketing organization and technology infrastructure to support our future growth.

Free Cash Flow and Free Cash Flow Margin. Our management uses free cash flow as a critical measure in the evaluation of liquidity in conjunction with related GAAP amounts. We also use the measure when considering available cash, including for decision making purposes related to dividends and discretionary investments. We consider free cash flow to be an important measure for investors because it measures the amount of cash we generate from our operations after our capital expenditures and capitalization of software development costs. In addition, we base certain of our forward-looking estimates and budgets on free cash flow and free cash flow margin. We define free cash flow as the total of net cash provided by operating activities less purchases of property and equipment and capitalized software. We define free cash flow margin as free cash flow divided by total revenues for the same period. For purposes of comparison, our net cash provided by operating activities was \$92.5 million and \$80.4 million for the years ended December 31, 2019 and 2018, respectively, while our operating cash flow margin was 29% and 30% over the same periods, respectively. Our net cash used in operating activities was \$(6.4) million and our net cash provided by operating activities was \$9.9 million for the three months ended March 31, 2020 and 2019, respectively, while our operating cash flow margin was (7)% and 13% over the same periods, respectively. Net cash used in investing activities was \$37.6 million and \$33.3 million for the years ended December 31, 2019 and 2018, respectively, and \$21.7 and \$8.1 for the three months ended March 31, 2020 and 2019, respectively. Net cash used in financing activities was \$30.6 million and \$30.7 million for the years ended

December 31, 2019 and 2018, respectively, net cash provided by financing activities was \$103.7 million for the three months ended March 31, 2020 and net cash used in financing activities was \$12.4 million for the three months ended March 31, 2019.

	For the Year Ended December 31		Three Months Ended March 31	
	2019	2018	2020	2019
Free cash flow (in thousands)	\$ 54,938	\$ 47,135	\$ (15,755)	\$ 1,784
Free cash flow margin	17%	17%	(18)%	2%

Free cash flow increased by \$7.8 million in 2019 over 2018, driven primarily by an increase in cash from operating activities of \$12.0 million, due to a \$4.5 million increase in net income after excluding the impact of the asset impairment in 2018 and an increase in cash provided by changes in operating assets and liabilities. This amount is offset by an increase of \$5.0 million in investments in capitalized software costs to support the growth of our customers. Free cash flow margin remained consistent with the prior year at 17%.

Free cash flow decreased by \$17.5 million for the three months ended March 31, 2020, driven primarily by a decrease in cash from operating activities of \$16.3 million due to a reduction in cash provided by changes in operating assets and liabilities of \$16.0 million. This reduction was primarily due to decreases in accrued and deferred compensation of \$4.8 million, a reduction in deferred revenue of \$7.6 million and a reduction in accounts receivable of \$2.3 million. Accrued and deferred compensation decreased by \$4.8 million due to payments for variable compensation for the first quarter of 2020 increasing over the prior year comparable quarter by \$2.7 million due to increases in headcount, and due to payments of \$2.8 million for stock appreciation right redemptions in the first quarter of 2020 as compared to the same quarter of 2019. Deferred revenue decreased \$7.6 million due to a \$4.8 million decrease in non-recurring extended product support fees billed in the first quarter of 2019 related to older versions of software subscription solutions retired during 2019. The balance of the deferred revenue reduction of \$2.8 million, and the reduction in accounts receivable of \$2.3 million are due primarily to modifications to billing frequencies requested by customers, primarily to align all the annual subscription billings for their subscription licenses to the same period. This results in a short-term reduction in deferred revenue, but no impact to revenue.

Components of Our Results of Operations

Revenue

We generate revenue from software subscriptions and services.

Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration expected to be received in exchange for those products or services. We enter into contracts that include various combinations of products and services, which are generally capable of being distinct and accounted for as separate performance obligations. Revenue is recognized net of allowance for subscription and non-renewal cancellations and any taxes collected from customers that are subsequently remitted to governmental authorities.

Software Subscriptions

Licenses for on-premise software subscriptions, which are generally one year, provide the customer with a right to use the software as it exists when made available to the customer. Customers purchase a subscription to these licenses, which includes the related software and tax content updates and product support. The updates and support, which are part of the subscription agreement, are essential to the continued utility of the software; therefore, we have determined the software and the related updates and support to be a single performance obligation. Accordingly, when on-premise software is licensed,

the revenue associated with this combined performance obligation is recognized ratably over the license term as these subscriptions are provided for the duration of the license term. Revenue recognition begins on the later of the beginning of the subscription period or the date the software is made available to the customer to download. Our on-premise software subscription prices in the initial subscription year are higher than standard renewal prices. The excess initial year price over the renewal price is a material right that provides customers with the right to this reduced renewal price. We recognize revenue associated with this material right over the estimated period of benefit to the customer, which is generally three years.

Our cloud-based subscriptions allow customers to use Company-hosted software over the contract period without taking possession of the software. The contracts are generally for one to three years and are generally billed annually in advance of the subscription period. Our cloud-based offerings also include related updates and support. All services within the cloud-based contracts consistently provide a benefit to the customer during the subscription period, thus the associated revenue is recognized ratably over the subscription period. Revenue recognition begins on the later of the beginning of the subscription period or the date the customer is provided access to the cloud-based solutions.

Revenue is impacted by the timing of sales and our customers' growth or contractions resulting in their need to expand or contract their subscription usage, the purchase of new solutions or the non-renewal of existing solutions. In addition, revenue will fluctuate with the cessation of extended product support fees charged for older versions of our software subscription solutions when they are retired and these fees are no longer charged. Contracts for on-premise licenses permit cancellations at the end of the license term, which is generally one year. Legacy cloud-based subscription contracts for multi-year periods previously provided customers the right to terminate their contract for services prior to the end of the subscription period at a significant penalty. This penalty requires the payment of a percentage of the remaining months of the then current contract term. Current cloud-based contracts do not contain such termination rights. Terminations of cloud-based subscriptions prior to the end of the subscription term have occurred infrequently and the impact has been immaterial. The allowance for subscription and non-renewal cancellations reflects an estimate of the amount of such cancellations and non-renewals based upon our historical experience.

Services Revenue

We generate services revenue primarily in support of our customers' needs associated with our software and to enable them to realize the full benefit of our solutions. These software subscription-related services include configuration, data migration and implementation, and premium support and training. In addition, we generate services revenue through our managed services offering which allows customers to outsource all or a portion of their indirect tax operations to us. These services include indirect tax return preparation, filing and tax payment and notice management. We generally bill for services on a per-transaction or time and materials basis, and we recognize revenue from deliverable-based professional services as services are performed.

Fluctuations in services revenue are directly correlated to fluctuations in our subscription revenues with respect to implementation and training services as we have historically experienced an attachment rate to subscription sales for these services in excess of 60%. Our managed services offering has recently experienced increased revenue associated with returns processing volume increases attributable to regulatory changes, as customers expanded their tax filings into more jurisdictions.

Cost of Revenue

Software Subscriptions

Cost of software subscriptions revenue consists of costs related to providing and supporting our software subscriptions and includes personnel and related expenses, including salaries, benefits, bonuses

and stock-based compensation. In addition, cost of revenue includes direct costs associated with information technology, such as data center and software hosting costs, and tax content maintenance. Cost of revenue also includes amortization associated with direct labor and related expenses for capitalized internal-use software and developed software for new products and enhancements to existing products and cloud-based subscription solutions. We plan to continue to significantly expand our infrastructure and personnel to support our future growth and increases in transaction volumes of our cloud-based solutions, including through acquisitions. We expect growth in our business will result in an increase in cost of revenue in absolute dollars.

Services

Cost of services revenue consists of direct costs of software subscription-related services and our managed services offering. These costs include personnel and related expenses, including salaries, benefits, bonuses, stock-based compensation and the cost of third-party contractors and other direct expenses. We plan to continue to expand our infrastructure and personnel as necessary to support our future growth and related increases in our service revenue. We expect growth in our business will result in an increase in the cost of services revenue in absolute dollars, but may decrease as a percentage of revenues as we scale our operations.

Research and Development

Research and development expenses consist primarily of personnel and related expenses for our research and development activities, including salaries, benefits, bonuses and stock-based compensation, and the cost of third-party developers and other contractors. Research and development costs, other than software development expenses qualifying for capitalization, are expensed as incurred. For the years ended December 31, 2019 and 2018, \$17.2 million and \$12.3 million of software development costs were capitalized, respectively. For the three months ended March 31, 2020 and 2019, \$3.7 million and \$3.9 million of software development costs were capitalized, respectively. Capitalized software development costs consist primarily of employee-related and third-party labor costs.

We devote substantial resources to developing new products and enhancing existing products, conducting quality assurance testing and improving our core technology. We believe continued investments in research and development are critical to attain our strategic objectives and expect research and development costs to increase in absolute dollars. These investments include enhancing our solution offerings to address changing customer needs to support their growth, as well as implementing changes required to keep pace with our partners' technology to ensure the continued ability of our solutions to work together and deliver value to our customers. The market for our solutions is characterized by rapid technological change, frequent new product and service introductions and enhancements, changing customer demands and evolving industry standards. As a result, although we are making significant research and development expenditures, which may be incurred and certain of which may be capitalized, there is no guarantee these solutions will be accepted by the market. This could result in increased costs or an impairment of capitalized development costs with no resulting future revenue benefit.

Selling and Marketing Expenses

Selling expenses consist primarily of personnel and related expenses in support of sales and marketing efforts. These costs include salaries, benefits, bonuses and stock-based compensation. In addition, selling expense includes costs related to advertising and promotion efforts, branding costs, partner-based commissions and costs associated with our annual customer conferences. We intend to continue to invest in our sales and marketing capabilities in the future to continue to increase our brand awareness and expect these costs to increase on an absolute dollar basis as we grow our business and continue to expand our market and partner ecosystem penetration. Sales and marketing expense in

absolute dollars and as a percentage of total revenue may fluctuate from period-to-period based on total revenue levels and the timing of our investments in our sales and marketing functions as these investments may vary in scope and scale over future periods.

General and Administrative

General and administrative expenses consist primarily of personnel and related expenses for administrative, finance, information technology, legal, risk management, facilities and human resources staffing, including salaries, benefits, bonuses, stock-based compensation, professional fees, insurance premiums, facility costs and other internal support costs.

We expect our general and administrative expenses to increase in absolute dollars as we continue to expand our operations, hire additional personnel, integrate future acquisitions and incur additional costs associated with becoming a publicly listed company. As a public company, we expect to incur increased expenses related to accounting, tax and auditing activities, legal, insurance, SEC compliance and internal control compliance.

Depreciation and Amortization

Depreciation and amortization expense consists of the allocation of purchased and developed asset costs over the future periods benefitted by the use of these assets. These assets include leasehold improvements for our facilities, computers and equipment needed to support our customers and our internal infrastructure and capitalized internal-use software associated with our internal infrastructure and tools. Depreciation and amortization will fluctuate in correlation with our ongoing investment in internal infrastructure costs to support our growth.

Interest Income

Interest income reflects earnings on investments of our cash on hand and on funds held for customers related to our managed outsourcing services. Interest income will vary as a result of fluctuations in the future level of funds available for investment and the rate of return available in the market on such funds.

Interest Expense

Interest expense consists primarily of interest payments and other financing costs on our debt facility. Interest expense will vary as a result of fluctuations in the level of debt outstanding as well as interest rates on such debt.

Provision for Taxes

We have been taxed as an S Corporation for U.S. federal income tax purposes and for income tax purposes in most states. As a result, net income or loss has been allocated to our stockholders and included on their individual income tax returns. In certain states, we have been taxed at the corporate level. Accordingly, the income tax provision or benefit is based on taxable income allocated to these states. In certain foreign jurisdictions, our subsidiaries were taxed at the corporate level. Similar to states, the income tax provision or benefit is based on taxable income sourced to these foreign jurisdictions.

In connection with the offering, we will convert to a C Corporation, which will result in net income of the Company being taxed at the corporate level. As such, our provision for taxes will increase. Assuming the conversion to a C Corporation, we expect a pro forma entity level estimated effective tax rate of approximately 25%, inclusive of all applicable U.S. federal, state, local and foreign income

taxes. In addition, based on the deferred tax asset balances at March 31, 2020, we would anticipate recording a tax benefit of approximately \$8.5 million upon such conversion.

Results of Operations

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with the audited consolidated financial statements and the notes thereto included elsewhere in this prospectus. The period-to-period comparison of financial results is not necessarily indicative of financial results to be achieved in future periods. In particular, in connection with this offering, we will convert to a C Corporation, which will result in taxation at the corporate level.

The following table sets forth our consolidated statements of comprehensive income (loss) for the periods indicated. Revenue is reflected in accordance with ASC 606, which we adopted on January 1, 2018.

(In thousands)	For the Year Ended December 31		Year-Over-Year Change	Three Months Ended March 31		Period-Over- Period Change		
	2019	2018		2020	2019	(unaudited)		
Revenue:								
Software subscriptions	\$ 275,629	\$ 235,663	\$ 39,966	17.0%	\$ 75,760	\$ 64,384	\$ 11,376	17.7%
Services	45,871	36,740	9,131	24.9%	13,485	10,230	3,255	31.8%
Total revenue	321,500	272,403	49,097	18.0%	89,245	74,614	14,631	19.6%
Cost of Revenue:								
Software subscriptions ⁽¹⁾	77,259	68,945	8,314	12.1%	24,684	18,426	6,258	34.0%
Services ⁽¹⁾	33,119	26,753	6,366	23.8%	14,778	7,138	7,640	107.0%
Total cost of revenues	110,378	95,698	14,680	15.3%	39,462	25,564	13,898	54.4%
Gross profit	211,122	176,705	34,417	19.5%	49,783	49,050	733	1.5%
Operating expenses:								
Research and development ⁽¹⁾	30,557	23,755	6,802	28.6%	13,079	7,573	5,506	72.7%
Selling and marketing ⁽¹⁾	68,127	56,898	11,229	19.7%	24,333	16,047	8,286	51.6%
General and administrative ⁽¹⁾	71,014	58,947	12,067	20.5%	37,636	15,448	22,188	143.6%
Depreciation and amortization	8,996	7,937	1,059	13.3%	2,869	2,045	824	40.3%
Impairment of asset	—	32,692	(32,692)	(100.0)%	—	—	—	—
Other operating expense (income)	573	(691)	1,264	(182.9)%	111	163	(52)	(31.9)%
Total operating expenses	179,267	179,538	(271)	(0.2)%	78,028	41,276	36,752	89.0%
Income (loss) from operations	31,855	(2,833)	34,688	1,224.4%	(28,245)	7,774	(36,019)	(463.3)%
Other (income) expense:								
Interest income	(1,083)	(526)	(557)	(105.9)%	(355)	(292)	(63)	(21.6)%
Interest expense	2,036	2,120	(84)	(4.0)%	924	537	387	72.1%
Total other expense, net	953	1,594	(641)	(40.2)%	569	245	324	132.2%
Income (loss) before income taxes	30,902	(4,427)	35,329	798.0%	(28,814)	7,529	(36,343)	(482.7)%
Income tax (benefit) expense	(155)	1,679	(1,834)	(109.2)%	250	204	46	22.5%
Net income (loss)	31,057	(6,106)	37,163	(608.6)%	(29,064)	7,325	(36,389)	(496.8)%
Other comprehensive (income) loss from foreign currency translations	(5)	355	(360)	(101.4)%	2,998	(21)	(3,019)	(14376.2)%
Total comprehensive income (loss)	\$ 31,062	\$ (6,461)	\$ 37,523	(580.7)%	\$ (32,062)	\$ 7,346	\$ (39,408)	(536.5)%

(1) Includes stock-based compensation expenses as follows in the table below. For more details, see "Seasonality and Quarterly Trends."

	For the Year Ended December 31,		Three Months Ended March 31,	
	2019	2018	2020	2019
	(In thousands)			
Cost of revenues, software subscriptions	\$ 946	\$ 512	\$ 3,492	\$ 131
Cost of revenues, services	1,419	765	5,238	197
Research and development	946	511	3,492	131
Selling and marketing	1,892	1,022	6,984	261
General and administrative	4,257	2,298	15,714	590
Total stock-based compensation	\$ 9,460	\$ 5,108	\$ 34,920	\$ 1,310

The following table sets forth our results of operations as a percentage of our total revenue for the periods presented.

	For the Year Ended December 31		Three Months Ended March 31	
	2019	2018	2020	2019
	(unaudited)			
Revenue:				
Software subscriptions	85.7%	86.5%	84.9%	86.3%
Services	14.3%	13.5%	15.1%	13.7%
Total revenue	100.0%	100.0%	100.0%	100.0%
Cost of Revenue:				
Software subscriptions	24.0%	25.3%	27.7%	24.7%
Services	10.3%	9.8%	16.6%	9.6%
Total cost of revenues	34.3%	35.1%	44.3%	34.3%
Gross profit	65.7%	64.9%	55.7%	65.7%
Operating expenses:				
Research and development	9.5%	8.7%	14.7%	10.1%
Selling and marketing	21.2%	20.9%	27.3%	21.5%
General and administrative	22.1%	21.6%	42.2%	20.7%
Depreciation and amortization	2.8%	2.9%	3.2%	2.7%
Impairment of asset	0.0%	12.0%	0.0%	0.0%
Other operating expense (income), net	0.2%	(0.2)%	0.1%	0.2%
Total operating expenses	55.8%	65.9%	87.5%	55.2%
Income (loss) from operations	9.9%	(1.0)%	(31.8)%	10.5%
Other (income) expense:				
Interest income	(0.3)%	(0.2)%	(0.4)%	(0.4)%
Interest expense	0.6%	0.8%	1.0%	0.7%
Total other expense, net	0.3%	0.6%	0.6%	0.3%
Income (loss) before income taxes	9.6%	(1.6)%	(32.4)%	10.2%
Income tax (benefit) expense	0.1%	(0.6)%	0.3%	0.3%
Net income (loss)	9.7%	(2.2)%	(32.7)%	9.9%
Other comprehensive (income) loss from foreign currency translations	0.0%	0.1%	3.4%	(0.0)%
Total comprehensive income (loss)	9.7%	(2.3)%	(36.1)%	9.9%

Three Months Ended March 31, 2020 Compared to Three Months Ended March 31, 2019 (unaudited)*Revenue*

(In thousands)	Three Months Ended March 31		Period-Over-Period Change	
	2020	2019		
	(unaudited)			
Revenue:				
Software subscriptions	\$ 75,760	\$ 64,384	\$ 11,376	17.7%
Services	13,485	10,230	3,255	31.8%
Total revenue	<u>\$ 89,245</u>	<u>\$ 74,614</u>	<u>\$ 14,631</u>	<u>19.6%</u>

Revenue increased \$14.6 million, or 19.6%, to \$89.2 million for the three months ended March 31, 2020 compared to \$74.6 million for the three months ended March 31, 2019. The increase in software subscriptions revenue of \$11.4 million, or 17.7%, was primarily driven by \$10.5 million in revenue growth derived from our existing customers and \$0.9 million of revenue from new customers.

The \$3.3 million increase in services revenue is primarily driven by an increase of \$2.5 million in software subscription-related services associated with the growth in subscription revenues, which includes new customers implementing our solutions and upgrading existing customers to newer versions of our solutions. In addition, our managed services offering experienced a \$0.8 million increase in recurring services revenue over the prior year due to returns processing volume increases related to regulatory changes as customers expanded their tax filings into more jurisdictions.

Cost of Software Subscriptions Revenue

(In thousands)	Three Months Ended March 31		Period-Over-Period Change	
	2020	2019		
	(unaudited)			
Cost of software subscriptions revenue	\$ 24,684	\$ 18,426	\$ 6,258	34.0%

Cost of software subscriptions revenue increased \$6.3 million, or 34.0%, to \$24.7 million for the three months ended March 31, 2020 compared to \$18.4 million for the three months ended March 31, 2019. Of this increase, 53.7% is due to an increase in stock-based compensation of \$3.4 million for the three months ended March 31, 2020 over the same period in 2019. The balance of the increase of \$2.9 million is due primarily to increased costs of personnel supporting year-over-year growth of sales and customers and ongoing infrastructure investments to support expansion of customer transaction volumes for our cloud-based subscription customers. As a percentage of total revenue, the cost of software subscriptions revenue increased to 27.7% for the three months ended March 31, 2020 compared to 24.7% in March 31, 2019. Adjusting for the increase in stock-based compensation in 2020, cost of software subscriptions as a percentage of total revenue would have been 23.9% for the three months ended March 31, 2020.

Cost of Services Revenue

(In thousands)	Three Months Ended March 31		Period-Over-Period Change	
	2020	2019		
	(unaudited)			
Cost of services revenue	\$ 14,778	\$ 7,138	\$ 7,640	107.0%

Cost of services revenue increased \$7.6 million, or 107.0%, to \$14.8 million for the three months ended March 31, 2020 compared to \$7.1 million for the three months ended March 31, 2019. Of this increase, 66.0% is due to an increase in stock-based compensation of \$5.0 million for the three months ended March 31, 2020 over the same period in 2019. The balance of the increase of \$2.6 million is primarily due to headcount growth in the service delivery areas to support revenue growth in software subscription-related services and our managed services offering. As a percentage of total revenue, cost of services revenue increased to 16.6% in 2020 compared to 9.6% in 2019. Adjusting for the increase in stock-based compensation in 2020, cost of services revenue as a percentage of total revenue would have been 10.9% for the three months ended March 31, 2020.

Research and Development

(In thousands)	Three Months Ended March 31		Period-Over-Period Change	
	2020	2019		
	(unaudited)			
Research and development	\$ 13,079	\$ 7,573	\$ 5,506	72.7%

Research and development expenses increased \$5.5 million, or 72.7%, to \$13.1 million for the three months ended March 31, 2020 compared to \$7.6 million for the three months ended March 31, 2019. Of this increase, 61.0% is due to an increase in stock-based compensation of \$3.4 million for the three months ended March 31, 2020 over the same period in 2019 for personnel that participate in the Company's stock-based compensation plans. The balance of the increase of \$2.1 million is primarily due to costs associated with increased development activity associated with nascent technologies and new solutions to address end-to-end data analysis and compliance needs of our customers. As a percentage of total revenue, research and development expenses increased to 14.7% for the three months ended March 31, 2020 compared to 10.1% for the three months ended March 31, 2019, driven in part by our expanded investment in developing our global compliance reporting solution. Adjusting for the increase in stock-based compensation in 2020, research and development expenses as a percentage of total revenue would have been 10.9% for the three months ended March 31, 2020.

Research and development expense excludes those costs that have been capitalized for solutions that have met our capitalization policy.

Selling and Marketing

(In thousands)	Three Months Ended March 31		Period-Over-Period Change	
	2020	2019		
	(unaudited)			
Selling and marketing	\$ 24,333	\$ 16,047	\$ 8,286	51.6%

Selling and marketing expenses increased \$8.3 million, or 51.6%, to \$24.3 million for the three months ended March 31, 2020 compared to \$16.0 million for the same period in 2019. Of this increase, 81.1% is due to an increase in stock-based compensation of \$6.7 million for the three months ended March 31, 2020 over the same period in 2019. The balance of the increase of \$1.6 million is primarily due to an increase in payroll and related expenses associated with the growth in year-over-year subscription sales and services revenue and expansion of our partner and channel management programs. In addition, increases in advertising and promotional spending and expanded brand awareness efforts contributed to this increase. As a percentage of total revenue, selling and marketing expenses increased to 27.3% for the three months ended March 31, 2020 compared to 21.5% for the same period in 2019. Adjusting for the increase in stock-based compensation in 2020, selling and

marketing expenses as a percentage of total revenue would have been 19.7% for the three months ended March 31, 2020.

General and Administrative

(In thousands)	Three Months Ended March 31		Period-Over-Period Change	
	2020	2019		
	(unaudited)			
General and administrative	\$ 37,636	\$ 15,448	\$ 22,188	143.6%

General and administrative expenses increased \$22.2 million, or 143.6%, to \$37.6 million for the three months ended March 31, 2020 compared to \$15.4 million for the same period in 2019. Of this increase, 68.2% is due to an increase in stock-based compensation of \$15.1 million for the three months ended March 31, 2020 over the same period in 2019. The balance of the increase of \$7.1 million is primarily due to planned strategic investments in information technology infrastructure, business process reengineering and other initiatives to drive future operating leverage, as well as investments in employees and other systems and resources in support of our growth. Due to these factors, as a percentage of total revenue, general and administrative expenses increased to 42.2% for the three months ended March 31, 2020 compared to 20.7% for the same period in 2019. Adjusting for the increase in stock-based compensation in 2020, general and administrative expenses as a percentage of total revenue would have been 25.2% for the three months ended March 31, 2020.

Depreciation and Amortization

(In thousands)	Three Months Ended March 31		Period-Over-Period Change	
	2020	2019		
	(unaudited)			
Depreciation and amortization	\$ 2,869	\$ 2,045	\$ 824	40.3%

Depreciation and amortization increased \$0.8 million, or 40.3%, to \$2.9 million for the three months ended March 31, 2020 compared to \$2.0 million for the same period in 2019. The increase was primarily due to the impact of infrastructure and technology purchases placed in service in 2019 and other capitalized infrastructure costs to support our growth. As a percentage of revenue, depreciation expense increased to 3.2% for the three months ended March 31, 2020 compared to 2.7% for the same period in 2019.

Interest Income

(In thousands)	Three Months Ended March 31		Period-Over-Period Change	
	2020	2019		
	(unaudited)			
Interest income	\$ (355)	\$ (292)	\$ (63)	(21.6)%

Interest income for the three months ended March 31, 2020 was relatively consistent with the same period in 2019.

Interest Expense

(In thousands)	Three Months Ended March 31		Period-Over-Period Change	
	2020	2019		
	(unaudited)			
Interest expense	\$ 924	\$ 537	\$ 387	72.1%

Interest expense increased \$0.4 million, or 72.1%, to \$0.9 million for the three months ended March 31, 2020 compared to \$0.5 million for the same period in 2019. The increase is primarily due to interest of \$0.2 million related to borrowings under the line of credit of \$12.3 million in January 2020 to fund the initial purchase of a controlling interest in a tax software and content subscription provider in Brazil and general interest rate increases during the quarter, and due to the write-off of \$0.2 million in deferred financing fees for extinguished debt in connection with the New Credit Agreement entered into on March 31, 2020.

Provision for Taxes

(In thousands)	Three Months Ended March 31		Period-Over-Period Change	
	2020	2019		
	(unaudited)			
Income tax (benefit) expense	\$ 250	\$ 204	\$ 46	22.5%

Income tax expense for the three months ended March 31, 2020 was relatively consistent with the same period in 2019.

*Year Ended December 31, 2019 Compared to Year Ended December 31, 2018**Revenue*

(In thousands)	For the Year Ended December 31		Year-Over-Year Change	
	2019	2018		
Revenue:				
Software subscriptions	\$ 275,629	\$ 235,663	\$ 39,966	17.0%
Services	45,871	36,740	9,131	24.9%
Total revenue	<u>\$ 321,500</u>	<u>\$ 272,403</u>	<u>\$ 49,097</u>	<u>18.0%</u>

Revenue increased \$49.1 million, or 18.0%, to \$321.5 million in 2019 compared to \$272.4 million in 2018. The increase in software subscriptions revenue of \$40.0 million, or 17.0%, was primarily driven by \$29.0 million in revenue growth derived from our existing customers and \$11.0 million of revenue from new customers.

The \$9.1 million increase in services revenue is primarily driven by an increase of \$5.3 million in software subscription-related services associated with the growth in subscription revenues, which includes new customers implementing our solutions and upgrading existing customers to newer versions of our solutions. In addition, our managed services offering experienced a \$2.5 million increase in recurring services revenue over the prior year due to returns processing volume increases related to regulatory changes as customers expanded their tax filings into more jurisdictions.

Cost of Software Subscriptions Revenue

(In thousands)	For the Year Ended December 31		Year-Over-Year Change	
	2019	2018		
Cost of software subscriptions revenue	\$ 77,259	\$ 68,945	\$ 8,314	12.1%

Cost of software subscriptions revenue increased \$8.3 million, or 12.1%, to \$77.3 million in 2019 compared to \$68.9 million in 2018. The increase was primarily due to costs of personnel supporting year-over-year growth of sales and customers, as well as ongoing infrastructure investments to support expansion of customer transaction volumes for our cloud-based subscription customers. Specifically, services headcount grew by 34% in 2019 as compared to 2018. As a percentage of total revenue, the cost of software subscriptions revenue decreased to 24.0% in 2019 compared to 25.3% in 2018.

Cost of Services Revenue

(In thousands)	For the Year Ended December 31		Year-Over-Year Change	
	2019	2018		
Cost of services revenue	\$ 33,119	\$ 26,753	\$ 6,366	23.8%

Cost of services revenue increased \$6.4 million, or 23.8%, to \$33.1 million in 2019 compared to \$26.8 million in 2018. The increase was primarily due to headcount growth in the service delivery areas to support revenue growth in software subscription-related services and our managed services offering. As a percentage of total revenue, cost of services revenue increased to 10.3% in 2019 compared to 9.8% in 2018.

Research and Development

(In thousands)	For the Year Ended December 31		Year-Over-Year Change	
	2019	2018		
Research and development	\$ 30,557	\$ 23,755	\$ 6,802	28.6%

Research and development expenses increased \$6.8 million, or 28.6%, to \$30.6 million in 2019 compared to \$23.8 million in 2018. The increase was primarily due to costs associated with increased development activity associated with nascent technologies and new solutions to address end-to-end data analysis and compliance needs of our customers. As a percentage of total revenue, research and development expenses increased to 9.5% in 2019 compared to 8.7% in 2018, driven in part by our expanded investment in developing our global compliance reporting solution. Research and development expense excludes those costs that have been capitalized for solutions that have met our capitalization policy.

Selling and Marketing

(In thousands)	For the Year Ended December 31		Year-Over-Year Change	
	2019	2018		
Selling and marketing	\$ 68,127	\$ 56,898	\$ 11,229	19.7%

Selling and marketing expenses increased \$11.2 million, or 19.7%, to \$68.1 million in 2019 compared to \$56.9 million in 2018. The increase was primarily due to an increase in payroll and related expenses associated with the growth in year-over-year subscription sales and services revenue and expansion of our partner and channel management programs. In addition, increases in advertising and

promotional spending and expanded brand awareness efforts contributed to this increase. As a percentage of total revenue, selling and marketing expenses increased to 21.2% in 2019 compared to 20.9% in 2018.

General and Administrative

(In thousands)	For the Year Ended December 31		Year-Over-Year Change	
	2019	2018		
General and administrative	\$ 71,014	\$ 58,947	\$ 12,067	20.5%

General and administrative expenses increased \$12.1 million, or 20.5%, to \$71.0 million in 2019 compared to \$59.0 million in 2018. The increase was primarily due to planned strategic investments of \$6.8 million in information technology infrastructure, business process reengineering and other initiatives to drive future operating leverage, as well as investments aggregating \$3.7 million in employees and other systems and resources in support of our growth. Due to these factors, as a percentage of total revenue, general and administrative expenses increased to 22.1% in 2019 compared to 21.6% in 2018.

Depreciation and Amortization

(In thousands)	For the Year Ended December 31		Year-Over-Year Change	
	2019	2018		
Depreciation and amortization	\$ 8,996	\$ 7,937	\$ 1,059	13.3%

Depreciation and amortization increased \$1.0 million, or 13.3%, to \$9.0 million in 2019 compared to \$7.9 million in 2018. The increase was primarily due to the impact of infrastructure and technology purchases placed in service in 2018 and 2019 and other capitalized infrastructure costs to support our growth. As a percentage of revenue, depreciation expense decreased to 2.8% in 2019 compared to 2.9% in 2018.

Impairment of Asset

(In thousands)	For the Year Ended December 31		Year-Over-Year Change	
	2019	2018		
Impairment of assets	\$ —	\$ 32,692	(\$ 32,692)	(100.0)%

For the year ended December 31, 2018, we recorded an impairment of \$32.7 million for capitalized internal-use software previously utilized to provide cloud-based services to customers, net of accumulated amortization of \$11.9 million. This impairment was related to a product strategy shift that resulted in this cloud offering no longer being made available for sale to customers after 2018. The capitalized development costs were deemed to be fully impaired due to the net book value of the asset exceeding its future expected cash flows.

Interest Income

(In thousands)	For the Year Ended December 31		Year-Over-Year Change	
	2019	2018		
Interest income	\$ (1,083)	\$ (526)	\$ (557)	105.9%

Interest income increased \$0.6 million, or 105.9%, to \$1.1 million in 2019 compared to \$0.5 million in 2018. The increase was primarily due to increases in returns earned on higher balances of cash on hand available for investment and increase in funds held for customers during 2019.

Interest Expense

(In thousands)	For the Year Ended December 31		Year-Over-Year Change	
	2019	2018		
Interest expense	\$ 2,036	\$ 2,120	\$ (84)	(4.0)%

Interest expense was relatively consistent with the prior year. The slight decrease was primarily due to the decrease in outstanding balance of debt due to payments made during 2019.

Provision for Taxes

(In thousands)	For the Year Ended December 31		Year-Over-Year Change	
	2019	2018		
Income tax (benefit) expense	\$ (155)	\$ 1,679	\$ 1,834	(109.2)%

Provision for taxes decreased \$1.8 million, or 109.2%, to an income tax benefit of \$0.2 million in 2019 compared to \$1.7 million in 2018. The decrease was primarily due to a \$1.0 million charge in 2018 to establish deferred taxes for assets that were transferred to the United States from a taxing jurisdiction that had a 0% tax rate.

Quarterly Results of Operations

The following table sets forth our unaudited quarterly consolidated statements of operations data for each of the periods presented as well as the percentage of total revenue that each line item represented for each quarter. In management's opinion, the data below have been prepared on the same basis as the audited consolidated financial statements included elsewhere in this prospectus and reflect all necessary adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of this data. The results of historical periods are not necessarily indicative of the results to be expected for a full year or any future period. Historical periods are also impacted by acquisitions. The

following quarterly financial data should be read in conjunction with our audited financial statements and related notes included elsewhere in this prospectus.

(In thousands)	For the Three Months Ended (unaudited)							
	Jun 30, 2018	Sep 30, 2018	Dec 31, 2018	Mar 31, 2019	Jun 30, 2019	Sept 30, 2019	Dec 31, 2019	Mar 31, 2020
Revenue:								
Software subscriptions	\$ 57,702	\$ 60,231	\$ 63,171	\$ 64,384	\$ 67,267	\$ 71,041	\$ 72,937	\$ 75,760
Services	9,201	8,903	9,770	10,230	11,108	11,398	13,135	13,485
Total revenue	66,903	69,134	72,941	74,614	78,375	82,439	86,072	89,245
Cost of revenue:								
Software subscriptions ⁽¹⁾	17,143	18,081	17,090	18,426	19,417	18,647	20,768	24,684
Services ⁽¹⁾	6,924	6,731	6,474	7,138	7,692	8,786	9,503	14,778
Total cost of revenues	24,067	24,812	23,564	25,564	27,109	27,433	30,271	39,462
Gross profit	42,836	44,322	49,377	49,050	51,266	55,005	55,801	49,783
Operating expenses:								
Research and development ⁽¹⁾	6,599	5,854	5,015	7,573	7,205	7,271	8,508	13,079
Selling and marketing ⁽¹⁾	15,540	12,773	14,907	16,047	17,287	15,830	18,963	24,333
General and administrative ⁽¹⁾	13,823	15,397	15,018	15,448	16,647	17,263	21,656	37,636
Depreciation and amortization	1,984	1,895	2,013	2,045	2,172	2,311	2,468	2,869
Impairment of asset	—	—	32,692	—	—	—	—	—
Other operating expense (income)	(231)	(1,375)	1,103	163	305	4	101	111
Total operating expenses	37,715	34,544	70,748	41,276	43,616	42,679	51,696	78,028
Income (loss) from operations	5,121	9,778	(21,371)	7,774	7,650	12,326	4,105	(28,245)
Other (income) expense:								
Interest income	(106)	(195)	(166)	(292)	(232)	(251)	(308)	(355)
Interest expense	548	570	491	537	539	503	457	924
Total other expense, net	442	375	325	245	307	252	149	569
Income (loss) before income taxes	4,679	9,403	(21,696)	7,529	7,343	12,074	3,956	(28,814)
Income tax (benefit) expense	1,143	195	189	204	221	175	(755)	250
Net income (loss)	3,536	9,208	(21,885)	7,325	7,122	11,899	4,711	(29,064)
Other comprehensive (income) loss from foreign currency translations	333	71	118	(21)	23	174	(181)	2,998
Total comprehensive income (loss)	\$ 3,203	\$ 9,137	\$ (22,003)	\$ 7,346	\$ 7,099	\$ 11,725	\$ 4,892	\$ (32,062)

(1) Includes stock-based compensation expenses as follows in the table below. For more details, see "Seasonality and Quarterly Trends."

(In thousands)	For the Three Months Ended (unaudited)							
	Jun 30, 2018	Sep 30, 2018	Dec 31, 2018	Mar 31, 2019	Jun 30, 2019	Sept 30, 2019	Dec 31, 2019	March 31, 2020
Cost of revenues, software subscriptions	\$ 131	\$ 131	\$ 119	\$ 131	\$ 131	\$ 131	\$ 553	\$ 3,492
Cost of revenues, services	197	197	175	197	197	197	830	5,238
Research and development	131	131	118	131	131	131	553	3,492
Selling and marketing	261	261	236	261	261	261	1,106	6,984
General and administrative	590	590	530	590	590	590	2,489	15,714
Total stock-based compensation	\$ 1,310	\$ 1,310	\$ 1,178	\$ 1,310	\$ 1,310	\$ 1,310	\$ 5,530	\$ 34,920

The following table sets forth our results of operations as a percentage of our total revenue for the periods presented.

	For the Three Months Ended (unaudited)							
	Jun 30, 2018	Sep 30, 2018	Dec 31, 2018	Mar 31, 2019	Jun 30, 2019	Sept 30, 2019	Dec 31, 2019	Mar 31, 2020
Revenue:								
Software subscriptions	86.2%	87.1%	86.6%	86.3%	85.8%	86.2%	84.7%	84.9%
Services	13.8%	12.9%	13.4%	13.7%	14.2%	13.8%	15.3%	15.1%
Total revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of revenue:								
Software subscriptions	25.6%	26.2%	23.4%	24.7%	24.8%	22.6%	24.1%	27.7%
Services	10.3%	9.7%	8.9%	9.6%	9.8%	10.7%	11.0%	16.6%
Total cost of revenues	35.9%	35.9%	32.3%	34.3%	34.6%	33.3%	35.1%	44.3%
Gross profit	64.1%	64.1%	67.7%	65.7%	65.4%	66.7%	64.9%	55.7%
Operating expenses:								
Research and development	9.9%	8.5%	6.9%	10.1%	9.2%	8.8%	9.9%	14.7%
Selling and marketing	23.2%	18.5%	20.4%	21.5%	22.1%	19.2%	22.0%	27.3%
General and administrative	20.7%	22.3%	20.6%	20.7%	21.2%	20.9%	25.2%	42.2%
Depreciation and amortization	3.0%	2.7%	2.8%	2.7%	2.8%	2.8%	2.9%	3.2%
Impairment of asset	0.0%	0.0%	44.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Other operating expense (income)	(0.3)%	(2.0)%	1.5%	0.2%	0.4%	0.0%	0.1%	0.1%
Total operating expenses	56.5%	50.0%	97.0%	55.2%	55.7%	51.7%	60.1%	87.5%
Income (loss) from operations	7.6%	14.1%	(29.3)%	10.5%	9.7%	15.0%	4.8%	(31.8)%
Other (income) expense:								
Interest income	(0.2)%	(0.3)%	(0.2)%	(0.4)%	(0.3)%	(0.3)%	(0.4)%	(0.4)%
Interest expense	0.8%	0.8%	0.7%	0.7%	0.7%	0.6%	0.5%	1.0%
Total other expense, net	0.6%	0.5%	0.5%	0.3%	0.4%	0.3%	0.1%	0.6%
Income (loss) before income taxes	7.0%	13.6%	(29.8)%	10.2%	9.3%	14.7%	4.7%	(32.4)%
Income tax (benefit) expense	1.7%	0.3%	0.3%	0.3%	0.3%	0.2%	(0.9)%	0.3%
Net income (loss)	5.3%	13.3%	(30.1)%	9.9%	9.0%	14.5%	5.6%	(32.7)%
Other comprehensive (income) loss from foreign currency translations	0.5%	0.1%	0.2%	0.0%	0.0%	0.2%	(0.2)%	3.4%
Total comprehensive income (loss)	4.8%	13.2%	(30.3)%	9.9%	9.0%	14.3%	5.8%	(36.1)%

Seasonality and Quarterly Trends

We have historically signed a higher percentage of software subscription agreements with new and existing customers in the fourth quarter of each year. This can be attributed to buying patterns typical in the software industry. Since most of our customer agreement terms are annual, agreements initially entered into in the fourth quarter will generally come up for renewal at that same time in subsequent years. As a result, customer agreement cancellations may have a higher concentration during the end of the year. In addition, typically the first and last quarters of the year tend to be higher volume sales periods. This seasonality is reflected in our revenues, though the impact to overall annual or quarterly revenues is minimal since we recognize subscription revenue ratably over the term of the customer contract. Additionally, this seasonality is reflected in commission expenses to our sales personnel and our partners.

Our quarterly revenue has generally increased over the last two years primarily due to new sales to existing customers and sales to new customers. However, the pace of our revenue growth has not been consistent. Many of our customers are enterprise and large corporations and their purchase patterns can be sensitive to timing of budget decisions. Depending on such timing, these decisions can create volatility in the amount of business transacted by our salesforce and the amount of revenues recorded in each quarter. As such, certain periods may be less comparable due to the timing of our customers purchase patterns.

Our operating expenses generally have increased over the two-year period due to increases in headcount and related expenses to support our growth. Quarterly fluctuations in our costs and expenses overall primarily reflect changes in our headcount, and other costs related to certain technology development projects and the development and scaling of our cloud solution. In particular, research and development expenses have fluctuated based on the timing of personnel additions, capitalized costs and related spending on product development. Increases in our sales and marketing expenses primarily reflect personnel additions and various sales and marketing initiatives, the timing of which may fluctuate from quarter to quarter. We anticipate our operating expenses will continue to increase in future periods as we invest in the long-term growth of our business.

The Company has used share-based compensation programs as a component of overall compensation expense for certain of its employees. Certain of these programs require the appreciation of value to be recorded at each measurement date. Beginning in the fourth quarter 2019 and continuing into 2020, intrinsic value has risen significantly as our proximity to an initial public offering has become more likely and as such, the amount of expenses recorded related to stock-based compensation have significantly increased our operating expenses over the past two quarters making period-over-period comparisons difficult.

During the fourth quarter of 2018, we recorded an impairment of \$32.7 million for capitalized internal-use software previously utilized to provide cloud-based services to customers, net of accumulated amortization of \$11.9 million. This impairment was related to a product strategy shift that resulted in this cloud offering no longer being made available for sale to customers after 2018. The capitalized development costs were deemed to be fully impaired due to the net book value of the asset exceeding its future expected cash flows.

Historical patterns should not be considered a reliable indicator of our future sales activity or performance.

Liquidity and Capital Resources

As of December 31, 2019, we had cash and cash equivalents of \$75.9 million and an accumulated deficit of \$90.7 million. Our primary sources of capital to date have been from sales of our solutions and proceeds from bank lending facilities. We believe that our existing cash resources will be sufficient

to meet our capital requirements and fund our operations for at least the next 12 months. Our existing credit facility, which was due to mature in November 2020, was refinanced on March 31, 2020 through borrowings pursuant to the New Credit Agreement, which involved a \$175.0 million three-year term loan and a \$100.0 million five-year line of credit. The term loan is required to be repaid upon consummation of this offering. No amounts are outstanding under the line of credit at May 31, 2020. In the event this offering is not consummated, we believe that cash flows from operations are sufficient to repay the outstanding borrowings. Further, we believe we have the ability to refinance our credit facility pursuant to the New Credit Agreement in the future should the need arise. However, if these sources are insufficient to satisfy our liquidity requirements, we may seek to sell additional equity or debt securities. If we raise additional funds by issuing equity securities, our stockholders would experience dilution. Debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. Any debt financing or additional equity that we raise may contain terms that are not favorable to us or our stockholders. Additional financing may not be available at all, or in amounts or on terms unacceptable to us.

The following table presents a summary of our cash flows for the periods indicated:

(in thousands)	Year Ended December 31		Three Months Ended March 31	
	2019	2018	2020 (unaudited)	2019
Net cash provided by (used in) operating activities	\$ 92,498	\$ 80,449	\$ (6,417)	\$ 9,899
Net cash used in investing activities	(37,560)	(33,314)	(21,656)	(8,115)
Net cash provided by (used in) financing activities	(30,629)	(30,697)	103,654	(12,392)
Effect of foreign exchange rate changes	12	(402)	(249)	21
Net increase in cash, cash equivalents and restricted cash	\$ 24,321	\$ 16,036	\$ 75,332	\$ (10,587)

Operating Activities. Cash provided by operating activities was \$92.5 million for the year ended December 31, 2019 compared to \$80.4 million for the same period in 2018, an increase of \$12.1 million. This increase was primarily due to increased net income of \$4.5 million, after adding back the 2018 impairment, increases in stock-based compensation of \$4.1 million and a net increase in cash from operating assets and liabilities of \$3.8 million. Cash used in operating activities was \$6.4 million for the three months ended March 31, 2020 compared to cash provided by operating activities of \$9.9 million for the same period in 2019, a decrease of \$16.3 million. This change was primarily due to a net reduction in cash from operating assets and liabilities of \$16.0 million. This reduction was primarily due to decreases in accrued and deferred compensation of \$4.8 million, a reduction in deferred revenue of \$7.6 million and a reduction in accounts receivable of \$2.3 million. Accrued and deferred compensation decreased by \$4.8 million due to payments for variable compensation for the three months ended March 31, 2020, increasing over the prior year comparable quarter by \$2.7 million due to increases in headcount, and due to payments of \$2.8 million for stock appreciation right redemptions in the first quarter of 2020 as compared to the same quarter of 2019. Deferred revenue decreased \$7.6 million due to a \$4.8 million decrease in non-recurring extended product support fees billed in the first quarter 2019 related to software subscription solutions retired during 2019. The balance of the deferred revenue reduction of \$2.8 million, and the reduction in accounts receivable of \$2.3 million are due primarily to modifications to billing frequencies requested by customers, primarily to align all the annual subscription billings for their subscription licenses to the same period. This results in a short-term reduction in deferred revenue, but no impact to revenue.

Investing Activities. Cash used in investing activities was \$37.6 million for the year ended December 31, 2019 compared to \$33.3 million for the same period in 2018, an increase of \$4.3 million. This increase is due to investments focused on productivity enhancement associated with process automation and implementation of new tools. Cash used in investing activities was \$21.7 million for the

three months ended March 31, 2020 compared to \$8.1 million for the same period in 2019, an increase of \$13.5 million. This increase was primarily related to the acquisition of a controlling interest in Systax Sistema Fiscais LTD ("Systax"), a Brazilian transaction tax software and content subscription provider, for cash paid of \$12.3 million during the quarter. For additional information on investing activities, see "Note 2 to Consolidated Financial Statements—Acquisition (unaudited)."

Financing Activities. Cash used in financing activities was \$30.6 million for the year ended December 31, 2019 compared to \$30.7 million for the same period in 2018, a decrease of \$0.1 million. This decrease was primarily due to an increase in principal repayments of bank debt of \$2.3 million, offset by an increase in cash collected with respect to customer funds obligations of \$2.6 million. Cash provided by financing activities was \$103.7 million for the three months ended March 31, 2020 compared to \$12.4 million used for the same period in 2019, a change of \$116.1 million. This change was due primarily to borrowings under the term loan of \$175.0 million in connection with the New Credit Agreement entered into on March 31, 2020. The proceeds of the term loan were used to repay amounts outstanding under the Company's previous credit agreement of \$61.7 million and pay related financing fees of \$2.9 million, with the balance being used to fund a portion of a \$123.0 million dividend to our stockholders on May 29, 2020.

Debt. As of December 31, 2019, we had a credit agreement consisting of a \$65.0 million term loan, with \$50.4 million outstanding, and a \$40.0 million line of credit. Interest on outstanding borrowings accrued at a Base Rate plus an applicable margin (4.75% as of December 31, 2019) or London Interbank Offered Rate ("LIBOR") plus an applicable margin (2.69% as of December 31, 2019). On March 31, 2020, we entered into the \$275.0 million New Credit Agreement consisting of a three-year \$175.0 million term loan and a \$100.0 million line of credit with a term of five years. Proceeds from the term loan were used to repay amounts outstanding under the Company's previous credit agreement of \$61.7 million and pay related financing fees of \$2.9 million, with the balance being used to fund a portion of a \$123.0 million dividend to our stockholders on May 29, 2020. The term loan is required to be repaid with proceeds from this offering. Absent the occurrence of this offering, the term loan requires quarterly principal payments of \$4.4 million beginning October 2020 with a balloon payment in March 2023. There were no amounts borrowed under the line of credit through May 31, 2020. As of May 31, 2020, the interest rate on the term loan was 2.50%.

Funds Held for Customers and Customer Funds Obligations

We maintain trust accounts with financial institutions, which allows our customers to outsource their tax remittance functions to us. We have legal ownership over the accounts utilized for this purpose. Funds held for customers represents cash and cash equivalents that, based upon our intent, are restricted solely for satisfying the obligations to remit funds relating to our tax remittance services. Funds held for customers are not commingled with our operating funds.

Customer funds obligations represent our contractual obligations to remit collected funds to satisfy customer tax payments. Customer funds obligations are reported as a current liability on our consolidated balance sheets as the obligations are expected to be settled within one year. Cash flows related to changes in customer funds obligations liability are presented as cash flows from financing activities.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements, as defined by applicable regulations of the SEC, that are reasonably likely to have a current or future material effect on our financial condition, results of operations, liquidity, capital expenditures or capital resources.

Contractual Obligations and Commitments

Our contractual obligations and commitments as of December 31, 2019 are summarized in the table below:

(in thousands)	Payments Due by Year				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Long-term debt	\$ 50,375	\$ 50,375	\$ —	\$ —	\$ —
Capital leases	1,332	650	682	—	—
Operating leases	35,914	4,534	8,430	8,002	14,947
Purchase obligations	7,694	4,859	2,835	—	—
Total contractual cash obligations	<u>\$ 95,315</u>	<u>\$ 60,418</u>	<u>\$ 11,947</u>	<u>\$ 8,002</u>	<u>\$ 14,947</u>

Quantitative and Qualitative Disclosures about Market Risk**Interest Rate Risk**

We had cash and cash equivalents of \$55.8 million and \$75.9 million as of December 31, 2018 and 2019, respectively, and \$40.4 million as of March 31, 2020. We maintain our cash and cash equivalents in deposit accounts and money market funds with financial institutions. Due to the short-term nature of these instruments, we believe that we do not have any material exposure to changes in the fair value of our investment portfolio as a result of changes in interest rates. Declines in interest rates, however, would reduce future interest income.

We are exposed to risk related to changes in interest rates. Borrowings under the New Credit Agreement bear interest at rates that are variable. Increases in the bank prime or LIBOR rates would increase the interest rate on these borrowings.

On March 31, 2020, we entered into the \$275.0 million New Credit Agreement consisting of a three-year \$175.0 million term loan and a \$100.0 million line of credit with a term of five years. A portion of the proceeds from the term loan were used to repay amounts outstanding under the Company's previous credit agreement of \$61.7 million. There were no amounts borrowed under the line of credit through May 31, 2020. Each change of one percentage point in interest rates would result in an approximate \$1.75 million increase in our annual interest expense. Any debt we incur in the future may also bear interest at variable rates.

Foreign Currency Exchange Risk

Our revenue and expenses are primarily denominated in U.S. dollars. For our foreign operations, the majority of our revenues and expenses are denominated in other currencies, such as the Canadian Dollar, Euro, British Pound, Swedish Krona and Brazilian Real. Decreases in the relative value of the U.S. dollar as compared to these currencies may negatively affect our revenue and other operating results as expressed in U.S. dollars. For the years ended December 31, 2018 and 2019 and the three months ended March 31, 2019 and 2020, approximately 1% of our revenues were generated in currencies other than U.S. dollars in each respective period.

We have experienced and will continue to experience fluctuations in our net income (loss) as a result of transaction gains or losses related to revaluing certain current asset and current liability balances that are denominated in currencies other than the functional currency of the entities in which they are recorded. We have historically recognized immaterial amounts of foreign currency gains and losses in each of the periods presented. We may in the future hedge selected significant transactions denominated in currencies other than the U.S. dollar as we expand our international operation and our risk grows. The acquisition of the controlling interest in Systax in January 2020 and the future purchase

commitments associated with this acquisition are expected to increase our exposure to fluctuations of the Brazilian Real over time.

Inflation

In the past two years, we do not believe that inflation had a material effect on our business, financial condition or results of operations. If our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, financial condition and results of operations.

Internal Control Over Financial Reporting

In connection with the audit of our consolidated financial statements, we identified three material weaknesses in our internal control over financial reporting during the two-year period ended December 31, 2019. These material weaknesses were due to (i) the lack of an effective review control over the completeness and accuracy of significant conclusions regarding the impact of the new revenue recognition guidance prescribed by ASC 606, (ii) incorrect applications of software capitalization models and untimely identification of impairments of capitalized software development costs and (iii) an insufficient process for the provision and governance of user access to financially significant systems that resulted in a lack of segregation of duties related to journal entries and cash disbursements. The material weaknesses resulted in several control deficiencies that could have the following effects:

- the impact of new or revised accounting guidance on the Company's financial statements may not be identified and accurately reflected in the Company's financial statements;
- errors in the amount of software development costs capitalized and impairment assessments that are either not captured in a timely manner or not appropriate based on whether such costs are internal-use software versus software to be sold, leased or marketed; and
- an increased risk that unauthorized transactions will not be prevented and/or detected and corrected in a timely manner.

The material weaknesses relating to revenue recognition and capitalized software development costs resulted in errors that were not identified timely in conjunction with the issuance of our financial statements as of and for the years ended December 31, 2018 and 2019. These errors led to adjustments reflected in the 2019 and 2018 audited consolidated financial statements contained herein. We evaluated these errors under both quantitative and qualitative standards. No errors were identified with respect to the lack of segregation of user access to financially significant systems.

A material weakness is a control deficiency, or combination of control deficiencies, that results in more than a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis by a company's internal controls.

Beginning in February 2020, we started specific efforts to remediate the material weaknesses described above, including the following:

- implemented additional and more precise review controls over revenue recognition, particularly considering the complex nature of this accounting pronouncement;
- instituted additional and more precise review controls over implementation of new accounting pronouncements, particularly where management seeks input from outside consultants with respect to implementation of those accounting pronouncements that are complex;
- instituted a control in which senior members of our finance, accounting, technology and product teams meet quarterly and review all new software projects, existing software assets that have

changes in projected use and/or pipeline, and business and market conditions that could impact classification or impairment of capitalized software development costs; and

- evaluated changes needed over our user access governance practices to prevent individuals from having the ability to create and post journal entry or create a vendor and prepare checks, with a plan to implement these changes by the end of the second quarter of 2020.

We continue to implement new technology systems to automate certain processes, particularly with respect to revenue recognition. We expect these efforts to continue throughout 2020 and, in the interim, we will continue to employ enhanced review controls. We also plan to increase the education and training available to our management regarding new and revised accounting standards to aid in our efforts to remediate the material weakness regarding our implementation of ASC 606 and future accounting pronouncements. Our executive team in charge of reviewing potential impairments of capitalized software development costs will continue to meet quarterly in 2020 and thereafter. Finally, we are in the process of performing an overall review of user access for our core financial systems, which we expect may result in further segregation of duties. We also plan to periodically update our review of user access going forward.

As we continue to implement these practices and prepare to meet the financial reporting requirements of a public company, we may make additional changes to our internal control over financial reporting. Additionally, in 2020, we expect to enhance our financial reporting risk assessment as part of evaluating our current control environment against a formal control framework consistent with applicable requirements for a public company.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements. The preparation of these financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements, as well as the reported amounts of revenue and expenses during the reporting periods. These estimates, assumptions and judgments are necessary because future events and their effects on our consolidated financial statements cannot be determined with certainty, and are made based on our historical experience and on other assumptions that we believe to be reasonable under the circumstances. These estimates may change as new events occur or additional information is obtained, and we may periodically be faced with uncertainties, the outcomes of which are not within our control and may not be known for a prolonged period of time. Because the use of estimates is inherent in the financial reporting process, actual results could materially differ from those estimates.

We believe the following critical accounting policies affect our most significant judgments and estimates used in preparation of our consolidated financial statements:

- Revenue recognition;
- Stock-based compensation;
- Common stock valuations;
- Software development costs; and
- Goodwill

Revenue Recognition

On January 1, 2018, we adopted ASC 606. Thus, the consolidated financial statements reflect ASC 606 for the years ended December 31, 2019 and 2018.

Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration expected to be received in exchange for those products or services. We enter into contracts that can include various combinations of products and services, which are generally capable of being distinct and accounted for as separate performance obligations. Revenue is recognized net of allowance for subscription and non-renewal cancellations and any taxes collected from customers, which are subsequently remitted to governmental authorities.

Licenses for on-premise software subscriptions provide the customer with a right to use the software as it exists when made available to the customer. Customers purchase a subscription to these licenses, which includes the related software and tax content updates and product support. The updates and support, which are part of the subscription agreement, are essential to the continued utility of the software. Therefore, we have determined the software and the related updates and support to be a single performance obligation. Accordingly, when on-premise software is licensed, the revenue associated with this combined performance obligation is recognized ratably over the license term as these subscription services are provided for the duration of the license term. Revenue recognition begins on the later of the beginning of the subscription period or the date the software is made available to the customer to download. Our on-premise software subscription prices in the initial subscription year are higher than standard renewal prices. The excess initial year price over the renewal price ("new sale premium") is considered to be a material right. We recognize revenue associated with the material right over the estimated period of benefit to the customer, generally three years.

Cloud-based subscriptions allow customers to use Company-hosted software over the contract period without taking possession of the software. The cloud-based offerings also include related updates and support. All services within the cloud-based contracts would consistently provide a benefit to the customer during the subscription period, thus the associated revenue is recognized ratably over the subscription period. Revenue recognition begins on the later of the beginning of the subscription period or the date the customer is provided access to the cloud-based services.

Revenue from deliverable-based services is recognized as services are delivered. Revenue from fixed fee services is recognized as services are performed using the percentage of completion input method.

We have elected the "right to invoice" practical expedient for revenue related to services that are billed on an hourly basis, which enables revenue to be recognized as the services are performed.

We have determined that the methods applied to measuring our progress toward complete satisfaction of performance obligations recognized over time are a faithful depiction of our transfer of control of software and services to customers.

Significant Judgments

Contracts with customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. Identification of the amortization periods of material rights and contract costs requires significant judgement by management.

Contract Balances

Timing of revenue recognition may differ from the timing of invoicing customers. A receivable, or contract asset, is recorded in the consolidated balance sheet when customers are billed related to revenue to be collected and recognized for subscription agreements as there is an unconditional right to invoice and receive payment in the future related to these subscriptions. A receivable and related revenue may also be recorded in advance of billings to the extent services have been performed and we

have a right under the contract to bill and collect for such performance. Subscription-based customers are generally invoiced at the beginning of each annual subscription period. A contract liability is recorded as deferred revenue on the consolidated balance sheet when subscription-based customers are billed in advance of performance obligations being satisfied, and revenue is recognized subsequent to invoicing ratably over the subscription period or over the amortization period of material rights.

Deferred sales commissions earned by our sales force and certain sales incentive programs and vendor referral agreements are considered incremental and recoverable costs of obtaining a contract with a customer. An asset is recognized for these incremental contract costs and reflected as deferred commissions in the consolidated balance sheet. These contract costs are amortized on a straight-line basis over a period consistent with the transfer of the associated product and services to the customer, which is generally three years. Amortization of these costs are included in selling and marketing expense in the consolidated statements of comprehensive income (loss). We periodically review these contract assets to determine whether events or changes in circumstances have occurred that could impact the period of benefit of these assets. There were no impairment losses recorded for the periods presented.

Payment Terms

Payment terms and conditions vary by contract, although our terms generally include a requirement of payment within 30 days. In instances where the timing of revenue recognition differs from the timing of payment, we have determined that our contracts do not include a significant financing component. The primary purpose of invoicing terms is to provide customers with simplified and predictable ways of purchasing products and services, not to receive financing from customers or to provide customers with financing.

Stock-Based Compensation

We apply the provisions of ASC 718, Compensation—Stock Compensation, for the award of equity-based instruments. The provisions of ASC 718 require a company to measure the fair value of stock-based compensation as of the grant date of the award. We have stock options and stock appreciation rights ("SAR(s)") (collectively, the "awards") outstanding that are subject to guidance set forth in ASC 718. Our board of directors intends all awards granted to be exercisable at a price per share not less than the per share fair value of the Company's common stock underlying such awards on the date of grant. Stock-based compensation expense reflects the cost of employee services received in exchange for the awards.

SARs are accounted for as liabilities under ASC 718 and, as such, we recognize stock-based compensation expense by remeasuring the SARs at the end of each reporting period and accruing the portion of the requisite service rendered at that date. As a nonpublic entity, we have elected to measure SARs based on their intrinsic values. Management measures the intrinsic value of a SAR as the difference between the fair value of the Company's non-voting common stock less the grant date fair value of the underlying shares as this is the value the SAR participant can derive from exercise of the SAR award. The fair value of the Company's common stock is determined periodically by the board of directors with the assistance of management and a third-party valuation firm. Management plans to continue to record changes in the intrinsic value of the SARs in 2020 up to the date on which the Company becomes a public entity. Upon becoming a public entity and thereafter, we will remeasure SARs using the fair value-based method under ASC 718. Any impact from such change in measurement on the date on which we become a public entity will be accounted for as a change in accounting policy in that period. To the extent that the fair value-based measure of the SARs differs materially from the intrinsic value of the SARs, this effect could be material. As the fair value-based measure of the SARs is not determinable at this time, such amount cannot be reasonably estimated

with any degree of certainty. Outstanding SARs are included in deferred compensation, current and deferred compensation, net of current portion in the consolidated balance sheets.

Due to the option holders having the right to require us to repurchase shares issued in connection with option exercises after six months of issuance, the options are classified as temporary equity and reflected in options for redeemable shares on the consolidated balance sheets at their redemption value as of the end of each balance sheet measurement period. Changes as a result of remeasurement of the redemption value of options for redeemable shares are recorded as adjustments to accumulated deficit.

As of December 31, 2019, we had approximately \$3.9 million of total unrecognized stock-based compensation expense, which we expect to recognize over a period of approximately three to five years. As of March 31, 2020, we had approximately \$16.8 million of total unrecognized stock-based compensation.

Based upon the initial public offering price of \$ per share, the aggregate intrinsic value of stock-based awards outstanding as of March 31, 2020 was approximately \$ million, of which approximately \$ million related to vested awards and approximately \$ million related to unvested awards.

Common Stock Valuations

Following the closing of this initial public offering, the fair value per share of our common stock for purposes of determining stock-based compensation will be the closing price of our common stock as reported on the applicable grant date.

The fair value of the common stock underlying the awards is determined by the board of directors with assistance from management and an independent third-party valuation firm. The determination of value uses the market and income approaches, with an adjustment for marketability discount in arriving at the per share fair value (the "valuation methodology"). Under the market approach, the guideline public company method is used, which estimates the fair value of our Company based on market prices of stock of guideline public companies. The income approach involves projecting the future benefits of owning an asset and estimating the present value of those future benefits by discounting them based upon the time value of money and the investment risks associated with ownership.

At the end of 2019, due to the consideration by our board of directors of pursuing an initial public offering of the Company's common stock during 2020, the valuation methodology began to consider the impact of such an event on the value of the Company's common stock underlying the awards. As we approach the offering, we expect this will result in an increase in the intrinsic value of the awards that will correspondingly result in increases to compensation expense in the consolidated comprehensive statements of income during 2020 that exceed historical results.

Software Development Costs

Internal-Use Software

We follow ASC 350-40, *Goodwill and Other, Internal-Use Software*, to account for development costs incurred for the costs of computer software developed or obtained for internal use. ASC 350-40 requires such costs to be capitalized once certain criteria are met. Capitalized internal-use software costs are primarily comprised of direct labor, related expenses and initial software licenses. ASC 350-40 includes specific guidance on costs not to be capitalized, such as overhead, general and administrative and training costs. Internal-use software includes software utilized for cloud-based services as well as software for internal systems and tools. Costs are capitalized once the project is defined, funding is committed and it is confirmed the software will be used for its intended purpose. Capitalization of these costs concludes once the project is substantially complete and the software is ready for its intended purpose. Post-configuration training and maintenance costs are expensed as incurred.

Internal-use software available for its intended use is included in internal-use software developed in property and equipment in the consolidated balance sheets and is depreciated over periods between three to five years. Depreciation expense for internal-use software utilized for cloud-based services and for software for internal systems and tools is included in cost of software subscription revenues, and depreciation expense, respectively, in the consolidated statements of comprehensive income (loss).

We review the carrying value of internal-use software, for impairment whenever events or changes in circumstances indicate that the carrying amount of such software may not be fully recoverable. Whenever such events or circumstances are present, an impairment loss equal to the excess of the asset carrying value over its fair value, if any, is recorded.

Software Developed for Sale

The costs incurred for the development of computer software to be sold, leased or otherwise marketed are capitalized in accordance with ASC 985-20, *Costs of Software to be Sold, Leased or Marketed*, when technological feasibility has been established. Technological feasibility generally occurs after completion of all planning, design, coding and testing activities that are necessary to establish that the product can be produced to meet its design specifications, including functions, features and technical performance requirements. The establishment of technological feasibility is an ongoing assessment of judgment by management with respect to certain external factors, including, but not limited to, anticipated future revenues, estimated economic life and changes in technology. Capitalized software includes direct labor and related expenses for software development for new products and enhancements to existing products and acquired software.

Amortization of capitalized software development costs begins when the product is available for general release. Amortization is provided on a product-by-product basis using the straight-line method over periods between three to five years. Unamortized capitalized software development costs determined to be in excess of the net realizable value of the product are expensed immediately.

Capitalized software costs are subject to an ongoing assessment of recoverability based on anticipated future revenues and changes in software technologies. At each balance sheet date, unamortized capitalized software costs are compared to the net realizable value of the related product. The carrying value of the related assets are written down to the net realizable value to the extent the unamortized capitalized costs exceed such value. The net realizable value is the estimated future gross revenues from the related product reduced by the estimated future costs of completing and disposing of such product, including the costs of providing related maintenance and customer support.

Goodwill

Goodwill represents the excess of the purchase price over the fair value of net tangible and intangible assets acquired in a business combination. We evaluate goodwill for impairment annually at December 31 and whenever events or circumstances make it more likely than not that impairment may have occurred. We have determined that our business comprises one reporting unit. We have the option to first assess qualitative factors to determine whether events or circumstances indicate it is more likely than not that the fair value of a reporting unit is greater than its carrying amount, in which case a quantitative impairment test is not required.

The quantitative goodwill impairment test is performed by comparing the fair value of the reporting unit with its carrying amount, including goodwill. If the fair value of the reporting unit exceeds its carrying amount, goodwill is not impaired. An impairment loss is recognized for any excess of the carrying amount of the reporting unit's goodwill over the fair value up to the amount of goodwill allocated to the reporting unit. Income tax effects from any tax-deductible goodwill on the carrying amount of the reporting unit are considered when measuring the goodwill impairment loss, if applicable.

Recent Accounting Pronouncements

A discussion of recent accounting pronouncements is included in note 1 to our audited consolidated financial statements included elsewhere in this prospectus.

JOBS Act

As a company with less than \$1.07 billion in revenue during our last fiscal year, we qualify as an "emerging growth company," as defined in the JOBS Act. An emerging growth company may take advantage of reduced reporting requirements that are otherwise applicable to public companies. These provisions include:

- being permitted to present only two years of audited financial statements and only two years of related Management's Discussion and Analysis of Financial Condition and Results of Operations in this prospectus;
- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act;
- reduced disclosure obligations regarding executive compensation in this prospectus and in our periodic reports, proxy statements and registration statements; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We may take advantage of these provisions until the last day of our fiscal year following the fifth anniversary of the completion of this offering. However, if certain events occur prior to the end of such five-year period, including if we become a "large accelerated filer," our annual gross revenue exceeds \$1.07 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period.

We have elected to take advantage of certain of the reduced disclosure obligations in this registration statement and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our stockholders may be different from what you might receive from other public reporting companies in which you hold equity interests.

In addition, under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies.

BUSINESS

Overview

Our vision is to accelerate global commerce, one transaction at a time.

Vertex delivers comprehensive tax solutions that enable global businesses to transact, comply and grow with confidence. Companies with complex tax operations rely on Vertex to automate their end-to-end indirect tax processes. Indirect tax is the largest corporate tax category, encompassing sales tax, seller's use tax, consumer use tax and VAT, among others. Indirect tax accounts for more than \$3.5 trillion of annual tax revenue, which is 2.5 times the amount of corporate income taxes, according to the 2019 OECD Tax Database. Our software, content and services address the increasing complexities of global commerce and compliance by reducing friction, enhancing transparency and enabling greater confidence in meeting indirect tax obligations. As a result, our software is ubiquitous within our customers' business systems, touching nearly every line item of every transaction that an enterprise can conduct. Today, we have more than 4,000 customers, including over half of the Fortune 500, and provide our customers with tax support in over 130 countries.

Tax complexity is driven by the number of jurisdictions, products, distribution channels and systems of record within an organization. Each transaction must be tax-assessed for compliance purposes in real time and indirect taxes generally require filing each month, in every jurisdiction in which a company does business. Despite these complexities, there are still businesses that attempt to manage the tax lifecycle through a patchwork of static tax rate tables in spreadsheets, home-built systems or business applications, such as ERP software, that were not designed for complex tax management. Each of these approaches relies heavily on finance personnel or outside professional services.

The rapid changes taking place in today's global business, technology and regulatory environments are having a compounding effect on the complexity of indirect tax management. As companies expand their business models, enter new geographies and extend their distribution channels, they widen the aperture of their indirect tax obligations. Additionally, as they expand their core offerings to incorporate new digital products and services, they are increasingly impacted by new tax regulations being pursued by jurisdictions. For example, in the United States, nearly 40 states have now enacted marketplace facilitator regulations, requiring online marketplaces to collect and remit taxes for first- and third-party sales on their websites. This complexity demands intelligent solutions that enable businesses to satisfy tax obligations and support growth opportunities.

We have pioneered tax technology for over 40 years. We first began electronic delivery of tax rules in the early 1980s and we first sold transaction tax processing software in 1982. Today, our software enables tax determination, compliance and reporting, tax data management and document management with powerful pre-built integrations to core business applications used by most companies, particularly those applications that have a significant impact on global commerce. Our software is fueled by over 300 million data-driven effective tax rules and supports indirect tax compliance in more than 19,000 jurisdictions worldwide. In order to maintain the quality of our content, our team includes many global tax and regulatory experts from industry and the public sector, who deliver monthly updates to our tax content, which are then incorporated directly into our software. Our solutions can be deployed on-premise, in the cloud, or both, with implementation services available to enable optimal customer outcomes and satisfy unique business requirements.

Our customers include the majority of the Fortune 500, as well as a majority of the top 10 companies by revenue in multiple industries such as retail, technology and manufacturing, in addition to leading marketplaces. As these companies expand geographically and pursue omnichannel business models, their tax determination and compliance requirements increase and become more complex. Our trusted brand and strong relationships with our customers enable us to capitalize on these sustainable organic growth opportunities.

Our partner ecosystem is a differentiating, competitive strength in both our software development and our sales and marketing activities. We integrate with key technology partners that span ERP, CRM, procurement, billing, POS and eCommerce. These partners include Adobe/Magento, Coupa, Microsoft Dynamics, NetSuite, Oracle, Salesforce, SAP, SAP Ariba, Workday and Zuora. We also collaborate with numerous accounting firms who have built implementation practices around our software to serve their customer base.

We believe that global commerce and compliance environment provides durable and accelerating growth opportunities for our business. We generated revenue of \$272.4 million and \$321.5 million in 2018 and 2019, respectively, and \$74.6 million and \$89.2 million for the three months ended March 31, 2019 and 2020, respectively. We had a net loss of \$6.1 million and net income of \$31.1 million in 2018 and 2019, respectively, and net income of \$7.3 million and a net loss of \$29.1 million for the three months ended March 31, 2019 and 2020, respectively. Adjusted EBITDA was \$61.5 million and \$67.9 million in 2018 and 2019, respectively, and \$15.6 million and \$15.3 million for the three months ended March 31, 2019 and 2020, respectively. Additionally, we generated net cash provided by operating activities of \$80.4 million and \$92.5 million in 2018 and 2019, respectively, and \$9.9 million and \$(6.4) million in the three months ended March 31, 2019 and 2020, respectively. Our free cash flow was \$47.1 million and \$54.9 million in 2018 and 2019, respectively, and \$1.8 million and \$(15.8) million in the three months ended March 31, 2019 and 2020, respectively. Adjusted EBITDA and free cash flow are non-GAAP financial measures. For more information about how we use these non-GAAP financial measures in our business, the limitations of these measures and reconciliations to the most directly comparable GAAP measures, see "Prospectus Summary—Summary Consolidated Financial and Operating Information." In connection with the offering, we will convert from an S Corporation to a C Corporation, which will result in net income of the Company being taxed at the corporate level. For additional information on the effect of such conversion, see "Prospectus Summary—Summary Consolidated Financial and Operating Information."

Industry Background

Indirect taxes are significant and growing revenue streams for governments around the world

Indirect taxes are part of everyday commerce in many countries—they are levied on items such as food, clothing, business supplies and even data transmissions from mobile phones. According to the 2019 OECD Tax Database, more than \$3.5 trillion of indirect taxes were collected by national, state and local governments around the world in 2018, which is 2.5 times the amount of corporate income taxes collected. Indirect taxes on goods and services represented more than 10% of GDP for OECD countries in 2018 and governments continuously seek new ways to increase this revenue stream. In the United States, sales and use taxes are the largest component of indirect taxes. According to OECD Revenue Statistics, the United States collected more than \$800.0 billion in tax revenue from goods and services taxes in 2018.

Tax reporting and compliance pose tenacious challenges for all businesses

In today's global economy, indirect taxation is highly nuanced and growing in its complexity for most businesses. In order to calculate taxes accurately, enterprises must identify every jurisdiction in which they operate, determine and maintain the applicable rates for each of those jurisdictions and map the applicable taxability to the products and services they deliver. Cross-border transactions increase the complexity of taxes. Understanding the variables surrounding transactions and how they change applicable taxes becomes difficult for tax departments to manage given the volume of purchasing, sourcing and sales activities conducted by large enterprises.

Indirect tax returns generally need to be filed on a monthly basis and noncompliance exposes companies to significant monetary liability, poor customer experiences and reputational risk. Tax audits can look back many years, creating a greater level of accountability for managing tax data than for

typical business data. Additionally, it is not unusual for a large enterprise to have a substantial number of tax audits across numerous jurisdictions ongoing at any point in time. Each audit may require detailed traceability to individual transactions to defend historical tax positions taken.

Dynamic business, regulatory and technology drivers have a compounding effect on tax compliance

We believe that trends in the digital economy are accelerating the need for adoption of sophisticated tax solutions among a broader and growing number of enterprises and global commerce platforms.

- *Governments are increasingly adopting new and expanded indirect tax measures.* More governments are adopting indirect tax as an effective means to build and maintain their revenue base. For example, some of the countries that recently enacted new or expanded indirect tax legislation include China, India, Saudi Arabia and the United Arab Emirates.
- *Governments are mandating more frequent and more detailed tax reporting, using advanced technologies to scrutinize business tax filings.* Jurisdictions are also increasing the requirements and frequency of tax compliance. Many countries outside of the United States are now requiring detailed information and real-time or near-real time reporting from business taxpayers. For example, companies invoicing more than €6.0 million annually in Spain must submit invoice and other related data every four days, which must also be reconciled to their month-end filing.
- *Businesses' geographic and channel expansion are creating new tax exposures.* An increasing number of enterprises are selling globally and online to expand their business, and as a result are facing new tax compliance and reporting requirements. For many manufacturers and distributors, there are new complexities regarding what may trigger sales tax responsibility and which transactions are taxable or tax-exempt.
- *Governments are enacting new taxation on digital goods and services.* Many countries have already unilaterally proposed new taxation of digital services such as digital advertising, streaming video and online delivery services to increase revenues from the global digital economy. The European Union, United Kingdom, Australia, Austria, France, Italy, Spain and New Zealand have all proposed or enacted some type of digital taxation, accelerating the need for businesses and marketplace providers to extend their indirect tax processes.
- *B2B and B2C marketplaces are increasingly responsible for collecting and remitting taxes for their third-party sellers.* In the United States, nearly 40 states have now enacted marketplace facilitator regulations. These regulations may require companies such as Amazon, eBay and Walmart to collect and remit sales tax for first-and third-party sales on their websites, regardless of where those goods or services are consumed.
- *The expanded number of business applications being used by enterprises has increased the number of data sources necessary for indirect tax compliance.* A proliferation of best-of-breed enterprise software applications in segments such as procurement, billing, shipping and eCommerce has resulted in companies facing more applications handling data that impacts the sale and purchase of taxable goods and services. As a result, tax departments must collect tax-related data from numerous, disparate systems.

Legacy approaches are insufficient

Over the past several decades, many tax departments have addressed their indirect tax needs by relying on a patchwork of static tax rate tables in spreadsheets, home-built systems or business applications not designed for tax compliance. Each requires heavy reliance on finance personnel or outside professional services. As taxation becomes more complicated, we believe these approaches will begin to fracture as they are error-prone, inefficient and cannot scale, thus increasing exposure to fines, raising reserves and heightening the risk of tax audits across multiple jurisdictions.

Our Opportunity

We believe the total addressable market for solutions that enable global commerce and compliance is robust, global and growing. We estimate our addressable market among global enterprises and other businesses with greater than \$1.0 million in annual sales to be over \$7.0 billion in the United States. We believe this potentially understates our total addressable market because it does not include businesses domiciled outside of the United States.

We calculate our addressable market size by segmenting all companies domiciled in the United States across all industries by annual U.S. sales revenues. For each of the companies with greater than \$1.0 million in annual sales, we then apply an estimate of total potential annual spend per company for indirect tax technologies, including tax determination, compliance, tax data management and document management, based on our average selling price estimates.

Key Benefits of Our Solutions

We deliver comprehensive tax solutions that automate end-to-end indirect tax processes for enterprises and mid-market companies with complex tax operations. Our software includes tax determination, compliance and reporting, tax data management and document management fueled by our powerful and proprietary content database, which includes over 300 million data-driven effective tax rules supporting indirect tax compliance in more than 19,000 jurisdictions worldwide. Our solutions also include powerful pre-built integrations to core business applications, such as SAP and Oracle.

Our solutions deliver the following key benefits to our customers:

Comprehensive, efficient and accurate indirect tax management. Our solutions provide our customers with powerful tools to manage their end-to-end indirect tax obligations across determination, documentation, reporting and remittance. Our solutions move customers away from manual and inconsistent processes, spreadsheets and home-built solutions and enable them to manage their indirect tax obligations accurately and efficiently, while reducing risk with richer documentation and support for ongoing compliance and reporting requirements.

Reduction in tax audit risk and tax audit-induced costs. We believe that customers implement our solutions to increase accuracy and transparency in supporting the tax audit process, and to lower their overall costs of tax audit defense. This is driven by rich documentation and data support during tax audit discovery, which can mitigate tax audit-related adjustments and fines. The accuracy and ease of using our software also allows finance and tax teams to redistribute their time and effort towards higher return on investment initiatives such as strategic planning and tax audit defense, creating meaningful expansion in productivity.

Wide jurisdiction coverage to support geographic expansion. Economic nexus for indirect taxes is often based on the geographic location of either operations or sales. We maintain expansive coverage of jurisdictions and continually update our global content database, allowing our customers to expand their operations around the world while maintaining compliance with the relevant indirect tax laws of each jurisdiction.

Support of new business models. As digital transformation continues to change our economy, many enterprises are adopting new business models and incorporating new technology in their products and operations to fuel growth, including diversified supply chains and omnichannel retail strategies. Many of these digital transformations result in new, complex indirect tax challenges. For example, data transmissions from internet-connected devices are subject to telecom taxes, which are often new and unfamiliar obligations to traditional manufacturers and retailers.

Our Competitive Strengths

We have pioneered tax technology for over 40 years. We deliver comprehensive tax solutions that enable global businesses to transact, comply and grow with confidence. Companies with complex tax operations rely on us to automate their end-to-end indirect tax processes. Our key competitive strengths include:

We provide a differentiated portfolio of end-to-end solutions for indirect tax globally. Through the combination of data, analytics and expertise, our solutions automate the end-to-end indirect tax processes for enterprises with complex tax operations and audit risk. Our software includes tax determination, compliance and reporting, tax data management and document management tools, as well as pre-built integrations to the software applications and systems that are used by our customers, such as SAP, Oracle and Adobe/Magento, to perform real-time indirect tax determinations across a variety of different industries, including retail, leasing, communication and manufacturing. In addition to our powerful calculation engine, our software supports exemption automation for customers, and our data management capabilities provide a solution for the data validation, analysis and transformation steps that are required to properly support indirect tax compliance. We can also support tax remittance for our customers and currently process nearly \$6.0 billion of tax payments on behalf of our customers annually.

Our software is underpinned by a comprehensive proprietary tax content database. Our proprietary tax content database is significant and includes educational content, best practices guidance and over 300 million data-driven effective tax rules supporting indirect tax compliance in more than 19,000 jurisdictions worldwide, which are then embedded into our software. Our tax content provides meaningful insights and guidance to enterprises looking to address their tax exposure, and we provide solutions by embedding these tax rules into our software. We employ over 70 tax professionals on our tax content team, which is comprised of subject matter experts with significant experience and includes CPAs, attorneys and chartered accountants, among others. Our content team combines legislative research, analysis, technical logic and automation to embed updated rules into our software. We believe that the knowledge, depth and breadth of our content database is a differentiated asset that gives us a competitive advantage.

Our strong brand makes us a recognized and trusted provider in tax software. We pioneered the first indirect tax software over 40 years ago and since then have built innovative tax software, a marquee customer base and a trusted brand. We continue to adapt to meet our customers' needs—from mainframe-based software to cloud and mobile technologies. This has helped us create a long-standing customer base of over 4,000 customers, including some of the most complex and discerning multinational enterprises around the globe. Our history and experience with complex tax challenges are difficult to replicate.

Our culture of innovation, the name-brand recognition of our customer base and the mission-critical nature of our software for tax departments provide leverage to our sales and marketing teams and enable us to successfully attract new customers. Our brand and solutions are trusted by customers, as well as the tax audit and advisory community and regulators. Our history and expertise are also critical to our deep partnerships with numerous marketplaces, ERP, CRM and POS providers and have made us a sought-after thought leader in the industry.

Powerful, robust technology with enterprise-grade scale and speed. Our solutions are built upon a technology foundation purpose-built to meet the needs of highly discerning enterprises with complex indirect tax obligations. For example, our software is used by some of the largest companies in the world to automate indirect tax calculation in hundreds of locations, among thousands of suppliers and millions of customers, across tens of thousands of jurisdictions, and through multiple systems of record. By utilizing a common engine and data design, we offer consistency regardless of the technical infrastructure of our customers and partners. Our technology architecture and engineering expertise

allow us to continue providing solutions with the enterprise scale and speed our customers expect, realizing rapid-time-to-value from our software and monthly content updates.

Flexible delivery and configuration to meet the needs of our customers. Our customers need software that allows them to automate tax but also allows for tax configurability that accommodates their specific company needs. Our configurability allows users to create their own taxability rules that can act as an override, providing more flexibility and ensuring that all individual, company-specific tax scenarios can be met. We also offer a flexible delivery model that includes on-premise, cloud or a hybrid of both delivery models, giving our customers the ability to choose how to manage their tax determination and system deployments.

Deep and high-quality partnerships and integrations. Our partner ecosystem is a distinct strength to support both software development and our sales and marketing activities. We integrate with key technology partners that span ERP, CRM, procurement, billing, POS and eCommerce platforms. The majority of our integrations are designed, tested and supported by us; however, we also support partner-developed integrations as part of a rigorous certification program. Our teams are embedded at a deep technical level and we conduct joint roadmap development with our partners. In addition, we collaborate with over 50 tax, accounting and consulting firms, which not only complement our global tax and technology expertise, but also help us identify new growth opportunities. Many of these firms have built significant practices around our solutions, which greatly extends our reach.

Our Growth Strategies

We believe today's global commerce environment provides durable growth opportunities for our business. Our growth strategies include:

- **Expand existing customer revenues.** The breadth of our solutions allows us to continually meet our customer needs, even as their needs expand in scope. For example, customers initially investing in sales tax determination may need support for other tax types, jurisdictions and capabilities to manage their indirect tax lifecycle over time. As businesses continue to evolve through acquisitions and expand products and services, enter new geographies or expand their distribution channels, we believe they will need our software, services and content. We plan to continue to invest in new offerings and enhance our solutions to support the ongoing retention and expansion of revenue from our existing customers. Our flexible, tiered transaction-based pricing model also results in our customers growing their spend with us as they grow and continue to use our solutions.
- **Acquire new customers.** Our solutions address the complexity of aligning commerce and compliance and we believe the market for our software and solutions is large and underpenetrated, both in the United States and globally. As enterprise and mid-market companies continue to expand and their tax complexity grows, we expect demand for our solutions to increase among new customers and partners. We also expect these companies to adopt our solutions much earlier in their corporate lifecycle. This adoption is driven by advances in cloud computing and digital commerce, which enable more companies to accelerate new product delivery and scale their business through online marketplaces and emerging commerce platforms. These increases in business complexity necessitate advanced tax solutions for a broader number of companies. We plan to continue to invest in our sales and marketing teams in order to capture this demand increase and acquire new customers.
- **Broaden and deepen our partner ecosystem.** We integrate with key technology partners that span ERP, CRM, procurement, billing, POS and eCommerce platforms. Our partners enhance our go-to-market capacity and extend our brand leadership and reach. We leverage our partnerships to maximize the benefits of our solutions for our customers and to identify new growth opportunities. We believe expanding our strategic alliances with emerging participants who are

fueling global commerce, such as payment and digital commerce platforms, will create new value for our customers and new sources of revenue. Future partnerships with large-scale digital payments players will allow us to develop additional customer-centric solutions and further expand our customer base.

- Extend global footprint.** We have a significant opportunity to further expand internationally, in terms of our regional operations, content depth and go-to-market coverage. We expect to continue to invest in our software and solutions outside of the United States, most notably in Latin America and Europe. These jurisdictions are among the most complex and the largest international markets for our customers, respectively. We have also made significant investments in our own operations in these regions. In Europe and Brazil, for example, we have tailored our go-to-market strategy and enhanced our country-specific content database and furthered our investment in our global compliance reporting solution. By extending our global footprint, we believe we will also expand account penetration of existing customers with operations around the globe.
- Sustained investment in new product innovation.** With the pace of change in commerce and compliance, we believe it is important to continue innovating and extending the functionality and breadth of our software and solutions. Our approach to innovation is driven by our relationships with our customers and partners, with whom we create new solutions, align product roadmaps and embed our software within their applications and platforms. For example, we worked with a large United States-based distributor of industrial supplies to develop cloud-based software for managing tax exemption certificates. This distributor now uses this technology to manage over 13,000 tax exemption certificates every month. We have also established an innovation lab where we design, test and incubate next-generation tax solutions and adjacent market opportunities like blockchain, payment platforms and machine learning technologies. Over time, we expect this will bring additional value to existing customers and help us acquire new customers.

Our Software and Solutions



Our solutions automate the end-to-end indirect tax processes for enterprises with complex tax operations and audit risk. Our software includes tax determination, compliance and reporting, tax data management and document management tools, as well as pre-built integrations to major business

applications. Customers can purchase these solutions individually or as part of a broader suite and can choose the delivery model that best aligns to their enterprise technology environments.

- **Tax Determination.** Our tax determination solutions enable real-time calculation of indirect taxes and applicable fees for sale and purchase transactions. This solution includes a powerful indirect tax calculation engine that applies rules-based logic from our proprietary content database to determine taxability, identify precise taxing jurisdictions, and consistently apply the appropriate amount of tax to each transaction in real-time. As businesses expand into more digital services, complexity increases as transaction location becomes dynamic. For example, our solutions support ride-sharing services by leveraging geolocation technology to determine tax jurisdictions for these transactions by processing latitude-longitude coordinates in real-time. Our solution supports determination for sales tax, consumer use and seller use tax, VAT, communications tax, leasing tax, payroll tax and lodging and occupancy tax.
- **Compliance and Reporting.** Our compliance and reporting solutions enable the automation of signature-ready returns and remittance of indirect tax to appropriate jurisdictions. These solutions leverage tax data files imported from Vertex or third-party applications to establish visible audit trails of tax determinations and user-made adjustments. Our solutions also include workflow management tools, such as calendar and document management, and role-based security and event logging, which supports our customers' internal control over financial reporting and compliance for the Sarbanes-Oxley Act. We support e-filing and print formats for returns, schedules, worksheets, tax reports and payment requests and also provide archiving and retrieval of all filings. We remitted approximately \$6.0 billion in tax payments on behalf of customers in 2019.
- **Tax Data Management.** Our tax data management tools enable enterprises to unify transaction data from multiple business applications and sources. These solutions enable tax teams to view detailed transaction-level tax data, identify anomalies or errors, and establish necessary rules to address gaps in data and audit logs for any adjustments or corrections that have been made.
- **Document Management.** Our document management solutions automate the validation of, storage of and tax audit support for sales tax exemptions and reseller certificates. Enterprises with large, complex tax operations may have tens of thousands of exemption certificates to manage every year.
- **Pre-Built Integrations.** Our solutions are supported by a suite of powerful, pre-built integrations that enable real-time coordination between our solutions and major business applications, such as Adobe/Magento, Coupa, Microsoft Dynamics, NetSuite, Oracle, Salesforce, SAP, SAP Ariba, Workday and Zuora, among many others. Much more than traditional application programming interfaces, our integrations include mapping data fields, business logic and configurations to improve the processing of transactions to and from our solutions. The majority of our integrations are designed, tested and supported by us. However, we also support partner-developed integrations as part of a rigorous certification program.
- **Industry-Specific Solutions.** We also offer a range of solutions that support certain industry verticals that have specific indirect tax needs, such as retail, communications and leasing. For example, our retail solution supports omnichannel transactions spanning store kiosks, eCommerce websites, catalog sales and mobile device transactions. Our communications solution supports the determination of taxes, surcharges and fees affecting United States providers of communication services, including wireless, voice-over-IP, satellite, internet, video and audio streaming services. We have pre-built integrations specific to the leading providers of business applications used by these verticals.
- **Services.** Due to the ubiquitous nature of our software in our customers' technology environments, we also offer implementation services to enable our customers to realize the full

benefit of our solution at initial deployment. These software implementation services include configuration, data migration and implementation, and premium support and training. Customers can also purchase indirect tax returns outsourcing as a managed service for compliance in the United States and Canada. These managed services include indirect tax return preparation, filing and tax payment and notice management.

Our Tax Content

All of our software and solutions are underpinned by our proprietary content database, which currently supports over 300 million effective tax rules. We employ over 70 tax-content professionals residing in the United States, United Kingdom, Amsterdam, Brazil and Belgium who continually update and maintain this extensive database of content. Our content is a key component of our software subscriptions. Its quality and accuracy are critical to the longevity of our customer subscriptions. On a monthly basis, our content team combines legislative research, analysis, technical logic and automation to embed updated rules into our software. Unlike many enterprise software solutions where maintenance and support is focused solely on periodic technology upgrades, our monthly updates are a critical element of allowing our customers to ensure that they are utilizing the latest tax changes to accurately calculate their indirect taxes.

Our Technology

Our software and solutions are built upon a robust set of technology capabilities designed for the flexibility, configurability, speed and scale to handle the most complex tax scenarios and processing volumes and interoperability to core business applications.

Real-Time Engine. Our real-time engine determines the appropriate tax rules to apply to a line item in a transaction through a sequence of real-time processes that combine tax algorithms and tax content with transaction line item level detail. Combining tax content stored as structured data with sequencing and decision tree logic results in one or more individual tax rules that are applied to each line item in a transaction. This is built within memory and cached for performance. The in-memory processes of the core calculation engine are tuned to accommodate high volume and complex transactions at speed and scale.

Configuration. Our solutions are built to be highly configurable. Through our graphical user interfaces, users can configure and map their taxability to ensure the correct tax rules are executed. Our flexibility in configuration also extends to users who can create their own taxability rules, as appropriate. These user-defined taxability rules act as an override providing flexibility, to ensure that non-standard tax scenarios and processes can be addressed. Additionally, users can augment transactions entering and exiting the engine by building their own logic through our drag and drop experience. This logic is saved to then execute within the engine.

Tax Geography. Tax accuracy depends on detailed location information for where a transaction is occurring. We designed and created a proprietary solution for tax jurisdiction identification that leverages industry geographic information system tools and geospatial data. With our proprietary technology we are able to create and map multiple tax jurisdictions for a particular location and assign a unique identifier to each location so that it can be used by the engine to allow for higher accuracy. This technology is highly relevant to emerging economic shifts, such as the sharing economy, where the physical nexus of transactions is unclear, such as ride-sharing services.

Security. Our application security framework allows our customers to define how users can interact with sensitive enterprise data and how they are authorized to use certain aspects of our software. Users are mapped to a set of predefined roles and we provide our customers with the ability to create user-defined roles. User-defined role-based access can be defined on a screen-by-screen level and further refined with read and/or write privileges.

Cloud Solutions. We provide Cloud services from six geographically separate data centers located on two continents: North America and Europe. The data centers are paired for failover of operations to an alternate, geographically separate production facility in case any single data center becomes unavailable. All data centers are operated by leading vendors providing physical security, Internet access, environmental controls and data retention services.

Our Customers

Since our founding, we have earned the brand trust and loyalty of our customers through long-lasting relationships and our commitment to them.

Today, we serve a large, diverse and growing global customer base. Our market leadership in key verticals can be demonstrated by our relationships with many of the largest and most well-known companies in retail trade, wholesale trade and manufacturing, among others. Our customers include the majority of the Fortune 500, as well as a majority of the top 10 companies by revenue in multiple industries such as retail, technology and manufacturing, in addition to leading marketplaces. We have significant expansion opportunities with these customers driven by our growing product portfolio and geographic coverage.

A distinct and growing subset of our customer base includes marketplaces and various professional service providers, including accounting firms and outsourcing firms. Our robust technology and deep tax content differentiate us in our ability to serve the indirect tax needs of 7 of the top 10 marketplace providers in North America by revenue. These customers support tens of thousands of merchants who rely on their platform for their e-commerce transaction processing. We also support service providers such as outsourcing and accounting firms who use our technology to calculate tax and file tax returns for their end-customers. While we include these marketplaces and service providers in our customer counts, the tens of thousands of their end-customers are not included in our customer counts.

As of March 31, 2020, we had over 4,000 customers and our ARR per customer was over \$70,000. While most of our revenue is currently generated by customers domiciled in the United States, many of our customers are multinational organizations with global business operations. We also provide tax software solutions outside the United States, primarily in Europe. No single customer represented more than 10% of our total revenue for the year ended December 31, 2019 or the three months ended March 31, 2020.

Customer Case Studies

The following are representative examples of how some of our customers have benefitted from using our software and solutions:

Global Omnichannel Retailer

Customer Since: 2017

Solutions

- Tax Determination
- Document Management
- Retail Industry Solution

Tax Types Supported

- Sales Tax
- Consumer Use Tax

Regions Supported

- North America

Deployment Types

- On-Premise

The company is one of the largest retailers in the world, serving customers in over 10,000 stores spanning more than 20 countries. The company's eCommerce sales are one of its fastest growing areas, with up to 100 million unique visitors each month.

The company needed a solution that could support more than 90 million products SKUs and high transaction volumes in real-time across multiple channels, including in-store point of sale, eCommerce and marketplace, which allows third-party vendors to sell on its website.

The company selected Vertex indirect tax solutions to provide a seamless omnichannel experience for its customers, while enabling scale for future growth.

Specialty Retailer

Customer since: 2006

Solutions

- Tax Determination
- Compliance & Reporting
- Tax Data Management
- Document Management

Tax Types Supported

- Sales Tax
- Consumer Use Tax
- Value Added Tax

Regions Supported

- North America
- EMEA
- Asia Pacific

Deployment Types

- On-Premise
- Cloud

Operating in over 15,000 retail locations around the world, the company has a long history of innovation and customer experience powering its growth. The company has leveraged Vertex solutions for sales tax automation in its North America retail stores since 2006.

As the company's global supply chain operations grew, indirect tax complexity increased in purchasing, manufacturing and distribution. The company needed a centralized, scalable tax system for all invoice sales, purchases and inventory transfer transactions, with the ability to pull detailed

transaction data for analysis. It also needed to unify its tax data across multiple business applications and convert to legal entity formats required for compliance filing.

More recently, the company has expanded its use of Vertex solutions to support strategic initiatives including the company's global rollout of its mobile order and payment app, using Vertex cloud-based solutions.

The company's expanded use of Vertex solutions has resulted in over 700% ARR growth associated with this customer in the past 10 years.

Global Technology Service Provider

Customer Since: 2009

Solutions

- Tax Determination
- Compliance & Reporting
- Document Management

Tax Types Supported

- Sales Tax
- Consumer Use Tax
- Value Added Tax
- Communications Tax

Regions Supported

- North America
- EMEA
- Asia Pacific
- Central/South America

Deployment Types

- On-Premise

A top-10 global technology provider by annual revenues, the company first purchased Vertex software in 2009 to automate transaction tax determination and compliance in North America. As the company expanded its services globally and through its eCommerce systems, it needed to manage new telecommunication tax regulations across a broad ecosystem of small-to-midsize business, government, education, large volume licensing and reseller and distributor channels.

Vertex was chosen to deliver a centralized solution for managing sales and use tax, value-added tax, environmental fees, goods and services tax, and telecommunications tax compliance. Following a successful roll-out in North America, Vertex is continuing to support the company in their global roll-out for eCommerce sales across 240 countries.

The company's expanded use of Vertex solutions has resulted in a 300% ARR increase associated with this customer in the past 10 years.

Acxiom LLC

Acxiom enables people-based marketing everywhere through a simple, open approach to connecting systems and data to drive better customer experiences for people and greater return-on-investment for business. A leader in identity, customer data management and the ethical use of data for more than 50 years, Acxiom helps thousands of clients and partners around the globe work together to create millions of better customer experiences, every day.

Since 2004, Vertex has enabled Acxiom to manage its sales and use tax obligations on a global scale. The Acxiom team leverages Vertex's tax determination and compliance solutions to ensure accurate taxability across all of its services, determine the applicable tax rates and exemptions, and ensure accurate and timely client billing. Automating compliance and reporting has freed up valuable time and resources for the Acxiom tax team to increase its strategic focus and accelerate time-to-market for company mergers and acquisitions.

Problem

- Identify taxability across a wide range of marketing and technology services
- Determine applicable tax rates and/or exemptions to ensure accurate client billing
- Expanded tax support for company mergers and acquisitions

Solution

- Tax Determination
- Compliance & Reporting
- Document Management

Benefits

- Accurate client billing across global customer and partner network
- Accelerate time-to-market for mergers and acquisitions
- Increased strategic focus and analysis

Sales and Marketing

We sell our software and solutions primarily through our direct sales organization, with a focus on enterprise and mid-market businesses that have complex tax operations. Our direct sales team is comprised of inside sales and field sales, supported by our technical pre-sales and services teams. Teams are organized by territory and company size. We also have customer success teams focused on onboarding, usage, retention, renewals and cross-selling additional products.

Our direct sales force leverages our partnerships with technology providers such as Oracle, SAP, Microsoft and Salesforce, and a growing network of system integrators to influence and drive growth opportunities. The partnerships can include certified integrations that drive ease of implementation and rapid time-to-value for our joint customers. We leverage our relationships with professional services firms such as Deloitte, PwC and KPMG to drive tax software adoption in partnership with their tax advisory and tax technology practices.

We also utilize indirect sales to efficiently grow and scale our revenues. Our indirect sales team focuses on building relationships with leading system integrators who implement eCommerce and other platforms, and resellers who offer our software, services and training to their customer networks. These partnerships allow us to extend our demand generation and market reach efforts. We also extend our

reach efficiently through marketplaces and service providers who use our technology to calculate tax and/or file tax returns for their end-customers.

Our marketing investments are focused on establishing and expanding our brand recognition, creating sales leads and growing our customer relationships. We generate sales leads through online and offline marketing channels, including search engine marketing, outbound lead generation, technology events and conferences and digital marketing programs. Word-of-mouth referrals from our install base customers, technology partners and consulting firms further scale our market reach. We engage and grow our customer revenues through hosted events, customer advisory boards and user groups, and digital seminars. We extend brand awareness through advertising, press coverage and social media, as well as through sponsorships of industry associations such as Tax Executive Institute, Council on State Taxation and cpa.com.

Partners

We believe the scale and quality of our ecosystem is unparalleled in the industry, and we are committed to growing it even further. Our partner ecosystem consists of multiple types of partners that provide us access to their customers and clients.

Our continued success is enabled by our seamless integration into customers' business applications, gathering high-quality new customer leads and collaborating with professional service providers to help our customers solve their specific tax needs. In addition to driving technological innovation and growing our range of solution offerings, expanding our partner ecosystem has been an essential part of our growth.

Accounting & Consulting Partners. We collaborate with over 50 tax, accounting and consulting firms, which not only complement our global, local and industry-specific regulatory expertise but also point us towards specific commercial opportunities. Our wide range of offerings and sophisticated technology align with these firms' areas of specialization, enabling organizations to strengthen end-to-end delivery capabilities for a diverse array of clients.

Technology Partners. Our pre-built integrations with key partners including Adobe/Magento, Coupa, Microsoft Dynamics, NetSuite, Oracle, Salesforce, SAP, SAP Ariba, Workday and Zuora, among many others, are key differentiators that enable our customers to seamlessly connect our solutions into their business applications and processes. Our trusted brand reputation has allowed us to be the leading SAP and Oracle tax technology provider, with a relationship spanning many years with these vendors. Our technology software and solutions and highly scalable transaction volume throughput has earned the trust of world-class online marketplaces. These deep partnerships allow us to expand the frontier of tax technology innovation and market opportunity.

Research and Development

Our research and development team consists of our architecture, software engineering, user experience, infrastructure automation and technical production support teams. This organization is responsible for the design, development, testing and delivery of new technologies, features and integrations of our tax software and solutions, as well as the continued improvement of our existing solutions. It is also responsible for operating and scaling our software and solutions and infrastructure that run in the cloud. We continue to invest in our research and development capabilities to extend our solutions further into the cloud and partner ecosystems to continuously deliver more value.

Competition

Our industry is highly competitive and fragmented. Businesses employ a mix of approaches to address their indirect tax obligations, including:

- in-house practices and spreadsheets that result in custom transaction-specific research, manual determination, static tax tables or rate calculator services, as well as manual filing and remittance activities;
- businesses utilizing native ERP capabilities with rudimentary tax determination capabilities, which are typically not designed for complex tax support and lack tax rates, rules and complex calculation functionality and require the user to manually track, input, maintain and update all tax law changes that occur;
- outsourced transaction tax compliance services offered by accounting and specialized consulting firms; and
- tax-specific solutions from other vendors, including, Thomson Reuters and Sovos and Avalara.

We believe customers consider the following factors when selecting indirect tax technologies:

- ability to minimize compliance risk exposure associated with inaccurate and/or inconsistent determination and remittance of taxes;
- ability to deliver real time tax determinations;
- ease of deployment and use;
- ease of integration with the customer's business applications, across multiple systems;
- ability to address multiple transaction tax compliance functions, from initial taxability and tax rate determination through compliance and remittance of funds;
- lower total cost of ownership; and
- continuously updated tax content applicable to the customer's business.

Depending on the importance and complexity associated with these factors for each customer we maintain varying competitive advantages. We continually monitor these factors and adjust our functionalities, service offerings, pricing structures and overall solution delivery approach to continually strengthen our position.

Intellectual Property

Our success has resulted in part from our proprietary methodologies, software, reusable knowledge capital and other intellectual property rights. We rely on a combination of copyright, trademark and trade secret law, as well as contractual restrictions such as confidentiality and non-compete provisions to protect our intellectual property rights, including our brand, technology and confidential information. We have policies related to confidentiality, ownership, and the use and protection of our intellectual property. We also enter into confidentiality and invention assignment/proprietary rights agreements with our consultants, employees and other third parties as appropriate that protect and control access to our intellectual property, and we enforce these agreements if necessary. We recognize the value of our intellectual property in the marketplace and vigorously identify, create and protect it. We believe the innovation of our employees and our continued enhancement of the features and functionality of our solutions is the keystone of our success.

Despite our efforts to protect our proprietary technology, confidential information and our intellectual property rights, unauthorized parties may attempt to copy or obtain and use our technology to develop applications with the same functionality as our applications, and policing unauthorized use of our technology and intellectual property rights may be difficult and may not be effective.

We expect that software and other applications in our industry may be subject to third-party infringement claims as the number of competitors grows and the functionality of applications in different industry segments overlaps, and we may face such claims.

Regulation

Our software and solutions rely on a range of complex laws and regulations relating to our customers' sales and use transactions and business operations. We aggregate information regarding tax rates, rules and regulations obtained from taxing jurisdictions and use that data within our software and solutions to calculate transaction taxes, prepare and file tax returns, and remit taxes on behalf of our customers. Our long term success is based on our monitoring and understanding this legal and regulatory landscape.

We have an established an information security program that includes annual security training to help ensure that consultants and employees are aware of our legal and contractual obligations to protect us and our customer data. We also use privacy statements to provide notice to customers of our privacy practices, as well as provide them with the opportunity to furnish instructions with respect to the use of their personal information.

We use security controls to help protect customer and employee data from loss, misuse and unauthorized alteration. We use technical, logical and procedural measures, such as multi-factor authentication, which are designed to help detect and prevent fraud and misuse of customer data. Whenever customers transmit their data to us, we follow current industry standards to encrypt the data as it is transmitted to us and when we store it. We work to protect our systems from unauthorized internal or external access using numerous commercially available computer security products as well as internally developed security procedures and practices.

Employees & Culture

Our culture is the foundation of everything we do, guided by a common purpose to build trusted relationships at work, in business and in our communities. We strive to be a values-driven employer of choice who attracts, retains and inspires talented professionals to achieve their full potential. We have been recognized as one of the best places to work in Philadelphia for the past five years according to The Philadelphia Inquirer. We create and nurture an engaging work environment that embodies our core values of collaboration, performance, integrity, innovation and fun, and we actively support our employees' participation in community service and philanthropy.

As of December 31, 2019, we had approximately 1,100 full-time employees. Of these employees, 95% were based in the United States, 4% based in Europe and 1% in Latin America. We believe we have a strong relationship with our employees and we have not experienced any work stoppages.

Facilities

Our corporate headquarters, which includes our operations and innovation lab, is located in King of Prussia, Pennsylvania, and consists of approximately 189,502 square feet of space under a lease that expires on September 30, 2028.

We also lease offices in Sarasota, Florida; Naperville, Illinois; London, United Kingdom; Amsterdam and Maastricht City, The Netherlands; Frankfurt, Germany; Sao Paulo, Brazil; Chennai, India; and Cork, Ireland.

Legal Proceedings

From time to time, we may be involved in various legal proceedings arising from the normal course of business activities. We are not presently a party to any litigation the outcome of which we believe, if determined adversely to us, would individually or taken together have a material adverse effect on our business, operating results, cash flows or financial condition.

MANAGEMENT

The following table provides information regarding our executive officers and our board of directors:

<u>Name</u>	<u>Age</u>	<u>Position</u>
David DeStefano	57	President, Chief Executive Officer and Chairperson
John Schwab	52	Chief Financial Officer
Lisa Butler	54	Chief Accounting Officer
Bryan Rowland	40	General Counsel
Ric Andersen	58	Director
Terrence Kyle	70	Director
Amanda Westphal Radcliffe	52	Director
Kevin Robert	63	Director
Rick Stamm	64	Director
Stefanie Westphal Thompson	57	Director
Jeffrey Westphal	58	Director

Executive Officers

David DeStefano became our President and Chief Executive Officer in November 2016, joined our board of directors in 2019 and was appointed Chairperson of our board of directors in 2020. Between 2015 and 2016 he was an Executive Vice President and a member of the Company's Executive Council, which monitors our long-term strategic and financial viability, corporate brand, and culture. Mr. DeStefano previously served as our Vice President, Chief Financial Officer and Executive Vice President. Prior to joining the Company, Mr. DeStefano was Principal and Vice President at The Mid Atlantic Companies, Ltd. Mr. DeStefano is also on the Advisory Board for Corporate Social Responsibility at the Satell Institute and is on the Board of Trustees of the Joseph Fund in Camden, New Jersey. Mr. DeStefano received a BS in Finance from Lehigh University. We believe that Mr. DeStefano is qualified to serve on our board of directors because of the perspective and experience he brings as our Chief Executive Officer and his knowledge of our company and our business.

John Schwab became our Chief Financial Officer in 2020. Prior to joining the Company, Mr. Schwab served as Chief Financial Officer of Flagship Credit Acceptance from 2015 until 2019. Mr. Schwab began his career in assurance services at Arthur Andersen LLP. Mr. Schwab also is a director of PENN Capital Funds, a mutual group managed by Penn Capital Management. Mr. Schwab received a BS in Accounting from LaSalle University.

Lisa Butler became our Chief Accounting Officer in 2020, having previously served as our Chief Financial Officer from 2015 to 2019. Prior to joining the Company in 2003, Ms. Butler was a Controller at Kenexa Inc. (now an IBM company). Ms. Butler started her career in assurance services at Pricewaterhouse Coopers, L.L.P. ("PwC") serving both private and public companies. Ms. Butler received a BS in Accounting from LaSalle University and is a Certified Public Accountant.

Bryan Rowland became our General Counsel in 2017. Prior to joining the Company, Mr. Rowland held various roles at Checkpoint Systems from 2005 to 2016, including serving as Senior Vice President, General Counsel, Chief Compliance Officer and Corporate Secretary from 2014 to 2016. Mr. Rowland received a BA in Psychology and Philosophy from Towson University and a Juris Doctorate degree from Villanova University Charles Widger School of Law.

Directors

Ric Andersen joined our board of directors in January 2008 and currently serves as lead director. He has over 25 years of consulting and management experience at IBM, Price Waterhouse and PwC Consulting. His last 15 years have been spent in private equity. He is currently a managing partner at Peak Equity ("Peak"), a Philadelphia-based private equity firm focused on lower middle-market enterprise software. Prior to joining Peak, Mr. Andersen was a partner at Milestone Partners, a Philadelphia-based private equity firm and he was a managing director at Silver Lake Partners, a technology-focused private equity firm based in New York. During his tenures with Price Waterhouse, PwC Consulting, and IBM, Mr. Andersen was a senior partner and senior executive leading several businesses in the United States and Asia as well as globally. Mr. Andersen is currently chairman of G5, a privately held software company. In addition, he serves on the Board of American Public Education Inc. ("APEI") a publicly traded online higher education company where he is chair of the compensation committee and a member of the audit committee. Mr. Andersen holds an MBA from the Wharton School at the University of Pennsylvania and a BS from Bucknell University. We believe that Mr. Andersen is qualified to serve on our board of directors because of his extensive experience in building and leading companies, as well as his public company experience and significant operational and strategic expertise.

Terrence Kyle joined our board of directors in June 2004. Mr. Kyle was previously a partner with WIN Capital, LLC, a private equity group that invested in emerging growth companies from the manufacturing, technology and service markets. Mr. Kyle joined Shared Medical Systems in April 1976 and helped take the company public later that year. At Shared Medical Systems, Mr. Kyle served as Senior Vice President and Chief Financial Officer before the company's sale to the Siemens Corporation in July 2000. Mr. Kyle began his career with Arthur Andersen LLP in 1972. Mr. Kyle received a BS in Accounting from Drexel University. We believe that Mr. Kyle is qualified to serve on our board of directors because of his experience in the private equity industry and as an executive officer in other businesses.

Kevin Robert joined our board of directors in February 2015. Mr. Robert spent more than 30 years at Wolters Kluwer Tax & Accounting as a tax executive. Beginning as an Account Sales Manager in 1981 with CCH Computax, Mr. Robert progressed through leadership positions at CCH Computax and CCH Publishing before being named President and Chief Executive Officer of CCH Tax Compliance in 2001. Following CCH's 1995 acquisition by Wolters Kluwer, Mr. Robert led the Tax & Accounting division's operations in North America and Asia Pacific before being named Global Chief Executive Officer in 2010. Mr. Robert brings deep experience in developing and marketing cutting-edge accounting, tax and audit software and solutions for tax professionals around the world. His multinational experience includes developing business in North America, South America, Europe and the Pacific Rim, identifying global opportunities and negotiating the acquisition of companies. He also served on the Board of Epiq Software, which was sold in September of 2016. Mr. Robert holds a BS in Marketing from the University of New Orleans and an MBA in Business Management from Pepperdine University. He is a member of the National Association of Corporate Directors ("NACD") and has been a NACD Leadership Fellow since 2015. Mr. Robert currently owns his own consulting firm providing board and management consulting services. We believe that Mr. Robert is qualified to serve on our board of directors because of his significant industry knowledge and his corporate finance and public company experience.

Rick Stamm joined our board of directors in January 2019. Prior to joining our board of directors, Mr. Stamm was a partner with PwC for 30 years, during which time he served a long list of domestic and international clients and held numerous leadership positions. Over the final 12 years of his career with PwC, Mr. Stamm was the firm's Vice Chairman and U.S. Tax Leader, and then progressed to PwC's Vice Chairman of Global Tax. Mr. Stamm is Vice President and Chief Financial Officer of Stamm Development Group LLC, a Philadelphia area real-estate developer. Mr. Stamm is a member

emeritus of the Board of Advisors for the Leventhal School of Accounting at the University of Southern California and was formerly a member of the Boards of Germantown Academy and Lycoming College. Mr. Stamm received a BA in Accounting from Lycoming College. We believe that Mr. Stamm is qualified to serve on our board of directors because of his significant industry and corporate finance experience.

Amanda Westphal Radcliffe has served on our board of directors since 1993. Prior to joining our board of directors, Ms. Radcliffe served in a variety of roles at the Company, from technical software instructor and production, to middle-market product teams. Prior to joining the Company, she was a middle-market Managing Director at a global corporate travel management company. Ms. Radcliffe serves on the Children's Hospital of Philadelphia Board of Trustees, Foundation Board of Overseers and the St. Joe's University Kinney Center for Autism Education and Support Advisory Board. Ms. Radcliffe is Chair of the Drexel University A.J. Drexel Autism Institute Board and Chair Emeritus of breastcancer.org. Ms. Radcliffe is also a member of the Philadelphia Chapter of Women Corporate Directors. Ms. Radcliffe holds a BA from Moravian College, attended business school at Drexel University and attended the Executive Education program at the Wharton School. We believe that Ms. Radcliffe is qualified to serve on our board of directors because of her extensive knowledge of our company and our business derived from her longtime service with the company.

Stefanie Westphal Thompson joined the Company in 1991 and has served in a variety of roles, including Treasurer. Prior to joining the Company, Ms. Thompson was a Vice President at Chemical Bank (now part of Chase), where she specialized in managing the banking relationship for middle-market companies. Ms. Thompson sat on Bryn Mawr Hospital's Foundation Board for eight years, serving as Head of their Trustee Committee and as Vice-Chair. Ms. Thompson also served on the Board of the Agnes Irwin School in Rosemont, Pennsylvania, for ten years, heading its Trustees Committee. Ms. Thompson received an MBA in Finance from Fordham University and has a dual BA in Engineering and Economics from Lafayette College. We believe that Ms. Thompson is qualified to serve on our board of directors because of her corporate finance experience as well as her knowledge of our company and our business derived from her longtime service with the company.

Jeffrey Westphal has served on our board of directors since 1988. Mr. Westphal has previously held numerous roles with the Company, including Director of Marketing, Vice President of Sales and Marketing, Executive Vice President, President and Chief Executive Officer. Mr. Westphal is a member of the Institute for Professionals in Taxation, World Presidents' Organization and the Conference Board. Mr. Westphal served for 15 years as Chairman of the Board of Open Connections, Inc., a not-for-profit open educational organization, and remains a trustee. In addition, Mr. Westphal is co-founder, with his wife, Jenifer, of Kyle's Treehouse, a web-based resource for families seeking hope and guidance for the treatment of children diagnosed with Autism Spectrum Disorder. Mr. Westphal holds a BA in History from University of Richmond. We believe that Mr. Westphal is qualified to serve on our board of directors because of his knowledge of our company and our business derived from his prior service as our Chief Executive Officer and Chairman.

Family Relationships

Ms. Radcliffe, Ms. Thompson and Mr. Westphal are siblings. There are no other family relationships among any of our executive officers or directors.

Director Independence and Controlled Company Exemption

Our board of directors has undertaken a review of its composition, the composition of its committees and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that Ric Andersen, Terrence Kyle, Kevin

Robert and Rick Stamm, representing four of our eight directors, do not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the applicable rules and regulations of the SEC and the listing requirements and rules of the Nasdaq Global Market. In making this determination, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director.

Because the parties to the Stockholders' Agreement will own more than 50% of the voting power of our common stock after this offering, we are considered to be a "controlled company" for purposes of the Nasdaq Global Market listing requirements. As such, we are permitted, and have elected, to opt out of the Nasdaq Global Market listing requirements that would otherwise require our board of directors to be comprised of a majority of independent directors and require our nominating and corporate governance committee to be comprised entirely of independent directors. Accordingly, you may not have the same protections afforded to stockholders of companies that are subject to all of the Nasdaq Global Market corporate governance requirements. See "Risk Factors—Risks Related to this Offering and Ownership of our Class A Common Stock—We are a "controlled company" within the meaning of the rules of the Nasdaq Global Market and, as a result, expect to qualify for, and intend to rely on, exemptions from certain corporate governance requirements. You will not have the same protections afforded to stockholders of companies that are subject to such requirements."

Board of Directors, Committees and Executive Officers

Composition of Board of Directors

Our board of directors currently consists of eight members. Our amended and restated certificate of incorporation and amended and restated bylaws will provide that the authorized number of directors shall be fixed from time to time by a resolution of the majority of our board of directors.

Term and Class of Directors

Upon the effectiveness of the registration statement of which this prospectus forms a part, our board of directors will be divided into three staggered classes of directors of the same or nearly the same number. At each annual meeting of stockholders, a class of directors will be elected for a three-year term to succeed the directors of the same class whose terms are then expiring. The terms of the directors will expire upon election and qualification of successor directors at the annual meeting of stockholders to be held during the years 2021 for the Class I directors, 2022 for the Class II directors and 2023 for the Class III directors.

Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class shall consist of one-third of the directors. The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control.

Term of Executive Officers

Each executive officer is appointed and serves at the discretion of the board of directors and holds office until his or her successor is elected and qualified, or until his or her earlier resignation or removal.

Board Committees

In connection with the consummation of this offering, our board of directors will have an audit committee, a compensation committee and a nominating and corporate governance committee, each of which will have the composition and responsibilities described below.

Audit Committee

Our audit committee will oversee a broad range of issues surrounding our accounting and financial reporting processes and audits of our financial statements, including the following: (a) monitor the integrity of our financial statements, our compliance with legal and regulatory requirements, our independent registered public accounting firm's qualifications and independence, and the status of our independent registered public accounting firm; (b) assume direct responsibility for the appointment, compensation, retention and oversight of the work of any independent registered public accounting firm engaged for the purpose of performing any audit, review or attest services and for dealing directly with any such accounting firm; (c) provide a medium for consideration of matters relating to any audit issues; and (d) prepare the audit committee report that the rules require be included in our filings with the SEC. Upon the effectiveness of this registration statement, the members of our audit committee will be Terrence Kyle, Kevin Robert and Rick Stamm. Terrence Kyle will serve as chairman of the audit committee, and the composition of our audit committee will comply with all applicable Nasdaq Global Market rules, including the requirement that at least one member of the audit committee have accounting or related financial management expertise. Terrence Kyle will qualify as an "audit committee financial expert," as such term is defined in Item 407(d)(5) of Regulation S-K.

Our board of directors will adopt a written charter for the audit committee, which will be available on our website upon consummation of this offering.

Compensation Committee

Our compensation committee will review and recommend policy relating to compensation and benefits of our officers and employees, including the following: (a) review and approve corporate goals and objectives relevant to the compensation of our Chief Executive Officer and other senior officers; (b) evaluate the performance of these officers in light of those goals and objectives; and (c) set compensation of these officers based on such evaluations. The members of our compensation committee will be Ric Andersen, Terrence Kyle and Rick Stamm. Ric Andersen will serve as chairman of the compensation committee, and the composition of our compensation committee will comply with all applicable Nasdaq Global Market rules.

Our board of directors will adopt a written charter for the compensation committee, which will be available on our website upon consummation of this offering.

Nominating and Corporate Governance Committee

The nominating and corporate governance committee will: (a) oversee and assist our board of directors in identifying, reviewing and recommending nominees for election as directors; (b) evaluate our board of directors and our management; (c) develop, review and recommend corporate governance guidelines and a corporate code of business conduct and ethics; and (d) generally advise our board of directors on corporate governance and related matters. The members of our nominating and corporate governance committee will be Kevin Robert, Amanda Westphal Radcliffe and Ric Andersen. Kevin Robert will serve as chairman of the nominating and corporate governance committee.

Our board of directors will adopt a written charter for the nominating and corporate governance committee, which will be available on our website upon consummation of this offering.

Our board of directors may, from time to time, establish other committees.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee is, or has at any time during the past year been, one of our officers or employees. None of our executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee.

Indemnification

We maintain directors' and officers' liability insurance. Our amended and restated certificate of incorporation and amended and restated bylaws will include provisions limiting the liability of directors and officers and indemnifying them under certain circumstances. We expect to enter into indemnification agreements with our directors to provide our directors and certain of their affiliated parties with additional indemnification and related rights. See "Description of Capital Stock—Limitation on Liability of Directors and Indemnification" for further information.

Code of Ethics

Our board of directors will adopt a Code of Ethics that will contain the ethical principles by which our chief executive officer and chief financial officer, among others, are expected to conduct themselves when carrying out their duties and responsibilities. A copy of our Code of Ethics will be available on our website at www.vertexinc.com. We will provide a copy of our Code of Ethics to any person, without charge, upon request, by writing to, Vertex, Inc., 2301 Renaissance Blvd, King of Prussia, Pennsylvania 19406 (telephone number (800) 355-3500). We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of our Code of Ethics by posting such information on our website at www.vertexinc.com.

EXECUTIVE AND DIRECTOR COMPENSATION

This section discusses the material components of the executive compensation program for our executive officers who are named in the "2019 Summary Compensation Table" below. In 2019, our "named executive officers" and their positions were as follows:

- David DeStefano, President and Chief Executive Officer;
- Lisa Butler, Chief Accounting Officer; and
- Bryan Rowland, Vice President and General Counsel.

This discussion may contain forward-looking statements that are based on our current plans, considerations, expectations and determinations regarding future compensation programs. Actual compensation programs that we adopt following the completion of this offering may differ materially from the currently planned programs summarized in this discussion.

2019 Summary Compensation Table

The following table sets forth information concerning the compensation of our named executive officers for the year ended December 31, 2019.

Name and Principal Position	Year	Salary ^(S)	Option Awards ^{(S)(1)}	Non-Equity Incentive Plan Compensation ^{(S)(2)}	All Other Compensation ^{(S)(3)}	Total ^(S)
David DeStefano President and Chief Executive Officer	2019	530,016	—	831,492	55,929	1,417,437
Lisa Butler Chief Accounting Officer	2019	297,130	—	238,114	26,382	561,626
Bryan Rowland Vice President & General Counsel	2019	258,027	—	133,122	16,800	407,949

- (1) During 2019, Mr. DeStefano and Mr. Rowland were granted 124,393 and 62,196 stock appreciation rights, respectively. As a nonpublic business entity, these stock appreciation rights were recorded at their intrinsic value of zero on the date of grant. The company accounts for stock appreciation rights as liabilities under ASC Topic 718 and recognizes stock-based compensation expense by remeasuring the stock appreciation rights at the end of each reporting period and accruing the portion of the requisite service rendered at that date. We provide information regarding the accounting value of all stock appreciation rights in Note 1 to the consolidated financial statements included in this prospectus.
- (2) Amounts in this column represent cash incentive compensation earned during the year based on the attainment of pre-established performance objectives. This includes amounts earned under our annual Organizational Bonus Plan (as defined below) for 2019 of \$546,040 for Mr. DeStefano, \$139,360 for Ms. Butler and \$133,122 for Mr. Rowland, and amounts earned under our 2010 Long-Term Rewards Plan for the performance period ending in 2019 of \$285,452 for Mr. DeStefano and \$98,754 for Ms. Butler. For additional information about non-equity incentive plan compensation, see the section of this prospectus titled "—Cash-Based Incentive Compensation" below.
- (3) Amounts in this column represent the additional perquisites and supplemental benefits provided to our named executive officers that are not reported in the other columns of this table. For Mr. DeStefano, the amount shown includes premium payments for long-term disability and life insurance in the amount of \$3,209 (which includes an associated tax gross-up of \$1,101), reimbursements for certain supplemental benefits and perquisites in the aggregate amount of \$22,835 (which includes an associated tax gross-up of \$7,834), profit sharing contributions under our 401(k) plan in the amount of \$8,400, 401(k) matching contributions in the amount of \$8,400, Union League club membership fees in the amount of \$10,367 and a service recognition award valued at \$2,718 (which includes an associated tax gross-up of \$718). For Ms. Butler, the amount shown includes reimbursements for certain supplemental benefits and perquisites in the aggregate amount of \$9,582 (which includes an associated tax gross-up of \$2,729), profit sharing contributions under our 401(k) plan in the amount of \$8,400 and 401(k) matching contributions in the amount of \$8,400. For Mr. Rowland, the amount shown includes profit sharing contributions under our 401(k) plan in the amount of \$8,400 and 401(k) matching contributions in the amount of \$8,400. For additional information about the amounts set forth in this column, see the section of this prospectus titled "—Other Elements of Compensation."

2019 Salaries

The named executive officers receive a base salary to compensate them for services rendered to the company. The base salary payable to each named executive officer is intended to provide a fixed component of compensation reflecting the executive's skill set, experience, role and responsibilities. In early 2019, the board of directors approved increases to the annual base salaries of our named executive officers as set forth in the table below. Mr. DeStefano's base salary was determined following review of a market analysis prepared by Aon, our independent compensation consultant, of chief executive officer compensation for comparable companies in our industry. The 2019 base salaries for Ms. Butler and Mr. Rowland were determined in connection with our annual performance review process for all employees. In addition, the annual base salaries for our named executive officers were increased in early 2020 in connection with our annual performance review process as set forth in the table below.

<u>Name</u>	<u>2018 Salary</u>	<u>2019 Salary</u>	<u>2020 Salary</u>
David DeStefano	\$ 495,000	\$ 530,016	\$ 560,000
Lisa Butler	\$ 288,475	\$ 297,129	\$ 300,398
Bryan Rowland	\$ 250,512	\$ 258,027	\$ 263,188

Cash-Based Incentive Compensation

2019 Annual Bonus. We maintain an annual bonus plan (the "Organizational Bonus Plan"), which is designed to motivate and reward our employees, including our executives and named executive officers, for achievements relative to financial, non-financial and individual performance goals. For 2019, financial performance accounted for 80% of the bonus opportunity and was based on achievements relative to our three most important financial metrics (revenue, pre-tax net income and adjusted cash from operations ("ACFO")). The non-financial metrics for 2019 were based on our progress against critical business objectives and accounted for 20% of the bonus opportunity. Individual performance ratings for the year are also considered when determining awards under the Organizational Bonus Plan.

Each named executive officer has a target bonus opportunity under the Organizational Bonus Plan, defined as a percentage of annual base salary. For 2019, the target bonuses for our named executive officers were 80% for Mr. DeStefano, 40% for Ms. Butler and 40% for Mr. Rowland. In February 2020, our compensation committee assessed achievement against the financial and non-financial metrics described above and the board of directors approved funding the bonus pool at 117.4% of the targeted Organizational Bonus Plan opportunity for 2019.

The actual annual cash bonuses awarded to each named executive officer for 2019 performance are set forth above in the Summary Compensation Table in the column entitled "Non-Equity Incentive Plan Compensation".

Multi-Year Bonus Plans. In addition to the annual Organizational Bonus Plan, we maintain multi-year cash bonus plans for our most senior executives, including our named executive officers, and other key employees. The target bonuses, expressed as a percentage of annual base salary, for our named executive officers under the multi-year cash bonus plans are 50% for Mr. DeStefano and 30% for each of Ms. Butler and Mr. Rowland.

In early 2017, Mr. DeStefano and Ms. Butler were granted awards under our 2010 Long-Term Rewards Plan with performance measured over the three-year period from January 1, 2017 to December 31, 2019. These awards were eligible to be earned based on revenue, pre-tax net income and ACFO growth over the performance period. Following the end of the performance period, the compensation committee assessed growth with respect to these financial metrics over the performance

period and approved bonuses for all participants in the 2010 Long-Term Rewards Plan, including the named executive officers. The actual cash bonuses earned by Mr. DeStefano and Ms. Butler under the 2010 Long-Term Rewards Plan for the performance period ending in 2019 are set forth above in the Summary Compensation Table in the column entitled "Non-Equity Incentive Plan Compensation."

Effective January 2018, we adopted the 2018 Long-Term Rewards Plan for performance periods beginning on and after January 1, 2018. In early 2019, the named executive officers were granted awards under the 2018 Long-Term Rewards Plan for a three-year performance period from January 1, 2019 to December 31, 2021. These awards are scheduled to be earned based on the company's achievements against key financial metrics, including revenue, pre-tax net income, and ACFO at the end of the performance period. Amounts earned by the named executive officers with respect to these awards will be reported in the Summary Compensation Table in the year earned.

Equity Compensation

Our named executive officers have been granted stock appreciation rights ("SARs"). SARs generally entitle their holder, upon exercise, to receive from us an amount in cash equal to the appreciation of the shares subject to the award between the grant date and the exercise date. The SARs generally vest with respect to 50% of the award on the second anniversary of the applicable grant date and as to 50% of the award on the fifth anniversary of the applicable grant date, subject to the holder's continuous service to the company through each vesting date. SARs are exercisable upon 50% vesting or upon the occurrence of certain triggering events; provided that SAR holders are limited to exercising no more than 25% of their vested SARs in any given year and provided further that SAR exercises are limited each year to the proportion of vested SARs to the total units outstanding multiplied by adjusted net cash from operating activities.

The following table sets forth the SARs granted to our named executive officers during 2019 as the long-term equity incentive component of our compensation program. These SARs were granted under our Third Amended and Restated 2007 Stock Appreciation Rights Plan (the "2007 Plan") with exercise prices equal to the fair market value of our common stock on the date of grant, as determined by the board of directors, and subject to our standard vesting schedule described above.

<u>Named Executive Officer</u>	<u>2019 Stock Appreciation Rights Granted</u>
David DeStefano	124,393
Lisa Butler	—
Bryan Rowland	62,196

Treatment of Equity Awards in Connection with this Offering. In connection with this offering, holders of outstanding SARs were offered the opportunity to amend outstanding SARs, whether vested or unvested, so that they become options to purchase shares of our Class A common stock. These options will cover an equal number of shares as the amended SARs and have an exercise price per share equal to the base price of an amended SAR, subject to any stock split that occurs in connection with this offering. For additional information regarding the amendment of outstanding SARs, please see the section titled "Incentive Compensation Plans—2007 Stock Appreciation Rights Plan" below. We expect that all of the eligible SARs held by our named executive officers will become options in connection with this offering.

Prior to 2006, certain current and former service providers were granted options to purchase Class B common stock. In connection with this offering, holders of vested options were offered the opportunity to amend these options so that they become options to purchase our Class A common stock governed by our 2020 Plan. The amended options will cover the same number of shares as the existing options and will have the same exercise price per share as the existing options, subject to any

stock split that occurs in connection with this offering. Mr. DeStefano is our only named executive officer that holds a vested option to purchase Class B common stock and we expect that this option will be amended in connection with this offering.

Shares issued to Mr. DeStefano and Ms. Butler upon the exercise of options to purchase Class A common stock may be sold by Mr. DeStefano and Ms. Butler in the event the underwriters exercise their option to purchase additional shares in this offering. For additional information, including the maximum number of shares that may be sold by Mr. DeStefano and Ms. Butler if the underwriters exercise the over-allotment option in full, see the sections titled "Principal and Selling Stockholders" and "Underwriting."

Future Equity Compensation Programs. We adopted the 2020 Plan in order to facilitate the grant of cash and equity incentives to directors, employees (including our named executive officers) and consultants of the company and certain of its affiliates and to enable the company and certain of its affiliates to obtain and retain services of these individuals, which we believe is essential to our long-term success. The 2020 Plan will be effective on the effective date of the registration statement of which this prospectus forms a part. For additional information about the 2020 Plan, please see the section titled "Incentive Compensation Plans" below.

Other Elements of Compensation

Retirement Plans

We currently maintain a 401(k) retirement savings plan for our employees, including our named executive officers, who satisfy certain eligibility requirements. Our named executive officers are eligible to participate in the 401(k) plan on the same terms as other full-time employees. The Internal Revenue Code allows eligible employees to defer a portion of their compensation, within prescribed limits, on a pre-tax basis through contributions to the 401(k) plan. Currently, we match 50% of contributions made by participants in the 401(k) plan up to 6% of a participant's eligible compensation. During 2019, we also made discretionary profit sharing contributions under the 401(k) plan. These matching and profit sharing contributions are subject to vesting at the rate of 20% each year over the first five years of employment. We believe that providing a vehicle for tax-deferred retirement savings through our 401(k) plan, and making matching contributions, adds to the overall desirability of our executive compensation package and further incentivizes our employees, including our named executive officers, in accordance with our compensation policies.

Health/Welfare Plans

All of our full-time employees, including our named executive officers, are eligible to participate in our health and welfare plans, including, medical and dental benefits; medical and dependent care flexible spending accounts; short-term and long-term disability insurance; and life insurance.

Perquisites and Other Personal Benefits

We provide our named executive officers with perquisites that we believe to be necessary and appropriate to provide a competitive compensation package, certain of which are described below. The actual amount of all perquisites and other personal benefits provided to our named executive officers during 2019 are set forth above in the Summary Compensation Table in the column entitled "All Other Compensation."

Supplemental Executive Benefits. During 2019, our named executive officers were eligible for certain benefits in addition to the standard employee benefits offered to all employees generally, including, (i) supplemental term life insurance in a face amount of \$750,000, subject to certain conditions regarding insurability; and (ii) supplemental disability pay and insurance, which when combined with the disability coverage provided under our long-term disability insurance plan, provided

the named executive officer with disability income equal to 80% of the named executive officer's pre-disability base salary. The named executive officers were reimbursed for the premiums paid for such supplemental life and disability insurance, including an associated tax gross-up.

Supplemental Perquisites. We provide Ms. Butler and Mr. Rowland with an annual reimbursement of \$3,300 (which represents an allowance of \$2,000 plus an approximate gross up for income taxes) for the purchase of additional perquisites, including, health club membership, personal financial planning/investment advice, estate planning, certain legal advice, personal physical examination, a home office and vacation travel. Any amounts not used in one year may be "rolled-over" to the next year, but the executives may not receive reimbursement of more than \$16,500 for such perquisites in any five-year period.

Pursuant to the terms of his employment agreement, Mr. DeStefano was entitled to reimbursement of up to \$15,000 per year (plus a tax gross-up on any such reimbursement) for certain expenses related to financial and estate planning services, legal advice related to employment with the company, investment advice, health club memberships, physical examinations, a home office and vacation travel. Additionally, we pay approximately \$10,000 per year for Mr. DeStefano's membership in the Union League Club, which he primarily uses for business purposes.

Ms. Butler is entitled to reimbursement of up to \$75,000 (plus a tax gross-up on any such reimbursement) for tuition and tuition-related expenses incurred in connection with her pursuing a master's degree in business administration; provided that, Ms. Butler must repay any such reimbursements in the event she terminates her employment within one year of completing the degree. No amounts have been paid pursuant to this arrangement as of the date of this prospectus.

Strategic Bonus. Pursuant to her employment agreement, Ms. Butler is entitled to a \$75,000 cash bonus payment upon the first to occur of (i) filing of the company's first Form 10-Q during 2020; (ii) the date the board of directors determines to terminate pursuit of filing a Form S-1 during 2020; and (iii) December 31, 2020. Additionally, if within 6 months of the occurrence of any of the foregoing, the company and Ms. Butler agree to terminate her employment agreement, Ms. Butler would be entitled to the severance payments and benefits provided under her employment agreement.

Outstanding Equity Awards at Fiscal Year-End

The following table summarizes the number of shares of common stock underlying outstanding equity incentive plan awards for each named executive officer as of December 31, 2019.

Name	Grant Date	Option Awards				
		Number of Securities Underlying Unexercised Options (#) Exercisable ⁽¹⁾	Number of Securities Underlying Unexercised Options (#) Unexercisable ⁽¹⁾	Option Exercise Price ⁽⁵⁾	Option Expiration Date	Type of Award
David DeStefano	01/01/2002	342,000	—	0.45	N/A	OPTION
	01/01/2016	52,477	52,478(2)	7.50	01/01/2026	SAR
	02/05/2016	17,676	—	7.50	12/31/2020	SAR
	10/31/2016	209,916	209,916(2)	7.50	10/31/2026	SAR
	12/27/2019	—	124,393(2)	11.20	12/27/2029	SAR
Lisa Butler	02/05/2015	52,500	52,500(2)	6.46	02/05/2025	SAR
	02/05/2016	2,072	2,073(3)	7.50	12/31/2020	SAR
	02/05/2016	20,991	20,991(2)	7.50	02/05/2026	SAR
Bryan Rowland	02/09/2018	—	41,621(2)	9.50	02/09/2028	SAR
	02/07/2019	—	41,464(2)	11.20	02/07/2029	SAR
	12/20/2019	—	20,732(2)	11.20	12/20/2029	SAR

- (1) The number of shares underlying each SAR that is shown as being exercisable and unexercisable represents, respectively, the number of shares underlying each SAR that was vested and unvested as of December 31, 2019.
- (2) The SARs vest with respect to 50% of the award on the second anniversary of the applicable grant date and as to 50% of the award on the fifth anniversary of the applicable grant date, subject to the holder's continuous service to the company through each applicable vesting date.
- (3) The SARs vest with respect to 50% of the award on the first anniversary of the applicable grant date and as to 50% of the award on the fourth anniversary of the applicable grant date, subject to the holder's continuous service to the company through each applicable vesting date.

Executive Compensation Arrangements

We have entered into employment agreements with each of our named executive officers that sets forth the terms and conditions of each executive's employment with us. In addition, we entered into an employment agreement with John Schwab, our Chief Financial Officer, in connection with his commencement of employment with us in January 2020.

In connection with this offering, we expect to enter into new employment agreements with Mr. DeStefano, Ms. Butler, Mr. Rowland and Mr. Schwab. See "Recent Changes in Executive Compensation—Executive Employment Agreements" below for additional information.

Salary; Bonus

The employment agreements entitle the executives to annual base salaries and eligibility to earn discretionary bonuses under our annual and long-term cash bonus plans. See "2019 Salaries" and "Cash-Based Incentive Compensation" above for additional information regarding the base salaries and bonus opportunities of our named executive officers for 2019.

Mr. Schwab's employment agreement entitles him to an annual base salary of \$420,000 and provides for an annual bonus target under the Organizational Bonus Plan of 60% of his base salary and a bonus target under the Company's Long-Term Rewards Plan of 50% of his base salary. Pursuant to his employment agreement, Mr. Schwab received a one-time bonus of \$240,000 and was granted 165,492 stock appreciation rights in connection with his commencement of employment. The sign-on bonus is subject to full or partial repayment in the event Mr. Schwab voluntarily resigns or is

terminated for cause within the first 18 months of employment. The stock appreciation rights vest pursuant to our standard vesting schedule described above. In addition, Mr. Schwab may be entitled to additional cash bonuses of up to \$420,000 and stock appreciation rights equivalent to 5% of the company's Class B common stock if this offering does not occur by April 1, 2022.

Term

The initial term of Mr. DeStefano's employment agreement expired in November 2019 and automatically renews for successive two year periods unless 60 days' prior notice of non-renewal is given by either party. The employment agreements for Ms. Butler, Mr. Rowland and Mr. Schwab are for indefinite terms.

Severance

If we terminate Mr. DeStefano, Ms. Butler, Mr. Rowland or Mr. Schwab without cause, or with respect to Mr. Rowland and Mr. Schwab only, the executive resigns for good reason, subject to the executive timely executing a release of claims, the executive is entitled to receive (i) base salary continuation for 12 months (or 24 months for Mr. DeStefano); and (ii) direct payment of, or additional cash payments equal to, the premiums for continued health coverage for up to 18 months. Mr. DeStefano is also entitled to an additional lump sum payment equal to 12 months of health coverage premiums in the event he has not become eligible for health insurance coverage from a subsequent employer by the date that is 15 months following such termination of employment.

Notwithstanding the foregoing, any continued base salary payments for Mr. DeStefano, Mr. Rowland and Mr. Schwab will be reduced by any salary or bonus paid to the executive by a subsequent employer during the applicable severance period.

The receipt of severance payments and benefits for Mr. DeStefano, Mr. Rowland and Mr. Schwab is also subject to the executive's continued compliance with certain restrictive covenants and confidentiality obligations as described below under "Restrictive Covenants." In the event of a material breach of such covenants by Mr. DeStefano, Mr. Rowland or Mr. Schwab, subject to certain cure rights, the executive's right to receive any of the severance payments or benefits described above will cease and the executive will be obligated to repay to the company any such payments or benefits previously paid.

Each of Mr. DeStefano, Ms. Butler, Mr. Rowland and Mr. Schwab is entitled to 30 days' notice, or pay in lieu of notice, in the event we terminate the executive for any reason other than cause.

For purposes of the employment agreements, "cause" generally means, subject to certain notice and cure rights, the executive's (i) material breach of the employment agreement; (ii) repeated failure to perform duties to the company or any subsidiary; (iii) willful misconduct that is materially injurious to the company or any subsidiary (or for Mr. Rowland and Mr. Schwab, willful misconduct or gross negligence with regard to the company, any subsidiary or their business, assets or employees); (iv) dishonesty, unethical, fraudulent or similar misconduct in connection with the executive's employment or service; (v) use of non-prescription controlled substances, misuse of prescription drugs, or habitual intoxication during work hours; (vi) other than for Ms. Butler, indictment for any felony that has or is reasonably likely to cause material adverse consequences to the company, its businesses or prospects; (vii) conviction, guilty plea or plea of nolo contendere to a felony or any crime involving fraud, dishonesty or moral turpitude; (viii) material violation of any company policy; (ix) refusal to follow any reasonable and lawful direction of the board of directors or any person to whom the executive reports, if applicable; or (x) for Mr. Rowland only, breach of a fiduciary duty owed to the company in good faith.

For purposes of the employment agreements with Mr. Rowland and Mr. Schwab, "good reason" is generally defined to mean, subject to certain notice and cure rights, (i) a material diminution in the

executive's duties that is inconsistent with the duties of his position; and (ii) for Mr. Schwab only, the company's material breach of the employment agreement.

Restrictive Covenants

Pursuant to their employment agreements, the executives have agreed to refrain from competing with us or soliciting our employees, customers, clients or prospects, in each case, while employed and following termination of employment for a period of 24 months for Mr. DeStefano or 12 months for Ms. Butler, Mr. Rowland and Mr. Schwab. During the applicable restricted period, the executives are also obligated to disclose to us certain business opportunities that relate to the business of the company, its subsidiaries or affiliates. The executives are also bound by certain confidentiality and assignment of inventions obligations.

Recent Changes in Executive Compensation

In connection with this offering, we expect to enter into amended and restated employment agreements with Mr. DeStefano, Ms. Butler, Mr. Rowland and Mr. Schwab and to grant certain equity awards to these individuals, each as described in more detail below.

Executive Employment Agreements

We expect to enter into an amended and restated employment agreement with each of Mr. DeStefano, Ms. Butler, Mr. Rowland and Mr. Schwab that will supersede the executive's prior employment agreement with us effective on the closing of this offering.

Mr. DeStefano's amended and restated employment agreement will have an initial term of three years and will automatically renew for successive two year periods unless 60 days' prior notice of non-renewal is given by either party. The terms of Mr. DeStefano's amended and restated employment agreement are substantially the same as Mr. DeStefano's prior employment agreement with us as described above under "Executive Compensation Arrangements", except that (i) Mr. DeStefano's annual base salary will be \$572,018, (ii) Mr. DeStefano's rights to severance payments and benefits will also apply in the event he resigns for good reason, (iii) the continued base salary component of his severance payments will no longer be reduced by compensation paid to him by a subsequent employer during the severance period, (iv) the release of claims that Mr. DeStefano must execute to receive any severance payments and benefits is no longer mutual and (v) Mr. DeStefano will no longer be entitled to certain supplemental executive benefits, including supplemental life and disability coverage and the annual reimbursement for those certain business and personal expenses described above under "Other Elements of Compensation—Perquisites and Other Personal Benefits—Supplemental Perquisites".

The terms of Ms. Butler's, Mr. Rowland's and Mr. Schwab's amended and restated employment agreements are substantially the same as their prior employment agreements with us as described above under "Executive Compensation Arrangements", except that (i) Ms. Butler's annual base salary will be \$302,679, Mr. Rowland's annual base salary will be \$265,313 and Mr. Schwab's annual base salary will be \$421,625, (ii) for Ms. Butler, her rights to severance payments and benefits will also apply in the event she resigns for good reason and, for Mr. Rowland and Mr. Schwab, the definition of "good reason" was expanded as further described below, (iii) for Mr. Rowland and Mr. Schwab, the continued base salary components of their severance payments will no longer be reduced by compensation paid by a subsequent employer during the severance period; (iv) for Ms. Butler, the receipt of severance payments and benefits is subject to her continued compliance with certain restrictive covenants and confidentiality obligations, and (v) the executives will no longer be entitled to certain supplemental executive benefits, including supplemental life and disability coverage.

For purposes of the amended and restated employment agreements, "good reason" generally means, subject to certain notice and cure rights, any action taken by us that causes (i) a material breach of the employment agreement, (ii) the material diminution of the executive's duties, (iii) a

material decrease in the executive's annual base salary, or (iv) any relocation of the executive's principal office by more than fifty (50) miles.

IPO Grants to Named Executive Officers

In connection with this offering, we intend to grant each of our U.S.-based employees, including our named executive officers, an award of restricted stock under the 2020 Incentive Award Plan covering a number of shares determined by dividing \$1,000 by the initial public offering price per share of the Class A common stock in this offering, with any partial shares that result being rounded up to the nearest whole share. The shares of restricted stock will vest on the first anniversary of the date the registration statement of which this prospectus forms a part becomes effective, subject to continued service to the company through the vesting date.

In addition, we intend to grant to Mr. DeStefano an award of restricted stock under the 2020 Incentive Award Plan covering a number of shares determined by dividing \$4,000,000 by the initial public offering price per share of the Class A common stock in this offering, with any partial shares that result being rounded up to the nearest whole share. The shares of restricted stock granted to Mr. DeStefano will vest in substantially equal installments on each of the first, second and third anniversaries of the date the registration statement of which this prospectus forms a part becomes effective, subject to continued service to the company through each applicable vesting date. We intend to grant to each of Ms. Butler, Mr. Rowland and Mr. Schwab fully vested shares of stock under the 2020 Plan covering a number of shares determined by dividing \$50,000 by the initial public offering price per share of the Class A common stock in this offering, with any partial shares that result being rounded up to the nearest whole share.

Director Compensation

The non-employee members of our board of directors are eligible to receive compensation for their service on our board of directors. The 2019 compensation for the non-employee members of our board of directors consisted of (i) an annual director fee of \$112,910 (or \$80,000 for directors who commenced service on the board of directors in 2018 or 2019); (ii) additional annual fees for committee service of \$6,300 for service on a board committee (other than the chair) or \$12,600 for service as chair of a board committee; and (iii) consulting fees in the amount of \$500 per hour for additional board services beyond the scope of a director's customary service as a member of the board of directors. In addition, during 2019 the non-employee directors were eligible to receive a discretionary annual bonus targeted at \$120,000 and payable as to seventy-five percent (75%) in cash and twenty-five percent (25%) in stock appreciation rights. The amount of the annual bonus was determined based on the company's performance against the financial and non-financial goals under the Organizational Bonus Plan for the given year, although the company's stockholders retained discretion to increase or decrease the actual bonuses awarded to the directors. The stockholders did not exercise this discretion with respect to the 2019 bonuses and the actual annual bonuses awarded to each non-employee director for 2019 are set forth in the Director Compensation Table below in the column entitled "Non-Equity Incentive Plan Compensation." See the section of this prospectus titled "—Cash-Based Incentive Compensation" above for a description of company performance under the Organization Bonus Plan for 2019.

During 2019, Ms. Radcliffe, Ms. Thompson and Mr. Westphal were our employees and also members of the board of directors and received no additional compensation for their service on the board of directors. Effective June 1, 2020, Ms. Radcliffe, Ms. Thompson and Mr. Westphal no longer serve as our employees. See "Certain Relationships and Related Party Transactions" section below for information regarding their employment arrangements with the company.

The following table sets forth information concerning the compensation of our non-employee directors for their service on our board of directors for the year ended December 31, 2019.

<u>Name</u>	<u>Fees Earned or Paid in Cash⁽¹⁾</u>	<u>Option Awards⁽²⁾</u>	<u>Non-Equity Incentive Plan Compensation⁽³⁾</u>	<u>All Other Compensation⁽⁴⁾</u>	<u>Total⁽⁵⁾</u>
Ric Andersen	131,838	—	196,390	84,000	412,228
Terence Kyle	149,838	—	196,390	146,785	493,013
Kevin Robert	131,838	—	196,390	28,625	356,853
Rick Stamm	86,835	—	105,400	41,634	233,869

- (1) Includes annual fees for service on the board of directors and committees of the board.
- (2) During 2019, Mr. Andersen, Mr. Kyle and Mr. Robert were each granted 26,186 stock appreciation rights and Mr. Stamm was granted 14,041 stock appreciation rights. As a nonpublic business entity, these stock appreciation rights were recorded at their intrinsic value of zero on date of grant. The company accounts for stock appreciation rights as liabilities under ASC Topic 718 and recognizes stock-based compensation expense by remeasuring the stock appreciation rights at the end of each reporting period and accruing the portion of the requisite service rendered at that date. We provide information regarding the accounting value of all stock appreciation rights in Note 1 to the consolidated financial statements included in this prospectus.
- (3) Includes the cash portion of the director annual bonus for 2019.
- (4) For all non-employee directors, the amount shown includes fees for consulting services, including \$24,000 for services to the company regarding guidance in connection with this initial public offering.

The table below shows the aggregate numbers of options and stock appreciation rights (exercisable and unexercisable) held as of December 31, 2019 by each non-employee director who was serving as of December 31, 2019, all of which are fully vested. None of our non-employee directors held unvested stock awards as of December 31, 2019.

<u>Name</u>	<u>Stock Appreciation Rights Vested and Outstanding at Fiscal Year End^(#)</u>	<u>Options Vested and Outstanding at Fiscal Year End^(#)</u>
Ric Andersen	80,186	0
Terrence Kyle	83,778	91,000
Kevin Robert	80,186	0
Rick Stamm	14,041	0

We expect that all of the options and SARs held by our non-employee directors will become options to purchase shares of our Class A common stock in connection with this offering. For additional information regarding the amendment of outstanding options and SARs, please see the section above titled "Equity Compensation" and the section below titled "Incentive Compensation Plans—2007 Stock Appreciation Rights Plan" below.

Shares issued to Mr. Kyle upon the exercise of options to purchase Class A common stock may be sold by Mr. Kyle in the event the underwriters exercise their option to purchase additional shares in this offering. For additional information, including the maximum number of shares that may be sold by Mr. Kyle if the underwriters exercise the over-allotment option in full, see the sections titled "Principal and Selling Stockholders" and "Underwriting."

Non-Employee Director Compensation Program

In connection with this offering, our board of directors approved a new compensation program for our non-employee directors. Under this program our non-employee directors receive the following amounts for their services on our board of directors:

- If a director (i) is initially elected or appointed to our board of directors at an annual meeting of stockholders or (ii) has served on our board of directors as of the date of an annual meeting of stockholders and will continue to serve as a director immediately following such meeting, a number of restricted stock units on the date of the annual meeting determined by dividing \$150,000 by the closing price of our common stock on the date of the annual meeting (with any partial shares that result rounded up to the nearest whole share);
- An annual director fee of \$42,000;
- If the director serves as lead independent director or chair or on a committee of our board of directors, an additional annual fee as follows:
 - Chair of the board of directors or lead independent director: \$15,000;
 - Chair of the audit committee: \$20,000;
 - Audit committee member other than the chair, \$10,000;
 - Chair of the compensation committee, \$15,000;
 - Compensation committee member other than the chair, \$6,000;
 - Chair of the nominating and corporate governance committee, \$12,000; and
 - Nominating and corporate governance committee member other than the chair, \$6,000.

Director fees under the program will be earned and paid monthly. Restricted stock units represent the right to receive one share (or an equal amount in cash) following vesting of the award as described in further detail below in the section entitled "Incentive Compensation Plans—2020 Incentive Award Plan—Awards—Restricted Stock and RSUs." Restricted stock units granted to our non-employee directors under the program will vest in a single installment on the earlier of the day before the next annual meeting or the first anniversary of the date of grant, subject to continued service as a non-employee member of our board through the applicable vesting date and accelerated vesting upon a change in control of the company.

IPO Grants to Non-Employee Directors

In connection with this offering, we intend to grant our non-employee directors awards of restricted stock under the 2020 Plan in the amounts set forth in the table below under the heading "Value of Annual Award for 2020" as part of their annual compensation for service on the board during 2020. In addition, in recognition of their significant contributions to the Company in connection with this offering, Mr. Andersen, Mr. Kyle and Mr. Stamm will be granted one-time awards in the amounts set forth in the table below under the heading "Value of One-Time IPO Award". The number of shares subject to each award will be determined by dividing the amounts shown in the table below for such director by the initial public offering price per share of the Class A common stock in this offering, with any partial shares that result being rounded up to the nearest whole share. The shares of restricted stock will vest on the earlier of the day before the next annual meeting of the Company's stockholders occurring after the date of grant or the first anniversary of the date of grant, subject to

such director's continued service as a non-employee member of our board of directors through the applicable vesting date and accelerated vesting upon a change in control.

<u>Name</u>	<u>Value of Annual Award for 2020</u>	<u>Value of One-Time IPO Award</u>
Ric Andersen	\$ 225,000	\$ 1,700,000
Terrence Kyle	\$ 225,000	\$ 500,000
Kevin Robert	\$ 225,000	—
Rick Stamm	\$ 225,000	\$ 900,000
Jeffrey Westphal	\$ 150,000	—
Amanda Westphal Radcliffe	\$ 150,000	—
Stefanie Westphal Thompson	\$ 150,000	—

Incentive Compensation Plans

The following summarizes the material terms of 2020 Plan and the 2020 Employee Stock Purchase Plan, which will be the long-term incentive compensation plans in which our directors and named executive officers will be eligible to participate following the consummation of this offering, and the Third Amended and Restated 2007 Stock Appreciation Rights Plan, under which we have previously made periodic grants of stock appreciation rights to our directors and named executive officers.

2020 Incentive Award Plan

Effective on the effective date of the registration statement of which this prospectus forms a part, we adopted and our stockholders approved the 2020 Plan under which we may grant cash and equity-based incentive awards to eligible service providers in order to attract, retain and motivate the persons who make important contributions to the company. The material terms of the 2020 Plan are summarized below.

Eligibility and Administration. Our employees, consultants and directors, and employees and consultants of our subsidiaries will be eligible to receive awards under the 2020 Plan. The 2020 Plan will be administered by our board of directors with respect to awards to non-employee directors and by our compensation committee with respect to other participants, each of which may delegate its duties and responsibilities to committees of our directors and/or officers (referred to collectively as the plan administrator below), subject to the limitations that may be imposed under the 2020 Plan, Section 16 of the Exchange Act, stock exchange rules and other applicable laws. The plan administrator will have the authority to take all actions and make all determinations under the 2020 Plan, to interpret the 2020 Plan and award agreements and to adopt, amend and repeal rules for the administration of the 2020 Plan as it deems advisable. The plan administrator will also have the authority to determine which eligible service providers receive awards, grant awards and set the terms and conditions of all awards under the 2020 Plan, including any vesting and vesting acceleration provisions, subject to the conditions and limitations in the 2020 Plan.

Shares Available. An aggregate of _____ shares of our Class A common stock will initially be available for issuance under the 2020 Plan. The number of shares initially available for issuance will be increased by an annual increase on January 1 of each calendar year beginning in 2021 and ending in and including 2030, equal to the lesser of (A) _____ % of the shares of Class A and Class B common stock outstanding on the final day of the immediately preceding calendar year and (B) a smaller number of shares as determined by our board of directors. No more than _____ shares of Class A common stock may be issued under the 2020 Plan upon the exercise of incentive stock options. Shares available under the 2020 Plan may be authorized but unissued shares, shares purchased on the open market or treasury shares.

If an award under the 2020 Plan expires, lapses or is terminated, exchanged for cash, surrendered, repurchased, or canceled without having been fully exercised or forfeited, any unused shares subject to the award will again be available for new grants under the 2020 Plan. Awards granted under the 2020 Plan in substitution for any options or other stock or stock-based awards granted by an entity before the entity's merger or consolidation with us or our acquisition of the entity's property or stock will not reduce the shares available for grant under the 2020 Plan, but will count against the maximum number of shares that may be issued upon the exercise of incentive stock options.

Awards. The 2020 Plan provides for the grant of stock options, including incentive stock options ("ISOs") and nonqualified stock options ("NSOs"), SARs, restricted stock, dividend equivalents, RSUs, and other stock or cash based awards. Certain awards under the 2020 Plan may constitute or provide for payment of "nonqualified deferred compensation" under Section 409A of the Code. All awards under the 2020 Plan will be set forth in award agreements, which will detail the terms and conditions of awards, including any applicable vesting and payment terms and post-termination exercise limitations. A brief description of each award type follows.

- **Stock Options and SARs.** Stock options provide for the purchase of shares of our Class A common stock in the future at an exercise price set on the grant date. ISOs, by contrast to NSOs, may provide tax deferral beyond exercise and favorable capital gains tax treatment to their holders if certain holding period and other requirements of the Code are satisfied. SARs entitle their holder, upon exercise, to receive from us an amount equal to the appreciation of the shares subject to the award between the grant date and the exercise date. The plan administrator will determine the number of shares covered by each option and SAR, the exercise price of each option and SAR and the conditions and limitations applicable to the exercise of each option and SAR. The exercise price of a stock option or SAR will not be less than 100% of the fair market value of the underlying share on the grant date (or 110% in the case of ISOs granted to certain significant stockholders), except with respect to certain substitute awards granted in connection with a corporate transaction. The term of a stock option or SAR may not be longer than ten years (or five years in the case of ISOs granted to certain significant stockholders).
- **Restricted Stock and RSUs.** Restricted stock is an award of nontransferable shares of our Class A common stock that remain forfeitable unless and until specified conditions are met and which may be subject to a purchase price. RSUs are contractual promises to deliver shares of our Class A common stock in the future, which may also remain forfeitable unless and until specified conditions are met and may be accompanied by the right to receive the equivalent value of dividends paid on shares of our Class A common stock prior to the delivery of the underlying shares. The plan administrator may provide that the delivery of the shares underlying RSUs will be deferred on a mandatory basis or at the election of the participant. The terms and conditions applicable to restricted stock and RSUs will be determined by the plan administrator, subject to the conditions and limitations contained in the 2020 Plan.
- **Other Stock or Cash Based Awards.** Other stock or cash based awards are awards of cash, fully vested shares of our Class A common stock and other awards valued wholly or partially by referring to, or otherwise based on, shares of our Class A common stock or other property. Other stock or cash based awards may be granted to participants and may also be available as a payment form in the settlement of other awards, as standalone payments and as payment in lieu of compensation to which a participant is otherwise entitled. The plan administrator will determine the terms and conditions of other stock or cash based awards, which may include any purchase price, performance goal, transfer restrictions and vesting conditions.

Performance Criteria. The plan administrator may select performance criteria for an award to establish performance goals for a performance period. Performance criteria under the 2020 Plan may

include, but are not limited to, the following: net earnings or losses (either before or after one or more of interest, taxes, depreciation, amortization, and non-cash equity-based compensation expense); gross or net sales or revenue or sales or revenue growth; net income (either before or after taxes) or adjusted net income; profits (including but not limited to gross profits, net profits, profit growth, net operation profit or economic profit), profit return ratios or operating margin; budget or operating earnings (either before or after taxes or before or after allocation of corporate overhead and bonus); cash flow (including operating cash flow and free cash flow or cash flow return on capital); return on assets; return on capital or invested capital; cost of capital; return on stockholders' equity; total stockholder return; return on sales; costs, reductions in costs and cost control measures; expenses; working capital; earnings or loss per share; adjusted earnings or loss per share; price per share or dividends per share (or appreciation in or maintenance of such price or dividends); regulatory achievements or compliance; implementation, completion or attainment of objectives relating to research, development, regulatory, commercial, or strategic milestones or developments; market share; economic value or economic value added models; division, group or corporate financial goals; customer satisfaction/growth; customer service; employee satisfaction; recruitment and maintenance of personnel; human resources management; supervision of litigation and other legal matters; strategic partnerships and transactions; financial ratios (including those measuring liquidity, activity, profitability or leverage); debt levels or reductions; sales-related goals; financing and other capital raising transactions; cash on hand; acquisition activity; investment sourcing activity; and marketing initiatives, any of which may be measured in absolute terms or as compared to any incremental increase or decrease. Such performance goals also may be based solely by reference to the company's performance or the performance of a subsidiary, division, business segment or business unit of the company or a subsidiary, or based upon performance relative to performance of other companies or upon comparisons of any of the indicators of performance relative to performance of other companies. When determining performance goals, the plan administrator may provide for exclusion of the impact of an event or occurrence which the plan administrator determines should appropriately be excluded, including, without limitation, non-recurring charges or events, acquisitions or divestitures, changes in the corporate or capital structure, events unrelated to the business or outside of the control of management, foreign exchange considerations, and legal, regulatory, tax or accounting changes.

Certain Transactions. In connection with certain corporate transactions and events affecting our Class A common stock, including a change in control, or change in any applicable laws or accounting principles, the plan administrator has broad discretion to take action under the 2020 Plan to prevent the dilution or enlargement of intended benefits, facilitate the transaction or event or give effect to the change in applicable laws or accounting principles. This includes canceling awards for cash or property, accelerating the vesting of awards, providing for the assumption or substitution of awards by a successor entity, adjusting the number and type of shares subject to outstanding awards and/or with respect to which awards may be granted under the 2020 Plan and replacing or terminating awards under the 2020 Plan. In addition, in the event of certain non-reciprocal transactions with our stockholders, the plan administrator will make equitable adjustments to the 2020 Plan and outstanding awards as it deems appropriate to reflect the transaction. In the event of a change in control of the company (as defined in the 2020 Plan), to the extent that the surviving entity declines to continue, convert, assume or replace outstanding awards, then all such awards may become fully vested and exercisable in connection with the transaction. Individual award agreements may provide for additional accelerated vesting and payment provisions.

Provisions of the 2020 Plan Relating to Director Compensation. The 2020 Plan provides that the plan administrator may establish compensation for non-employee directors from time to time subject to the 2020 Plan's limitations. In connection with this offering, our board of directors approved a compensation program for our non-employee directors. Our board of directors or its authorized committee may modify the non-employee director compensation program from time to time in the exercise of its business judgment, taking into account such factors, circumstances and considerations as

it shall deem relevant from time to time, provided that the sum of any cash compensation or other compensation and the grant date fair value of any equity awards granted under the 2020 Plan as compensation for services as a non-employee director during any fiscal year may not exceed \$750,000, excluding cash and other compensation awarded prior to the effective date of the 2020 Plan, compensation awarded in connection with this offering and compensation granted to a non-employee director who serves in a capacity in addition to that of non-employee director for which he or she receives additional compensation. The plan administrator may make exceptions to this limit for individual non-employee directors in extraordinary circumstances, as the plan administrator may determine in its discretion, subject to the limitations in the 2020 Plan.

Foreign Participants, Claw-Back Provisions, Transferability, and Participant Payments. The plan administrator may modify awards granted to participants who are foreign nationals or employed outside the United States or establish subplans or procedures to address differences in laws, rules, regulations or customs of such foreign jurisdictions. All awards will be subject to any company claw-back policy as set forth in such claw-back policy or the applicable award agreement. Except as the plan administrator may determine or provide in an award agreement, awards under the 2020 Plan are generally non-transferrable, except by will or the laws of descent and distribution, or, subject to the plan administrator's consent, pursuant to a domestic relations order and are generally exercisable only by the participant. With regard to tax withholding obligations arising in connection with awards under the 2020 Plan and exercise price obligations arising in connection with the exercise of stock options under the 2020 Plan, the plan administrator may, in its discretion, accept cash, wire transfer or check, shares of our common stock that meet specified conditions, a promissory note, a "market sell order," such other consideration as the plan administrator deems suitable or any combination of the foregoing.

Plan Amendment and Termination. Our board of directors may amend or terminate the 2020 Plan at any time; however, no amendment, other than an amendment that increases the number of shares available under the 2020 Plan, may materially and adversely affect an award outstanding under the 2020 Plan without the consent of the affected participant and stockholder approval will be obtained for any amendment to the extent necessary to comply with applicable laws. Further, the plan administrator may not, without the approval of our stockholders, amend any outstanding stock option or SAR to reduce its price per share, other than in the context of corporate transactions or equity restructurings, as described above. The 2020 Plan will remain in effect until the tenth anniversary of the earlier of the date the board of directors adopted the 2020 Plan and the date the Company's stockholders approved the 2020 Plan, unless earlier terminated by our board of directors. No awards may be granted under the 2020 Plan after its termination.

2020 Employee Stock Purchase Plan

Effective on the effective date of the registration statement of which this prospectus forms a part, we adopted and our stockholders approved the 2020 Employee Stock Purchase Plan (the "2020 ESPP"), the material terms of which are summarized below.

The 2020 ESPP is comprised of two distinct components in order to provide increased flexibility to grant options to purchase shares under the 2020 ESPP to U.S. and non-U.S. employees. Specifically, the 2020 ESPP authorizes (1) the grant of options to U.S. employees that are intended to qualify for favorable U.S. federal tax treatment under Section 423 of the Code (the "Section 423 Component"), and (2) the grant of options that are not intended to be tax-qualified under Section 423 of the Code to facilitate participation for employees located outside of the U.S. who do not benefit from favorable U.S. federal tax treatment and to provide flexibility to comply with non-U.S. law and other considerations (the "Non-Section 423 Component"). Where permitted under local law and custom, we expect that the Non-Section 423 Component will generally be operated and administered on terms and conditions similar to the Section 423 Component.

Shares Available for Awards; Administration. A total of _____ shares of our Class A common stock will initially be reserved for issuance under the 2020 ESPP. In addition, the number of shares available for issuance under the 2020 ESPP will be annually increased on January 1 of each calendar year beginning in 2021 and ending in and including 2030, by an amount equal to the lesser of (A) _____ % of the shares of Class A and Class B common stock outstanding on the final day of the immediately preceding calendar year and (B) such smaller number of shares as is determined by our board of directors, provided that no more than _____ shares of our Class A common stock may be issued under the Section 423 Component. Our board of directors or a committee of our board of directors will administer and will have authority to interpret the terms of the 2020 ESPP and determine eligibility of participants. We expect that the compensation committee will be the initial administrator of the 2020 ESPP.

Eligibility. We expect that all of our employees will be eligible to participate in the 2020 ESPP. However, an employee may not be granted rights to purchase stock under our 2020 ESPP if the employee, immediately after the grant, would own (directly or through attribution) stock possessing 5% or more of the total combined voting power or value of all classes of our stock.

Grant of Rights. Stock will be offered under the 2020 ESPP during offering periods. The length of the offering periods under the 2020 ESPP will be determined by the plan administrator and may be up to twenty-seven months long. Employee payroll deductions will be used to purchase shares on each purchase date during an offering period. The purchase dates for each offering period will be the final trading day in the offering period. Offering periods under the 2020 ESPP will commence when determined by the plan administrator. We expect the initial offering period under the 2020 ESPP to commence on the first public trading date of our Class A common stock. The plan administrator may, in its discretion, modify the terms of future offering periods. In non-U.S. jurisdictions where participation in the 2020 ESPP through payroll deductions is prohibited, the plan administrator may provide that an eligible employee may elect to participate through contributions to the participant's account under the 2020 ESPP in a form acceptable to the 2020 ESPP administrator in lieu of or in addition to payroll deductions.

The 2020 ESPP permits participants to purchase Class A common stock through payroll deductions of up to a specified percentage of their eligible compensation, provided that participants will be permitted to make lump sum contributions to the 2020 ESPP during the initial offering period. The plan administrator will establish a maximum number of shares that may be purchased by a participant during any offering period. In addition, no employee will be permitted to accrue the right to purchase stock under the Section 423 Component at a rate in excess of \$25,000 worth of shares during any calendar year during which such a purchase right is outstanding (based on the fair market value per share of our Class A common stock as of the first day of the offering period).

On the first trading day of each offering period, each participant will automatically be granted an option to purchase shares of our Class A common stock. The option will expire at the end of the applicable offering period, and will be exercised at that time to the extent of the payroll deductions (or contributions) accumulated during the offering period. The purchase price of the shares, in the absence of a contrary designation, will be 85% of the lower of the fair market value of our Class A common stock on the first trading day of the offering period or on the purchase date. Participants may voluntarily end their participation in the 2020 ESPP at any time during a specified period prior to the end of the applicable offering period, and will be paid their accrued payroll deductions (and contributions, if applicable) that have not yet been used to purchase shares of Class A common stock. Participation ends automatically upon a participant's termination of employment.

A participant may not transfer rights granted under the 2020 ESPP other than by will or the laws of descent and distribution, and are generally exercisable only by the participant.

Certain Transactions. In the event of certain non-reciprocal transactions or events affecting our Class A common stock, the plan administrator will make equitable adjustments to the 2020 ESPP and outstanding rights. In the event of certain unusual or non-recurring events or transactions, including a change in control, the plan administrator may provide for (1) either the replacement of outstanding rights with other rights or property or termination of outstanding rights in exchange for cash, (2) the assumption or substitution of outstanding rights by the successor or survivor corporation or parent or subsidiary thereof, if any, (3) the adjustment in the number and type of shares of stock subject to outstanding rights, (4) the use of participants' accumulated payroll deductions to purchase stock on a new purchase date prior to the next scheduled purchase date and termination of any rights under ongoing offering periods or (5) the termination of all outstanding rights.

Plan Amendment. The plan administrator may amend, suspend or terminate the 2020 ESPP at any time. However, stockholder approval will be obtained for any amendment that increases the aggregate number or changes the type of shares that may be sold pursuant to rights under the 2020 ESPP or changes the corporations or classes of corporations whose employees are eligible to participate in the 2020 ESPP.

2007 Stock Appreciation Rights Plan

Our board of directors has approved our Third Amended and Restated 2007 Stock Appreciation Rights Plan (the "2007 Plan"), under which we have granted SARs to employees of the company or its subsidiaries and our directors.

In connection with this offering, holders of outstanding SARs were offered the opportunity to amend outstanding SARs, whether vested or unvested, so that they become options to purchase shares of our Class A common stock. These options will cover an equal number of shares as the amended SARs and have an exercise price per share equal to the base price of an amended SAR, subject to any stock split that occurs in connection with this offering. Options resulting from the amendment of SARs that do not have an expiration date or SARs that expire during calendar year 2020 will automatically be exercised in connection with this offering for shares of our Class A common stock. All or a portion of such shares may be sold to us in connection with this offering. Options resulting from the amendment of SARs that have an expiration date after calendar year 2020 will not be automatically exercised in connection with this offering. Such options will be governed by the 2020 Plan and the applicable award agreement and, to the extent unvested, will vest pursuant to the same vesting schedule that applied to the amended SARs.

Our board of directors, or a committee of the board, administers the 2007 Plan. Subject to the express terms and conditions of the 2007 Plan, the plan administrator has the authority to make all determinations and interpretations under the 2007 Plan and determine the terms and conditions of all awards under the 2007 Plan.

In the event of the issuance of additional shares by the company, which has the effect of diluting the value of the common stock, the plan administrator has broad discretion to adjust the terms and conditions of existing awards under the 2007 Plan as it deems appropriate and equitable to ameliorate the effect of such dilution. Additionally, the plan administrator may make adjustments to existing awards in recognition of unusual or non-recurring events affecting the company or any subsidiary to prevent substantial dilution or enlargement of the rights of participants under the 2007 Plan.

Following the consummation of this offering, we will not make any further grants under the 2007 Plan, no SARs will remain outstanding under the 2007 Plan and the board of directors may terminate the 2007 Plan at any time.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Stockholders' Agreement

Upon the completion of this offering, our principal stockholders, Amanda Westphal Radcliffe, Stefanie Westphal Thompson and Jeffrey Westphal, each of whom serves as a member of our board of directors, together with their affiliated trust entities and family members, intend to enter into an Amended and Restated Stockholders' Agreement (the "Stockholders' Agreement") with these terms:

Transfer Restrictions

The parties to the Stockholders' Agreement will not transfer shares of our Class B common stock except: (i) to another holder of our Class B common stock; (ii) to Amanda Westphal Radcliffe, Stefanie Westphal Thompson or Jeffrey Westphal or their family members or affiliates, as described in the Stockholders' Agreement; (iii) to the Company; (iv) or in an underwritten public offering or other transaction approved by a majority of the disinterested members of our board of directors or a committee of our board of directors authorized to take such action ("Permitted Transfers"). Each party to whom Class B common stock is transferred will be required to become a party to the Stockholders' Agreement, if they are not a party already. Each share of our Class B common stock will convert automatically into one share of our Class A common stock upon any transfer, whether or not for value, except for transfers to Amanda Westphal Radcliffe, Stefanie Westphal Thompson and Jeffrey Westphal or their family members or affiliates, as described in our amended and restated certificate of incorporation.

Right of First Offer / Refusal

Before transferring any shares of our Class B common stock, other than through a Permitted Transfer, the party transferring the shares must offer them, first, to the other stockholder parties and, next, to the Company. If neither of those offers is accepted, the selling stockholder may then transfer the shares to someone else. If any party receives an offer from someone who is not a party to the Stockholders' Agreement to purchase some or all of their Class B common stock, that person must give the other parties notice of the offer and an opportunity to purchase the shares on the same terms.

Subscription Rights

The parties to the Stockholders' Agreement will have the right, but not the obligation, to purchase a number of shares of Class A common stock up to their proportionate interest of any new shares of Class A common stock, or any securities convertible into, exercisable for, or exchangeable for Class A common stock issued in a private offering, other than securities (including either shares of Class A common stock or Class B common stock) issued in connection with stock splits, stock dividends, in-kind equity distributions, recapitalizations and stockholders' rights plans, or a greater amount if any of the other parties to the Stockholders' Agreement do not elect to purchase their proportionate share of the newly issued securities.

Registration Rights

After our initial public offering and the expiration of any related lock-up period, any stockholder party to the Stockholders' Agreement can require us to register under the Securities Act shares of our common stock held by them if the anticipated aggregated offering amount exceeds \$50.0 million subject to certain limitations. They will also have shelf registration rights requiring us, when we are eligible for short-form registration, to file a shelf registration statement and to keep it effective to allow sales from time to time. They will also be entitled to participate as selling stockholders on a pro rata basis in any registration of our common stock under the Securities Act that we may undertake. We will pay

expenses relating to these registrations and will indemnify the parties participating in these offerings against liabilities that may arise from the offering process.

Standstill

For so long as any stockholder party to the Stockholders' Agreement owns any shares of Class B common stock, the party will not engage or participate in: (i) acquiring the Company's securities (other than through market-based purchases of up to 2% of outstanding equity in any 12-month period, the exercise or conversion of outstanding securities or equity awards); (ii) any tender or exchange offer, merger or other business combination involving the Company, any of our subsidiaries or affiliates or our assets constituting a significant portion of the consolidated assets of the Company and its subsidiaries or affiliates; (iii) any recapitalization, restructuring, liquidation, dilution or other extraordinary transaction involving the Company; or (iv) the solicitation of any proxies or written consents involving the Company. The parties must promptly inform the board of directors about any approaches by a third party regarding any of these matters. The board of directors and holders of a majority of the Class B common stock may agree to waive the standstill prohibition.

Director Designation Rights

For so long as Amanda Westphal Radcliffe, Stefanie Westphal Thompson or Jeffrey Westphal, in each case together with his or her children and related trusts, owns at least five percent of our outstanding common stock, he or she each shall be entitled to designate one individual, including themselves, to serve as a member of our board of directors, and we will be required to use our best efforts to include the designee in the slate of nominees recommended to our stockholders for election as a director at the next annual or special meeting of stockholders.

Director Voting

At any general or special meeting of the stockholders involving the election of directors, each stockholder party to the Stockholders' Agreement must vote all of his or her shares of stock in favor of each individual nominated by the parties to the Stockholders' Agreement. For all matters other than the election of directors, voting shall be discretionary at the option of each stockholder.

Tax Sharing Agreement

Prior to this offering, we have elected to be treated as an S Corporation for U.S. federal income tax purposes, as a result of which our existing stockholders have been required to pay income taxes attributable to our earnings. We have historically paid distributions to our existing stockholders, which have assisted them in paying such income taxes. In connection with this offering, our S Corporation status will terminate and we will thereafter be subject to federal and increased U.S. state income taxes. Our existing stockholders may be required to pay additional income taxes for periods prior to the termination of our S Corporation status as a result of an adjustment to our taxable income for periods beginning after our S Corporation status terminates. Accordingly, we intend to enter into an agreement with our existing stockholders in connection with this offering. Under this agreement, we may be required to make payments in material amounts to our existing stockholders with respect to any incremental income taxes resulting from an adjustment to our taxable income for any period beginning after our S Corporation status terminates. Furthermore, this agreement requires us to indemnify our existing stockholders with respect to unpaid income tax liabilities attributable to our taxable income for any period after the termination of our S Corporation status. We will also indemnify our existing stockholders for any interest, penalties, losses, costs or expenses arising out of any claim under the agreement. However, our existing stockholders will indemnify us with respect to our unpaid tax liabilities (including interest and penalties) to the extent that such unpaid tax liabilities are attributable

to a decrease in our existing stockholders' taxable income for any period and a corresponding increase in our taxable income for any period.

Indemnification Agreements

Our amended and restated certificate of incorporation will provide that we will indemnify our directors and officers to the fullest extent permitted by law. In addition, we expect to enter into indemnification agreements with all of our directors and executive officers prior to the completion of this offering. See "Description of Capital Stock—Limitation on Liability of Directors and Indemnification."

Compensation Arrangements

For a description of the compensation arrangements we have with our executive officers, see "Executive Compensation."

In connection with their service as employees of the Company, each of Stefanie Westphal Thompson, Amanda Westphal Radcliffe and Jeffrey Westphal received annual salaries of \$120,191 in 2019, 2018 and 2017 and were also entitled to participate in the Company's standard health, insurance and retirement benefits plans. Effective June 1, 2020, Ms. Radcliffe, Ms. Thompson and Mr. Westphal no longer serve as our employee.

Distributions

During the years ended December 31, 2019, December 31, 2018 and December 31, 2017, we paid distributions of \$28.6 million, \$28.0 million and \$17.6 million, respectively, to our stockholders.

Class B Share Purchase

Jeffrey Westphal, Amanda Westphal Radcliffe, Stefanie Westphal Thompson and Vertex have agreed that Amanda Westphal Radcliffe and Stefanie Westphal Thompson will immediately before this offering purchase from Jeffrey Westphal shares of his Class B common stock equal to a total of \$ _____ million, at the public offering price per share, net of underwriting discounts and commissions.

Directed Share Program

At our request, the underwriters have reserved for sale, at the initial public offering price, up to _____ % of the Class A common stock offered by this prospectus for sale to some of our directors, officers, employees, business associates and related persons. The directed share program will not limit the ability of our directors, officers and their family members, or holders of more than _____ % of our common stock, to purchase more than \$ _____ in value of our common stock. We do not currently know the extent to which these related persons will participate in our directed share program, if at all, or to the extent they will purchase more than \$ _____ in value of our common stock.

Our Policy Regarding Related Party Transactions

Upon consummation of this offering, our board of directors will have adopted written policies and procedures for transactions with related persons. As a general matter, the policy will require the audit committee to review and approve or disapprove of the entry by us into certain transactions with related persons. The policy will only apply to transactions, arrangements and relationships where the aggregate amount involved could reasonably be expected to exceed \$120,000 in any calendar year and in which a related person has a direct or indirect interest. A related person is: (a) any director, nominee for director or executive officer of our company; (b) any immediate family member of a director, nominee for director or executive officer; and (c) any person, and his or her immediate family members, or

entity, including affiliates, that was a beneficial owner of 5% or more of any of our outstanding equity securities at the time the transaction occurred or existed.

The policy will provide that if advance approval of a transaction subject to the policy is not obtained, it must be promptly submitted to the committee for possible ratification, approval, amendment, termination or rescission. In reviewing any transaction, the committee will take into account, among other factors the committee deems appropriate, recommendations from senior management, whether the transaction is on terms no less favorable than terms generally available to a third party in similar circumstances and the extent of the related person's interest in the transaction. Any related person transaction must be conducted at arm's length. Any member of the audit committee who is a related person with respect to a transaction under review may not participate in the deliberations or vote on the approval or ratification of the transaction. However, such a director may be counted in determining the presence of a quorum at a meeting of the audit committee that considers the transaction.

PRINCIPAL AND SELLING STOCKHOLDERS

The following table sets forth information with respect to the beneficial ownership of our common stock as of _____, 2020, both before and after giving effect to the closing of the offering, by:

- each person known to own beneficially more than 5% of our Class A common stock or Class B common stock;
- each of our directors;
- each of our named executive officers;
- all of our directors and executive officers as a group; and
- each of the selling stockholders.

The amounts and percentages of our Class A and Class B common stock beneficially owned are reported on the basis of SEC regulations governing the determination of beneficial ownership of securities. Under SEC rules, a person is deemed to be a "beneficial" owner of a security if that person has or shares voting power or investment power, which includes the power to dispose of or to direct the disposition of such security. A person is also deemed to be a beneficial owner of any securities of which that person has a right to acquire beneficial ownership within 60 days. Securities that can be so acquired are not deemed to be outstanding for purposes of computing any other person's percentage. Under these rules, more than one person may be deemed to be a beneficial owner of securities as to which such person has no economic interest.

Our determination of the percentage of beneficial ownership prior to this offering gives effect to the reclassification and is based on _____ shares of our Class A common stock and _____ shares of our Class B common stock outstanding as of _____, 2020. Our determination of beneficial ownership after this offering is based on _____ shares of our Class A common stock and _____ shares of our Class B common stock outstanding after closing of the offering. It also assumes the underwriters exercised their option to purchase up to _____ shares of Class A common stock from _____.

the selling stockholders. Unless otherwise indicated, the business address of each such beneficial owner is c/o 2301 Renaissance Blvd, King of Prussia, PA 19406.

Name of Beneficial Owners and Selling Stockholders	Shares Beneficially Owned Before the Offering		Percentage of Shares Beneficially Owned Before the Offering		Shares to be Sold Assuming Exercise of Over-Allotment Option	Shares Beneficially Owned After the Offering			Percentage of Total Voting Power [†]	
	Class A	Class B	Class A	Class B		Class A	Class B	Class A		Class B
Executive Officers and Directors:										
David DeStefano ⁽¹⁾			%	%				%	%	%
John Schwab			%	%				%	%	%
Lisa Butler ⁽²⁾			%	%				%	%	%
Bryan Rowland ⁽³⁾			%	%				%	%	%
Ric Andersen ⁽⁴⁾			%	%				%	%	%
Terrence Kyle ⁽⁵⁾			%	%				%	%	%
Amanda Westphal Radcliffe ⁽⁶⁾			%	%				%	%	%
Kevin Robert ⁽⁷⁾			%	%				%	%	%
Rick Stamm ⁽⁸⁾			%	%				%	%	%
Stefanie Westphal Thompson ⁽⁹⁾			%	%				%	%	%
Jeffrey Westphal ⁽¹⁰⁾			%	%				%	%	%
All executive officers and directors as a group (11 persons) ⁽¹¹⁾			%	%				%	%	%
Selling Stockholders:										
Christopher Jones ⁽¹²⁾			%	%				%	%	%
John G. Hurley ⁽¹³⁾			%	%				%	%	%

* Denotes less than 1.0% of beneficial ownership.

† Percentage of total voting power represents voting power with respect to all shares of our Class A common stock and Class B common stock, as a single class. The holders of our Class A common stock are entitled to one vote per share, and holders of our Class B common stock are entitled to ten votes per share.

- (1) Consists of (i) shares of Class A common stock and (ii) shares of Class A common stock subject to options that are exercisable within 60 days of .
- (2) Consists of (i) shares of Class A common stock and (ii) shares of Class A common stock subject to options that are exercisable within 60 days of .
- (3) Consists of shares of Class A common stock subject to options that are exercisable within 60 days of .
- (4) Consists of shares of Class A common stock subject to options that are exercisable within 60 days of .
- (5) Consists of (i) shares of Class A common stock and (ii) shares of Class A common stock subject to options that are exercisable within 60 days of .
- (6) Consists of (i) shares of Class B common stock held directly by Amanda Westphal Radcliffe and (ii) shares of Class B common stock held by various trusts for which Ms. Radcliffe is the trustee.
- (7) Consists of shares of Class A common stock subject to options that are exercisable within 60 days of .
- (8) Consists of shares of Class A common stock subject to options that are exercisable within 60 days of .
- (9) Consists of (i) shares of Class B common stock held directly by Stefanie Westphal Thompson and (ii) shares of Class B common stock held in various trusts for which Ms. Thompson is the trustee.
- (10) Consists of (i) shares of Class B common stock held directly by Jeffrey Westphal and (ii) shares of Class B common stock held in various trusts for which Mr. Westphal is the trustee.
- (11) Consists of (i) shares of Class A common stock, (ii) shares of Class B common stock, and (iii) shares of Class A common stock subject to options that are exercisable within 60 days of .
- (12) Consists of shares of Class A common stock and (ii) shares of Class A common stock subject to options that are exercisable within 60 days of .
- (13) Consists of (i) shares of Class A common stock and (ii) shares of Class A common stock subject to options that are exercisable within 60 days of .

DESCRIPTION OF CAPITAL STOCK

General

As of the closing of this offering, after giving effect to the reclassification, our authorized capital stock will consist of _____ shares of common stock, par value \$0.0001 per share, and _____ shares of preferred stock, par value \$0.0001 per share. Our common stock will be divided into two classes, Class A common stock and Class B common stock. Following this offering, our authorized Class A common stock will consist of _____ shares and our authorized Class B common stock will consist of _____ shares.

We are selling _____ shares of Class A common stock in this offering (_____ shares if the underwriters exercise their over-allotment option in full). All shares of our Class A common stock outstanding upon consummation of this offering will be fully paid and non-assessable.

After giving effect to the reclassification, as of _____, 2020, there were _____ shares of our Class A Common Stock outstanding, held by _____ stockholders of record, _____ shares of our Class B Common Stock outstanding held by _____ stockholders of record, and no shares of our preferred stock outstanding.

We are currently incorporated in Pennsylvania and will reincorporate in Delaware prior to the completion of this offering. We expect to adopt a Delaware certificate of incorporation and bylaws in connection with the completion of this offering. The following description of our capital stock and provisions of our amended and restated certificate of incorporation and amended and restated bylaws are summaries and are qualified by reference to the amended and restated certificate of incorporation and amended and restated bylaws that will become effective prior to the pricing of this offering. Copies of these documents will be filed with the SEC as exhibits to our registration statement, of which this prospectus forms a part. The description of our capital stock reflects changes to our capital structure that will occur upon the closing of this offering.

Common Stock

We have two classes of authorized common stock: Class A common stock and Class B common stock. The rights of the holders of Class A common stock and Class B common stock are identical, except with respect to voting, conversion and transfer rights.

Voting Rights

Holders of shares of our Class A common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders. Holders of shares of our Class B common stock are entitled to ten votes for each share held of record on all matters submitted to a vote of stockholders. The holders of our common stock do not have cumulative voting rights in the election of directors.

Our amended and restated certificate of incorporation will provide that so long as any shares of Class B common stock remain outstanding, the Company shall not, without the prior affirmative vote of the holders of a majority of the outstanding shares of Class B common stock, voting as a separate class, in addition to any other vote required by applicable law or our amended and restated certificate of incorporation, directly or indirectly, whether by amendment, or through merger, recapitalization, consolidation or otherwise, amend, repeal or adopt any provision of our amended and restated certificate of incorporation inconsistent with, or otherwise alter or change, any of the voting, conversion, dividend or liquidation provisions of the shares of Class B common stock or other rights, powers, preferences or privileges of the shares of Class B common stock.

In addition, Delaware law would require either holders of our Class A common stock or our Class B common stock to vote separately as a class in the following circumstances:

- if we were to seek to amend our amended and restated certificate of incorporation to increase or decrease the par value of the shares of such class of stock; and
- if we were to seek to amend our amended and restated certificate of incorporation in a manner that alters or changes the powers, preferences or special rights of the shares of such class of stock in a manner that affects them adversely.

Economic Rights

Except as otherwise expressly provided in our amended and restated certificate of incorporation or required by applicable law, shares of Class A common stock and Class B common stock will have the same rights and privileges and rank equally, share ratably and be identical in all respects as to all matters, including, without limitation, those described below.

Dividends. Any dividend or distributions paid or payable to the holders of shares of Class A common stock and Class B common stock shall be paid pro rata, on an equal priority, *pari passu* basis, unless different treatment of the shares of each such class is approved by the affirmative vote of the holders of a majority of the outstanding shares of the applicable class of stock treated adversely, voting separately as a class; provided, however, that if a dividend or distribution is paid in the form of Class A common stock or Class B common stock (or rights to acquire shares of Class A common stock or Class B common stock), then the holders of the Class A common stock shall receive Class A common stock (or rights to acquire shares of Class A common stock) and holders of Class B common stock shall receive Class B common stock (or rights to acquire shares of Class B common stock).

Liquidation. In the event of our liquidation, dissolution or winding-up, upon the completion of the distributions required with respect to any series of preferred stock that may then be outstanding, our remaining assets legally available for distribution to stockholders shall be distributed on an equal priority, pro rata basis to the holders of Class A common stock and Class B common stock.

Subdivisions and Combinations. If we subdivide or combine in any manner outstanding shares of Class A common stock or Class B common stock, then the outstanding shares of the other class will be subdivided or combined in the same proportion and manner, unless different treatment of the shares of each class is approved by the affirmative vote of the holders of a majority of the outstanding shares of Class A common stock and by the affirmative vote of the holders of a majority of the outstanding shares of Class B common stock, each voting separately as a class.

No Preemptive or Similar Rights

Holders of shares of our common stock do not have preemptive, subscription or redemption rights, except as otherwise provided in the Stockholders' Agreement. There will be no redemption or sinking fund provisions applicable to our common stock.

Conversion

Each outstanding share of our Class B common stock is convertible at any time at the option of the holder into one share of our Class A common stock. Each share of our Class B common stock will convert automatically into one share of our Class A common stock upon any transfer, whether or not for value, except for certain permitted transfers described in our amended and restated certificate of incorporation, including transfers to family members, trusts solely for the benefit of the stockholder or their family members, and partnerships, corporations, and other entities exclusively owned by the stockholder or their family members; provided that, in each case, voting control with respect to the

transferred shares of Class B common stock is retained by the transferring holder or such transferring holder's family member. Once converted or transferred and converted into Class A common stock, the Class B common stock may not be reissued.

Preferred Stock

Under the terms of our amended and restated certificate of incorporation that will become effective prior to the pricing of this offering, our board of directors is authorized to direct us to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock could adversely affect the voting power of holders of our common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock. Upon the closing of this offering, there will be no shares of preferred stock outstanding.

Registration Rights

There will be no registration rights, except as otherwise provided in the Stockholders' Agreement. For more information, see "Certain Relationships and Related Party Transactions—Stockholders' Agreement."

Exclusive Jurisdiction

Our amended and restated bylaws will provide that, unless we consent to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a claim of breach of fiduciary duty owed by any of our directors, officers or other employees to us or to our stockholders, any action asserting a claim governed by the internal affairs doctrine or any action asserting a claim arising pursuant to the General Corporation Law of the State of Delaware.

Anti-Takeover Provisions

Our amended and restated certificate of incorporation and amended and restated bylaws, as they will be in effect immediately prior to the consummation of this offering, will contain provisions that may delay, defer or discourage another party from acquiring control of us. We expect that these provisions, which are summarized below, will discourage coercive takeover practices or inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors, which we believe may result in an improvement of the terms of any such acquisition in favor of our stockholders. However, they also give our board of directors the power to discourage acquisitions that some stockholders may favor. See "Risk Factors—Risks Related to This Offering and Ownership of Our Class A Common Stock—Anti-takeover provisions contained in our charter documents and Delaware law could prevent a takeover that stockholders consider favorable and could also reduce the market price of our stock."

Authorized but Unissued Shares

The authorized but unissued shares of our common stock and our preferred stock are available for future issuance without stockholder approval, subject to any limitations imposed by the listing standards of the Nasdaq Global Market. These additional shares may be used for a variety of corporate finance transactions, acquisitions and employee benefit plans. The existence of authorized but unissued and unreserved common stock and preferred stock could make more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

Classified Board of Directors

Our amended and restated certificate of incorporation will provide that our board of directors will be divided into three classes, with the classes as nearly equal in number as possible and each class serving three-year staggered terms. Directors may only be removed from our board of directors for cause by the affirmative vote of the holders of a majority in voting power of the shares entitled to vote. See "Management—Board of Directors, Committees and Executive Officers." These provisions may have the effect of deferring, delaying or discouraging hostile takeovers or changes in control of us or our management.

Stockholder Action; Special Meeting of Stockholders

Our amended and restated certificate of incorporation will provide that our stockholders will not be able to take action by written consent for any matter and may only take action at annual or special meetings. As a result, a holder controlling a majority of our capital stock would not be able to amend our amended and restated bylaws or remove directors without holding a meeting of our stockholders called in accordance with our amended and restated bylaws, unless previously approved by our board of directors. Our amended and restated certificate of incorporation will further provide that special meetings of our stockholders may be called only by the chairperson of our board of directors, our chief executive officer, our president or another officer selected by a majority of our board of directors, thus limiting the ability of a stockholder to call a special meeting. These provisions might delay the ability of our stockholders to force consideration of a proposal or for stockholders controlling a majority of our capital stock to take any action, including the removal of directors.

Advance Notice Requirements for Stockholder Proposals and Director Nominations

In addition, our amended and restated bylaws will establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of candidates for election to our board of directors. In order for any matter to be "properly brought" before a meeting, a stockholder will have to comply with advance notice and duration of ownership requirements and provide us with certain information. Stockholders at an annual meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors or by a qualified stockholder of record on the record date for the meeting who is entitled to vote at the meeting and who has delivered timely written notice in proper form to our secretary of the stockholder's intention to bring such business before the meeting. These provisions could have the effect of delaying stockholder actions that are favored by the holders of a majority of our outstanding voting securities until the next stockholder meeting.

Amendment of Certificate of Incorporation or Bylaws

The DGCL provides generally that the affirmative vote of the holders of a majority in voting power of the shares entitled to vote is required to amend a corporation's certificate of incorporation, unless a corporation's certificate of incorporation requires a greater percentage. Upon consummation

of this offering, our bylaws may be amended or repealed by a majority vote of our board of directors or by the affirmative vote of the holders a majority of the votes which all our stockholders would be eligible to cast in an election of directors.

Limitation on Liability of Directors and Indemnification

Our amended and restated certificate of incorporation and amended and restated bylaws will limit our directors' and officers' liability to the fullest extent permitted under the General Corporation Law of the State of Delaware. Specifically, our directors and officers will not be liable to us or our stockholders for monetary damages for any breach of fiduciary duty by a director or officer, except for liability:

- for any breach of the director's or officer's duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- under Section 174 of the General Corporation Law of the State of Delaware; or
- for any transaction from which a director or officer derives an improper personal benefit.

If the General Corporation Law of the State of Delaware is amended to authorize corporate action further eliminating or limiting the personal liability of directors or officers, then the liability of our directors and officers shall be eliminated or limited to the fullest extent permitted by the General Corporation Law of the State of Delaware, as so amended.

The provision regarding indemnification of our directors and officers in our amended and restated certificate of incorporation will generally not limit liability under state or federal securities laws.

Delaware law and our amended and restated certificate of incorporation and amended and restated bylaws will provide that we will, in certain situations, indemnify any person made or threatened to be made a party to a proceeding by reason of that person's former or present official capacity with our company against judgments, penalties, fines, settlements and reasonable expenses, including reasonable attorney's fees. Any person is also entitled, subject to certain limitations, to payment or reimbursement of reasonable expenses in advance of the final disposition of the proceeding. In addition, we are party to certain indemnification agreements pursuant to which we have agreed to indemnify the employees who are party thereto.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. In addition, your investment may be adversely affected to the extent that, in a class action or direct suit, we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Transfer Agent and Registrar

The transfer agent and registrar for our Class A common stock will be Equiniti Trust Company.

Listing

We have applied to list our Class A common stock on Nasdaq Global Market under the symbol "VERX."

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our Class A common stock, and we cannot predict the effect, if any, that market sales of shares of our Class A common stock or the availability of shares of our Class A common stock for sale will have on the market price of our Class A common stock prevailing from time to time. Future sales of our Class A common stock in the public market, or the availability of such shares for sale in the public market, could adversely affect market prices prevailing from time to time. As described below, only a limited number of shares of Class A common stock will be available for sale shortly after this offering due to contractual and legal restrictions on resale. Nevertheless, sales of our Class A common stock in the public market after such restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price at such time and our ability to raise equity capital in the future.

After giving effect to the reclassification, based on the number of shares outstanding as of _____, 2020, upon the completion of this offering, _____ shares of Class A common stock (or _____ shares of Class A common stock if the underwriters exercise their option to purchase additional shares of Class A common stock in full) and _____ shares of Class B common stock will be outstanding. Of the outstanding shares, all the shares of Class A common stock sold in this offering, including both the shares sold by us and any shares sold by the selling stockholders as a result of the underwriters' exercise of their option to purchase additional shares, will be freely transferrable without restriction or registration under the Securities Act, except that any shares purchased by one of our "affiliates," as that term is defined in Rule 144 under the Securities Act may be sold only in compliance with the limitations described below, and any shares purchased by our directors or officers pursuant to our directed share program shall be subject to the lock-up agreements described below.

The shares of Class B common stock outstanding upon completion of this offering will be restricted securities, as that term is defined in Rule 144 under the Securities Act. These shares of Class B common stock may be sold in the public market only if registered or pursuant to an exemption from registration, such as Rule 144 or Rule 701 under the Securities Act, which are summarized below.

Lock-Up Agreements

All of our directors and executive officers, the selling stockholders and the holders of all of our capital stock have entered or will enter into lock-up agreements under which they agree, subject to certain exceptions, not to sell, transfer or dispose of, directly or indirectly, any shares of our Class A common stock or any securities convertible into or exercisable or exchangeable for shares of our Class A common stock for a period of 180 days after the date of this prospectus. The restrictions described above do not apply to the sales of shares of Class A common stock by us and, to the extent the underwriters exercise their option to purchase additional shares, the selling stockholders, to the underwriters in this offering. Goldman Sachs & Co. LLC and Morgan Stanley & Co. LLC may, in their sole discretion, permit our stockholders who are subject to these lock-up agreements to sell shares prior to the expiration of the lock-up agreements. See "Underwriting" for a description of these agreements.

Rule 144

In general, under Rule 144 as currently in effect, once we have been subject to the public company reporting requirements of Section 13 or Section 15(d) of the Exchange Act for at least 90 days, a person who is not deemed to have been one of our affiliates for purposes of the Securities Act at any time during the 90 days preceding a sale and who has beneficially owned the shares of our Class A common stock proposed to be sold for at least six months is entitled to sell those shares without complying with the manner of sale, volume limitation or notice provisions of Rule 144, subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares of Class A common stock proposed to be sold for at least one year, including the

holding period of any prior owner other than our affiliates, then that person would be entitled to sell those shares of Class A common stock without complying with any of the requirements of Rule 144.

In general, under Rule 144, as currently in effect, our affiliates or persons selling shares of our Class A common stock on behalf of our affiliates are entitled to sell upon expiration of the lock-up agreements described above, within any three-month period, a number of shares of Class A common stock that does not exceed the greater of:

- 1% of the number of shares of our Class A common stock then outstanding, which will equal approximately _____ shares of our Class A common stock immediately after this offering assuming no exercise of the underwriters' over-allotment option; and
- the average weekly trading volume of our Class A common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to that sale.

Sales under Rule 144 by our affiliates or persons selling shares of our Class A common stock on behalf of our affiliates are also subject to certain manner-of-sale provisions and notice requirements and to the availability of current public information about us.

Rule 701

Rule 701 generally allows a stockholder who purchased shares of our capital stock pursuant to a written compensatory plan or contract and who is not deemed to have been an affiliate of our company during the immediately preceding 90 days to sell these shares in reliance upon Rule 144, but without being required to comply with the public information, holding period, volume limitation or notice provisions of Rule 144. Rule 701 also permits affiliates of our company to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. All holders of Rule 701 shares, however, are required to wait until 90 days after the date of this prospectus before selling those shares pursuant to Rule 701. Moreover, all Rule 701 shares are subject to lock-up agreements with the underwriters as described above and in the section titled "Underwriting" and will not become eligible for sale until the expiration of those agreements.

Registration Rights

The holders of approximately _____ shares of our outstanding capital stock, or their transferees, are entitled to certain rights with respect to the registration of those shares under the Securities Act. For a description of these registration rights, see "Certain Relationships and Related Party Transactions—Registration Rights." If these shares are registered, in most cases they will be freely tradable without restriction under the Securities Act, and a large number of shares may be sold into the public market.

Registration Statement on Form S-8

We intend to file a registration statement on Form S-8 under the Securities Act promptly after the completion of this offering to register shares of our Class A common stock subject to options and restricted stock units outstanding, as well as reserved for future issuance, under our equity compensation plans. The registration statement on Form S-8 is expected to become effective immediately upon filing, and shares of our Class A common stock covered by the registration statement will then become eligible for sale in the public market, subject to the Rule 144 limitations applicable to affiliates, vesting restrictions and any applicable lock-up agreements.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following discussion is a summary of the material U.S. federal income tax consequences to Non-U.S. Holders (as defined below) of the purchase, ownership and disposition of our Class A common stock issued pursuant to this offering, but does not purport to be a complete analysis of all potential tax effects. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or non-U.S. tax laws are not discussed. This discussion is based on the Code, Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service (the "IRS"), in each case in effect as of the date hereof. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a Non-U.S. Holder of our Class A common stock. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance that the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the purchase, ownership and disposition of our common stock.

This discussion is limited to Non-U.S. Holders that hold our Class A common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to a Non-U.S. Holder's particular circumstances, including the impact of the Medicare contribution tax on net investment income. In addition, it does not address consequences relevant to Non-U.S. Holders subject to special rules, including, without limitation:

- U.S. expatriates and former citizens or long-term residents of the United States;
- persons subject to the alternative minimum tax;
- persons holding our Class A common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;
- banks, insurance companies, and other financial institutions;
- brokers, dealers or traders in securities;
- "controlled foreign corporations," "passive foreign investment companies," and corporations that accumulate earnings to avoid U.S. federal income tax;
- partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein);
- tax-exempt organizations or governmental organizations;
- persons deemed to sell our Class A common stock under the constructive sale provisions of the Code;
- persons who hold or receive our Class A common stock pursuant to the exercise of any employee stock option or otherwise as compensation;
- tax-qualified retirement plans;
- "qualified foreign pension funds" as defined in Section 897(1)(2) of the Code and entities, all of the interests of which are held by qualified foreign pension funds; and
- persons subject to special tax accounting rules as a result of any item of gross income with respect to the stock being taken into account in an applicable financial statement as described in Section 451(b) of the Code.

If an entity treated as a partnership for U.S. federal income tax purposes holds our Class A common stock, the tax treatment of a partner in the partnership will depend on the status of the

partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships holding our Class A common stock and the partners in such partnerships should consult their tax advisors regarding the U.S. federal income tax consequences to them.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR CLASS A COMMON STOCK ARISING UNDER U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Definition of a Non-U.S. Holder

For purposes of this discussion, a "Non-U.S. Holder" is any beneficial owner of our Class A common stock that is neither a "U.S. person" nor an entity treated as a partnership for U.S. federal income tax purposes. A U.S. person is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity taxable as a corporation) created or organized under the laws of the United States, any state thereof, or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (1) is subject to the primary supervision of a U.S. court and the control of one or more "United States persons" (within the meaning of Section 7701(a)(30) of the Code), or (2) has a valid election in effect to be treated as a United States person for U.S. federal income tax purposes.

Distributions

As described in the section entitled "Dividend Policy," we do not anticipate declaring or paying dividends to holders of our Class A common stock in the foreseeable future. However, if we do make distributions of cash or property on Class A our common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a Non-U.S. Holder's adjusted tax basis in its Class A common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under "—Sale or Other Taxable Disposition."

Subject to the discussion below on effectively connected income, dividends paid to a Non-U.S. Holder of our Class A common stock will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty, provided the Non-U.S. Holder furnishes a valid IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) certifying qualification for the lower treaty rate). If the Non-U.S. Holder holds the stock through a financial institution or other agent acting on the holder's behalf, the holder will be required to provide appropriate documentation to the agent. The holder's agent will then be required to provide certification to us or our paying agent, either directly or through other intermediaries. A Non-U.S. Holder that does not timely furnish the required documentation, but that qualifies for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

If dividends paid to a Non-U.S. Holder are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment in the United States to which such dividends are attributable), the Non-U.S. Holder will be exempt from the U.S. federal withholding tax described above. To claim the exemption, the Non-U.S. Holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI, certifying that the dividends are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States.

Any such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular graduated rates. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items. Non-U.S. Holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

Sale or Other Taxable Disposition

A Non-U.S. Holder will not be subject to U.S. federal income tax on any gain realized upon the sale or other taxable disposition of our Class A common stock unless:

- the gain is effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment in the United States to which such gain is attributable);
- the Non-U.S. Holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- our Class A common stock constitutes a U.S. real property interest ("USRPI") by reason of our status as a U.S. real property holding corporation ("USRPHC") for U.S. federal income tax purposes.

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular graduated rates. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected gain, as adjusted for certain items.

Gain described in the second bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty), which may be offset by U.S. source capital losses of the Non-U.S. Holder (even though the individual is not considered a resident of the United States), provided the Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the third bullet point above, we believe we currently are not, and do not anticipate becoming, a USRPHC. Because the determination of whether we are a USRPHC depends, however, on the fair market value of our USRPIs relative to the fair market value of our non-U.S. real property interests and our other business assets, there can be no assurance we currently are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition by a Non-U.S. Holder of our Class A common stock will not be subject to U.S. federal income tax if our Class A common stock is "regularly traded," as defined by applicable Treasury Regulations, on an established securities market, and such Non-U.S. Holder owned, actually and constructively, 5% or less of our Class A common stock throughout the shorter of the five-year period ending on the date of the sale or other taxable disposition or the Non-U.S. Holder's holding period.

Non-U.S. Holders should consult their tax advisors regarding potentially applicable income tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

Payments of dividends on our Class A common stock will not be subject to backup withholding, provided the applicable withholding agent does not have actual knowledge or reason to know the holder is a United States person and the holder either certifies its non-U.S. status, such as by furnishing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI, or otherwise establishes an exemption. However, information returns are required to be filed with the IRS in connection with any dividends on our Class A common stock paid to the Non-U.S. Holder, regardless of whether any tax was actually withheld. In addition, proceeds of the sale or other taxable disposition of our Class A common stock within the United States or conducted through certain U.S.-related brokers generally will not be subject to backup withholding or information reporting, if the applicable withholding agent receives the certification described above and does not have actual knowledge or reason to know that such holder is a United States person, or the holder otherwise establishes an exemption. Proceeds of a disposition of our Class A common stock conducted through a non-U.S. office of a non-U.S. broker generally will not be subject to backup withholding or information reporting.

Copies of information returns that are filed with the IRS may also be made available under the provisions of an applicable treaty or agreement to the tax authorities of the country in which the Non-U.S. Holder resides or is established.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a Non-U.S. Holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Additional Withholding Tax on Payments Made to Foreign Accounts

Withholding taxes may be imposed under Sections 1471 to 1474 of the Code (such Sections commonly referred to as the Foreign Account Tax Compliance Act, or "FATCA") on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on, or (subject to the proposed Treasury Regulations discussed below) gross proceeds from the sale or other disposition of, our Class A common stock paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Under the applicable Treasury Regulations and administrative guidance, withholding under FATCA generally applies to payments of dividends on our Class A common stock. While withholding under FATCA would have applied also to payments of gross proceeds from the sale or other disposition of stock on or after January 1, 2019, recently proposed Treasury Regulations eliminate FATCA withholding on payments of gross proceeds entirely. Taxpayers generally may rely on these proposed Treasury Regulations until final Treasury Regulations are issued.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our Class A common stock.

UNDERWRITING

We and the underwriters named below will enter into an underwriting agreement with respect to the shares of our Class A common stock being offered by this prospectus (the "Underwriting Agreement"). Subject to certain conditions, each underwriter will severally agree to purchase the number of shares of our Class A common stock indicated in the following table. Goldman Sachs & Co. LLC and Morgan Stanley & Co. LLC are the representatives of the underwriters.

<u>Underwriters</u>	<u>Number of Shares</u>
Goldman Sachs & Co. LLC	
Morgan Stanley & Co. LLC	
BofA Securities, Inc.	
Citigroup Global Markets Inc.	
Jefferies LLC	
JMP Securities LLC	
Stifel, Nicolaus & Company, Incorporated	
William Blair & Company, L.L.C.	
CastleOak Securities, L.P.	
Total	=====

Subject to the terms and conditions set forth in the Underwriting Agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the Underwriting Agreement if any of these shares are purchased, other than the shares covered by the option described below unless and until this option is exercised. If an underwriter defaults, the Underwriting Agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the Underwriting Agreement may be terminated.

We and the selling stockholders have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officers' certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Option to Purchase Additional Shares

We and the selling stockholders have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus, to purchase up to _____ additional shares at the public offering price, less underwriting discounts and commissions. Of these shares, _____ will be sold by selling stockholders. If the underwriters exercise this option, each will be obligated, subject to conditions contained in the Underwriting Agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus and to dealers at that price less a concession not in excess of \$ _____ per share. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

The following table shows the public offering price, underwriting discounts and commissions and proceeds before expenses to us and the selling stockholders. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares.

	<u>Per Share</u>	<u>Without Option</u>	<u>With Option</u>
Public offering price	\$	\$	\$
Underwriting discounts and commissions to be paid by us	\$	\$	\$
Underwriting discounts and commissions to be paid by the selling stockholders	\$	\$	— \$
Proceeds, before expenses, to us	\$	\$	\$
Proceeds to the selling stockholders	\$	\$	— \$

The expenses of the offering, not including underwriting discounts and commissions, are estimated at \$ and are payable by us. The Company has agreed to reimburse the underwriters for certain out-of-pocket expenses in connection with this offering in an amount not to exceed \$50,000.

No Sales of Similar Securities

We, our executive officers and directors, the selling stockholders and the holders of substantially all of our outstanding capital stock have agreed, that, without the consent of the representatives on behalf of the underwriters, we and they will not, during the period ending 180 days after the date of this prospectus, or the restricted period:

- offer, pledge, sell or contract to sell any Class A common stock;
- sell any option or contract to purchase any Class A common stock;
- purchase any option or contract to sell any Class A common stock;
- grant any option, right or warrant for the sale of any Class A common stock;
- lend or otherwise dispose of or transfer any Class A common stock;
- engage in any hedging or other transaction or arrangement in respect of Class A common stock;
- request or demand that we file a registration statement related to the Class A common stock; or
- enter into any swap or other agreement that transfers, in whole or in part, economic consequence of ownership of any Class A common stock.

The restrictions described above do not apply to:

- the sale of shares of Class A common stock to the underwriters in this offering;
- a *bona fide* gift or gifts, or by will or intestacy upon the death of the holder, provided that the donee or donees, beneficiary or beneficiaries, heir or heirs or legal representatives thereof agree to be bound in writing by the restrictions set forth in the lock-up agreements;
- to any trust, partnership, limited liability company or other entity created for the direct or indirect benefit of the holder or the immediate family of the holder, provided that the trustee of the trust agrees that the trust, or the partnership, limited liability company or other entity agrees that it, shall be bound in writing by the restrictions set forth in the lock-up agreements;
- if the holder is a trust, to a trustor, trustee or beneficiary of the trust or to the estate of a trustor, trustee or beneficiary of such trust, provided that the transferees agree to be bound in writing by the restrictions set forth in the lock-up agreements;
- if the holder is a corporation, partnership, limited liability company or other business entity, (A) to another corporation, partnership, limited liability company or other business entity that is

an affiliate (as defined in Rule 405 promulgated under the Securities Act) of the holder, or (B) to any investment fund or other entity controlled or managed by the holder or affiliates of the holder, or (C) as part of a distribution by the holder to its stockholders, partners, members or other equityholders or to the estate of any such stockholders, partners, members or other equityholders, provided in each case that the transferee agrees to be bound in writing by the restrictions set forth in the lock-up agreements;

- to the Company as the result of a vesting, conversion, exercise or exchange of any security convertible into or exercisable or exchangeable for shares of common stock pursuant to any existing employee benefit plans described in this prospectus;
- pursuant to a defined change of control of the Company;
- to the Company in connection with the conversion of shares of Class B common stock of the Company held by the holder as of the date of the Underwriting Agreement into shares of Class A Common stock, provided that any shares of Class A Common Stock received by the holder as a result of such conversion shall be subject to the restrictions set forth in the lock-up agreements;
- in open market transactions after completion of this offering;
- pursuant to the Class B Share Purchase;
- to the Company immediately prior to effectiveness of this registration statement in connection with the reclassification; and
- with the prior written consent of the representatives on behalf of the underwriters.

This lock-up provision applies to Class A common stock and to securities convertible into or exchangeable or exercisable for or repayable with Class A common stock. It also applies to Class A common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

Exchange Listing

We have applied to list the shares on the Nasdaq Global Market under the symbol "VERX." In order to meet the requirements for listing on that exchange, the underwriters have undertaken to sell a minimum number of shares to a minimum number of beneficial owners as required by that exchange.

Before this offering, there has been no public market for our Class A common stock. The initial public offering price will be determined through negotiations between us and the representatives. In addition to prevailing market conditions, the factors to be considered in determining the initial public offering price are:

- the valuation multiples of publicly traded companies that the representatives believe to be comparable to us;
- our financial information;
- the history of, and the prospects for, our company and the industry in which we compete;
- an assessment of our management, its past and present operations, and the prospects for, and timing of, our future revenues; and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

The underwriters do not expect to sell more than 5% of the shares in the aggregate to accounts over which they exercise discretionary authority.

Price Stabilization, Short Positions and Penalty Bids

Until the distribution of the shares is complete, SEC rules may limit underwriters and selling group members from bidding for and purchasing our Class A common stock. However, the representatives may engage in transactions that stabilize the price of the Class A common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may purchase and sell our Class A common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares described above. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option granted to them. "Naked" short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our Class A common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of Class A common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discounts and commissions received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Similar to other purchase transactions, the underwriters' purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our Class A common stock or preventing or retarding a decline in the market price of our Class A common stock. As a result, the price of our Class A common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on the Nasdaq Global Market, in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our Class A common stock. In addition, none of us or any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail. In addition, the underwriters may facilitate internet distribution for this offering to certain of their respective internet subscription customers. The underwriters may allocate a limited number of shares of common stock for sale to their respective online brokerage customers. An electronic prospectus is available on internet websites maintained by the underwriters. Other than the prospectus in electronic format, the information on the website of the underwriters is not part of this prospectus.

Other Relationships

Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates for which they have received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Directed Share Program

At our request, the underwriters have reserved for sale, at the initial public offering price, up to % of the Class A common stock offered by this prospectus for sale to some of our directors, officers, employees, business associates and related persons. If these persons purchase reserved shares, it will reduce the number of shares available for sale to the general public. Any reserved shares that are not so purchased will be offered by the underwriters to the general public on the same terms as the other shares offered by this prospectus.

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area, each referred to herein as a "Member State", no shares of our Class A common stock have been offered or will be offered pursuant to the offering to the public in that Member State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Member State or, where appropriate, approved in another Member State and notified to the competent authority in that Member State, all in accordance with the Prospectus Regulation, except that offers of shares may be made to the public in that Member State at any time under the following exemptions under the Prospectus Regulation:

- to any legal entity which is a qualified investor as defined under the Prospectus Regulation;
- to fewer than 150 natural or legal persons (other than qualified investors as defined under the Prospectus Regulation, subject to obtaining the prior consent of the representatives for any such offer); or
- in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares of our Class A common stock shall require the Company or the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares of our Class A common stock in any relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares of our Class A common stock to be offered so as to enable an investor to decide to purchase or subscribe for any shares of our Class A common stock, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

Notice to Prospective Investors in the United Kingdom

Each underwriter has represented and agreed that:

- it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, referred to herein as "FSMA") received by it in connection with the issue or sale of the shares of our Class A common stock in circumstances in which Section 21(1) of the FSMA does not apply to us; and
- it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares of our Class A common stock in, from or otherwise involving the United Kingdom.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange ("SIX"), or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance of prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company or the shares has been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes ("CISA"). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority ("DFSA"). This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus or taken steps to verify the information set forth herein and has no responsibility for the prospectus. The shares to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus, you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission, in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the "Corporations Act"), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons, referred to herein as the "Exempt Investors," who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional investors" (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Hong Kong

The shares may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32 of the Laws of Hong Kong) ("Companies (Winding Up and Miscellaneous Provisions) Ordinance") or which do not constitute an invitation to the public within the meaning of the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) ("Securities and Futures Ordinance"), or (ii) to "professional investors" as defined in the Securities and Futures Ordinance and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance, and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" in Hong Kong as defined in the Securities and Futures Ordinance and any rules made thereunder.

Notice to Prospective Investors in Japan

The shares have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, "Japanese Person" shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may

the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (a) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (b) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (c) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)), the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

- to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- where no consideration is or will be given for the transfer;
- where the transfer is by operation of law;
- as specified in Section 276(7) of the SFA; or
- as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Notice to Prospective Investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 *Underwriting Conflicts* ("NI 33-105"), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

LEGAL MATTERS

The validity of the shares of Class A common stock offered hereby will be passed upon for us by Latham & Watkins LLP, Washington, D.C. The underwriters are being represented by Skadden, Arps, Slate, Meagher & Flom LLP in connection with this offering.

EXPERTS

The consolidated financial statements of the Company at December 31, 2019 and 2018 and for each of the two years in the period ended December 31, 2019 have been audited by Crowe LLP, independent registered public accounting firm, as set forth in its report thereon appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

CHANGE IN INDEPENDENT ACCOUNTANT

On October 8, 2019, our board of directors determined to dismiss Baker Tilly Virchow Krause, LLP ("Baker Tilly"). Our board of directors retained Crowe LLP as our independent public accounting firm on December 4, 2019.

The reports of Baker Tilly on our consolidated financial statements for each of the two fiscal years prior to its dismissal did not contain any adverse opinion or disclaimer of opinion, nor were such reports qualified or modified as to uncertainty, audit scope or accounting principles. We had no disagreements with Baker Tilly on any matter of accounting principles or practices, consolidated financial statement disclosure or auditing scope or procedure, which disagreements, if not resolved to its satisfaction, would have caused Baker Tilly to make reference in connection with its opinion to the subject matter of the disagreement during its audits for each of the two fiscal years prior to its dismissal or the subsequent interim period through October 8, 2019. During the two most recent fiscal years preceding Baker Tilly's dismissal, and the subsequent interim period through October 8, 2019, there were no "reportable events" as such term is defined in Item 304(a)(1)(v) of Regulation S-K.

During the two years ended December 31, 2018 and the subsequent interim period through December 4, 2019, neither we, nor anyone acting on our behalf, consulted with Crowe LLP on matters that involved the application of accounting principles to a specified transaction, either completed or proposed, the type of audit opinion that might be rendered on our consolidated financial statements, and neither a written report nor oral advice was provided to us by Crowe LLP.

We have provided Baker Tilly with a copy of the foregoing disclosure and have requested that Baker Tilly furnish us with a letter addressed to the SEC stating whether or not Baker Tilly agrees with the above statements and, if not, stating the respects in which it does not agree. A copy of the letter from Baker Tilly has been filed as an exhibit to the registration statement of which this prospectus is a part.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act, with respect to the shares of Class A common stock offered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules to the registration statement. Please refer to the registration statement and exhibits for further information with respect to the Class A common stock offered by this prospectus. Statements contained in this prospectus regarding the contents of any contract or other document are only summaries. With respect to any contract or document that is filed as an exhibit to the registration statement, you should refer to the exhibit for a copy of the contract or document, and each statement in this prospectus regarding that contract or document is qualified by

reference to the exhibit. The SEC maintains a website that contains reports, proxy and information statements and other information regarding issuers, like us, that file documents electronically with the SEC. The address of that website is www.sec.gov.

Upon completion of this offering, we will become subject to the information and reporting requirements of the Exchange Act, and, in accordance with this law, will be required to file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information will be available for inspection and copying at the website of the SEC referred to above. We also maintain a website at www.vertexinc.com, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained on, or that can be accessed through, these websites is not a part of this prospectus. We have included these website addresses in this prospectus solely as an inactive textual reference.

VERTEX, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	<u>Page(s)</u>
Audited Consolidated Financial Statements:	
Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets as of December 31, 2019 and 2018 and March 31, 2020 (unaudited)	F-3
Consolidated Statements of Comprehensive Income (Loss) for the Years Ended December 31, 2019 and 2018 and the Three Months Ended March 31, 2020 and 2019 (unaudited)	F-4
Consolidated Statements of Changes in Equity for the Years Ended December 31, 2019 and 2018	F-5
Consolidated Statements of Changes in Equity for the Three Months Ended March 31, 2020 and 2019 (unaudited)	F-6
Consolidated Statements of Cash Flows for the Years Ended December 31, 2019 and 2018 and the Three Months Ended March 31, 2020 and 2019 (unaudited)	F-7
Notes to Audited Consolidated Financial Statements	F-8

Report of Independent Registered Public Accounting Firm

Shareholders and the Board of Directors of Vertex, Inc.
King of Prussia, Pennsylvania

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Vertex, Inc. (the "Company") as of December 31, 2019 and 2018, the related consolidated statements of comprehensive income (loss), changes in equity, and cash flows for the years then ended, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Crowe LLP

We have served as the Company's auditor since 2019.

New York, New York

March 27, 2020

Vertex, Inc.

Consolidated Balance Sheets

As of December 31, 2019 and 2018 and March 31, 2020 (unaudited)

(Amounts in thousands, except per share data)

	December 31,		March 31,	Pro Forma
	2019	2018	2020	March 31, 2020
				(unaudited)
Assets				
Current assets:				
Cash and cash equivalents	\$ 75,903	\$ 55,838	\$ 40,416	\$ 27,416
Funds held for customers	7,592	3,336	8,411	8,411
Accounts receivable, net of allowance of \$7,515, \$5,527, \$7,476 (unaudited) and \$7,476 (unaudited), respectively	70,367	62,235	61,653	61,653
Advances to stockholders	283	140	218	218
Prepaid expenses and other current assets	11,412	10,772	13,592	13,592
Total current assets	165,557	132,321	124,290	111,290
Funds held for stockholder distributions	—	—	110,000	—
Property and equipment, net of accumulated depreciation	54,727	49,481	55,710	55,710
Capitalized software, net of accumulated amortization	32,075	23,066	33,225	33,225
Goodwill	—	—	20,231	20,231
Deferred commissions	11,196	8,830	10,563	10,563
Deposits and other assets	1,068	1,374	2,110	2,110
Total assets	\$ 264,623	\$ 215,072	\$ 356,129	\$ 233,129
Liabilities and Equity				
Current liabilities:				
Current portion of long-term debt	\$ 50,804	\$ 4,910	\$ 9,394	\$ 9,394
Accounts payable	10,729	6,860	7,967	7,967
Accrued expenses	13,308	10,628	11,555	11,555
Distributions payable	13,183	10,892	—	—
Customer funds obligations	7,553	3,232	8,471	8,471
Accrued salaries and benefits	15,195	12,549	13,053	13,053
Accrued variable compensation	22,237	19,460	6,363	6,363
Deferred compensation, current	8,935	5,531	6,647	6,647
Deferred revenue	191,745	163,939	189,426	189,426
Deferred rent and other	840	751	878	878
Total current liabilities	334,529	238,752	253,754	253,754
Deferred compensation, net of current portion	18,530	12,570	54,172	54,172
Deferred revenue, net of current portion	14,046	14,764	12,058	12,058
Future acquisition commitment	—	—	11,120	11,120
Long-term debt, net of current portion	682	49,973	164,429	164,429
Deferred other liabilities	9,268	10,709	9,100	9,100
Total liabilities	377,055	326,768	504,633	504,633
Commitments and contingencies (Note 10)				
Options for redeemable shares	17,344	14,581	32,586	32,586
Stockholders' deficit:				
Class A voting common stock, \$0.001 par value, 200 shares authorized, 100 shares issued, 49 shares outstanding	—	—	—	—
Class B non-voting common stock, \$0.001 par value, 99,800 shares authorized, 54,099, 53,934, 54,099 (unaudited) and 54,099 (unaudited) shares issued, respectively, 40,090 shares outstanding	54	54	54	54
Accumulated deficit	(90,701)	(88,038)	(139,017)	(262,017)
Accumulated other comprehensive loss	(491)	(496)	(3,489)	(3,489)
Treasury stock	(38,638)	(37,797)	(38,638)	(38,638)
Total stockholders' deficit	(129,776)	(126,277)	(181,090)	(304,090)
Total liabilities and equity	\$ 264,623	\$ 215,072	\$ 356,129	\$ 233,129

The accompanying notes are an integral part of the consolidated financial statements.

Vertex, Inc.

Consolidated Statements of Comprehensive Income (Loss)

For the Years Ended December 31, 2019 and 2018 and
the Three Months Ended March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

	Years ended December 31,		Three months ended March 31,	
	2019	2018	2020	2019
	(unaudited)			
Revenues:				
Software subscriptions	\$ 275,629	\$ 235,663	\$ 75,760	\$ 64,384
Services	45,871	36,740	13,485	10,230
Total revenues	<u>321,500</u>	<u>272,403</u>	<u>89,245</u>	<u>74,614</u>
Cost of revenues:				
Software subscriptions	77,259	68,945	24,684	18,426
Services	33,119	26,753	14,778	7,138
Total cost of revenues	<u>110,378</u>	<u>95,698</u>	<u>39,462</u>	<u>25,564</u>
Gross profit	<u>211,122</u>	<u>176,705</u>	<u>49,783</u>	<u>49,050</u>
Operating expenses:				
Research and development	30,557	23,755	13,079	7,573
Selling and marketing	68,127	56,898	24,333	16,047
General and administrative	71,014	58,947	37,636	15,448
Depreciation and amortization	8,996	7,937	2,869	2,045
Impairment of asset	—	32,692	—	—
Other operating (income) expense, net	573	(691)	111	163
Total operating expenses	<u>179,267</u>	<u>179,538</u>	<u>78,028</u>	<u>41,276</u>
Income (loss) from operations	<u>31,855</u>	<u>(2,833)</u>	<u>(28,245)</u>	<u>7,774</u>
Other (income) expense:				
Interest income	(1,083)	(526)	(355)	(292)
Interest expense	2,036	2,120	924	537
Total other expense, net	953	1,594	569	245
Income (loss) before income taxes	<u>30,902</u>	<u>(4,427)</u>	<u>(28,814)</u>	<u>7,529</u>
Income tax (benefit) expense	(155)	1,679	250	204
Net income (loss)	<u>31,057</u>	<u>(6,106)</u>	<u>(29,064)</u>	<u>7,325</u>
Other comprehensive income (loss) from foreign currency translation adjustments and revaluations, net of tax	5	(355)	(2,998)	21
Total comprehensive income (loss)	<u>\$ 31,062</u>	<u>\$ (6,461)</u>	<u>\$ (32,062)</u>	<u>\$ 7,346</u>
Net income (loss) attributable to Class A stockholders	<u>\$ 38</u>	<u>\$ (7)</u>	<u>\$ (35)</u>	<u>\$ 9</u>
Net income (loss) per Class A share, basic and diluted	<u>\$ 0.77</u>	<u>\$ (0.15)</u>	<u>\$ (0.72)</u>	<u>\$ 0.18</u>
Weighted average Class A common stock, basic and diluted	<u>49</u>	<u>49</u>	<u>49</u>	<u>49</u>
Net income (loss) attributable to Class B stockholders	<u>\$ 31,019</u>	<u>\$ (6,099)</u>	<u>\$ (29,029)</u>	<u>\$ 7,316</u>
Net income (loss) per Class B share, basic	<u>\$ 0.77</u>	<u>\$ (0.15)</u>	<u>\$ (0.72)</u>	<u>\$ 0.18</u>
Weighted average common Class B stock, basic	<u>40,129</u>	<u>40,160</u>	<u>40,090</u>	<u>40,090</u>
Net income (loss) per Class B share, diluted	<u>\$ 0.75</u>	<u>\$ (0.15)</u>	<u>\$ (0.72)</u>	<u>\$ 0.18</u>
Weighted average common Class B stock, diluted	<u>41,373</u>	<u>40,160</u>	<u>40,090</u>	<u>41,393</u>
Pro forma information (unaudited):				
Income (loss) before income taxes	\$ 30,902		\$ (28,814)	
Pro forma provision for income tax expense (benefit)	7,825		(7,290)	
Pro forma net income (loss)	<u>\$ 23,077</u>		<u>(21,524)</u>	
Pro forma net income per share, basic	<u>\$</u>		<u>\$</u>	
Weighted average pro forma common shares, basic	<u></u>		<u></u>	
Pro forma net income per share, diluted	<u>\$</u>		<u>\$</u>	
Weighted average pro forma common shares, diluted	<u></u>		<u></u>	

The accompanying notes are an integral part of the consolidated financial statements.

Vertex, Inc.
Consolidated Statements of Changes in Equity
For the Years Ended December 31, 2019 and 2018
(Amounts in thousands)

	Outstanding Class A Shares	Class A Common Stock	Outstanding Class B Shares	Class B Common Stock	Accumulated Deficit	Accumulated Other Comprehensive Loss	Treasury Shares Issued	Treasury Stock	Total Stockholders' Deficit	Options for Redeemable Shares
Balance, January 1, 2018	49	\$ —	40,090	\$ 54	\$(41,977)	(141)	13,761	\$(36,520)	\$(78,584)	13,554
Exercise of stock options, net	—	—	134	—	(12)	—	—	—	(12)	—
Remeasurement of options for redeemable shares	—	—	—	—	(1,027)	—	—	—	(1,027)	1,027
Purchase of treasury stock	—	—	(134)	—	—	—	134	(1,277)	(1,277)	—
Distributions declared	—	—	—	—	(38,916)	—	—	—	(38,916)	—
Foreign currency translation adjustments and revaluations	—	—	—	—	—	(355)	—	—	(355)	—
Net loss	—	—	—	—	(6,106)	—	—	—	(6,106)	—
Balance, December 31, 2018	49	—	40,090	54	\$(88,038)	(496)	13,895	\$(37,797)	\$(126,277)	14,581
Remeasurement of options for redeemable shares	—	—	—	—	(2,763)	—	—	—	(2,763)	2,763
Exercise of stock options, net	—	—	75	—	(100)	—	—	—	(100)	—
Purchase of treasury stock	—	—	(75)	—	—	—	75	(841)	(841)	—
Distributions declared	—	—	—	—	(30,857)	—	—	—	(30,857)	—
Foreign currency translation adjustments and revaluations	—	—	—	—	—	5	—	—	5	—
Net income	—	—	—	—	31,057	—	—	—	31,057	—
Balance, December 31, 2019	49	\$ —	40,090	\$ 54	\$(90,701)	(491)	13,970	\$(38,638)	\$(129,776)	17,344

The accompanying notes are an integral part of the consolidated financial statements.

Vertex, Inc.
Consolidated Statements of Changes in Equity
For the Three Months Ended March 31, 2020 and 2019 (unaudited)
(Amounts in thousands)

	Outstanding Class A Shares	Class A Common Stock	Outstanding Class B Shares	Class B Common Stock	Accumulated Deficit	Accumulated Other Comprehensive Loss	Treasury Shares Issued	Treasury Stock	Total Stockholders' Deficit	Options for Redeemable Shares
Balance, January 1, 2019	49	\$ —	40,090	\$ 54	\$(88,038)	(496)	13,895	\$(37,797)	\$(126,277)	14,581
Remeasurement of options for redeemable shares	—	—	—	—	(607)	—	—	—	(607)	607
Distributions declared	—	—	—	—	(5,255)	—	—	—	(5,255)	—
Foreign currency translation adjustments and reevaluations	—	—	—	—	—	21	—	—	21	—
Net income	—	—	—	—	7,325	—	—	—	7,325	—
Balance, March 31, 2019	49	\$ —	40,090	\$ 54	\$(86,575)	(475)	13,895	\$(37,797)	\$(124,793)	15,188
Balance, January 1, 2020	49	\$ —	40,090	\$ 54	\$(90,701)	(491)	13,970	\$(38,638)	\$(129,776)	17,344
Remeasurement of options for redeemable shares	—	—	—	—	(15,242)	—	—	—	(15,242)	15,242
Distributions declared	—	—	—	—	(4,010)	—	—	—	(4,010)	—
Foreign currency translation adjustments and reevaluations	—	—	—	—	—	(2,998)	—	—	(2,998)	—
Net loss	—	—	—	—	(29,064)	—	—	—	(29,064)	—
Balance, March 31, 2020	49	\$ —	40,090	\$ 54	\$(139,017)	(3,489)	13,970	\$(38,638)	\$(181,090)	32,586

Vertex, Inc.

Consolidated Statements of Cash Flows

For the Years Ended December 31, 2019 and 2018 and
the Three Months Ended March 31, 2020 and 2019 (unaudited)

(Amounts in thousands)

	Years ended December 31,		Three months ended March 31,	
	2019	2018	2020	2019
(unaudited)				
Cash flows from operating activities:				
Net income (loss)	\$ 31,057	\$ (6,106)	\$ (29,064)	\$ 7,325
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:				
Depreciation and amortization	25,190	24,901	7,436	5,974
Impairment of asset	—	32,692	—	—
Provision for subscription cancellations and non-renewals	1,984	1,207	(39)	(824)
Amortization of deferred financing costs	266	266	221	67
Stock-based compensation expense	9,460	5,108	34,920	1,310
Other	(327)	899	72	32
Changes in operating assets and liabilities:				
Accounts receivable	(10,116)	(16,958)	9,453	11,731
Advances to stockholders	(142)	18	65	(160)
Prepaid expenses and other current assets	(667)	506	(2,167)	(2,107)
Deferred commissions	(2,366)	(3,154)	634	592
Accounts payable	3,868	3,397	(2,697)	(1,527)
Accrued expenses	2,539	1,566	(1,042)	(836)
Accrued and deferred compensation	5,318	2,060	(19,706)	(14,901)
Deferred revenue	25,938	34,226	(4,307)	3,253
Other	496	(179)	(196)	(30)
Net cash provided by (used in) operating activities	92,498	80,449	(6,417)	9,899
Cash flows from investing activities:				
Acquisition of business, net of cash acquired	—	—	(12,318)	—
Property and equipment additions	(20,339)	(21,053)	(5,632)	(4,200)
Capitalized software additions	(17,221)	(12,261)	(3,706)	(3,915)
Net cash used in investing activities	(37,560)	(33,314)	(21,656)	(8,115)
Cash flows from financing activities:				
Net increase (decrease) in customer funds obligations	4,276	1,711	(208)	5,639
Proceeds from line of credit	—	—	12,500	—
Principal payments on line of credit	—	—	(12,500)	—
Proceeds from long-term debt	—	—	175,000	—
Principal payments on long-term debt	(5,566)	(3,284)	(51,041)	(1,884)
Payments for deferred financing costs	—	—	(2,904)	—
Purchase of treasury stock	(841)	(1,277)	—	—
Proceeds from exercise of stock options	68	177	—	—
Distributions to stockholders	(28,566)	(28,024)	(17,193)	(16,147)
Net cash provided by (used in) financing activities	(30,629)	(30,697)	103,654	(12,392)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	12	(402)	(249)	21
Net increase in cash, cash equivalents and restricted cash	24,321	16,036	75,332	(10,587)
Cash, cash equivalents and restricted cash, beginning of period	59,174	43,138	83,495	59,174
Cash, cash equivalents and restricted cash, end of period	\$ 83,495	\$ 59,174	\$ 158,827	\$ 48,587
Reconciliation of cash, cash equivalents and restricted cash to the Consolidated Balance Sheets, end of period:				
Cash and cash equivalents	\$ 75,903	\$ 55,838	\$ 40,416	\$ 39,611
Restricted cash—funds held for stockholder distributions	—	—	110,000	—
Restricted cash—funds held for customers	7,592	3,336	8,411	8,976
Total cash, cash equivalents and restricted cash, end of year	\$ 83,495	\$ 59,174	\$ 158,827	\$ 48,587

The accompanying notes are an integral part of the consolidated financial statements.

Vertex, Inc.

Notes to Consolidated Financial Statements

**December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)**

(Amounts in thousands, except per share data)

1. Summary of significant accounting policies

Nature of Business

Vertex, Inc. ("Vertex") and its direct and indirect wholly-owned subsidiaries (collectively, the "Company") operate as solutions providers of state, local and value added tax calculation, compliance and analytics, offering software products which are sold through software license and software as a service ("cloud") subscriptions. The Company also provides implementation and training services in connection with its software license and cloud subscriptions, transaction tax returns outsourcing, and other tax-related services. The Company sells to customers located throughout the United States of America ("U.S.") and internationally.

Basis of Consolidation

The consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") and include the accounts of the Company. All intercompany transactions have been eliminated in consolidation.

Effective January 7, 2020, the Company acquired a 60% controlling interest in Systax Sistemas Fiscais LTDA ("Systax"), a provider of Brazilian transaction tax content and software. Systax is considered a Variable Interest Entity ("VIE") and its accounts have been included in the consolidated financial statements from the acquisition date. Systax was determined to be a VIE as Vertex is the primary beneficiary of the equity interests in Systax and participates significantly in the variability in the fair value of Systax's net assets. Although Vertex does not have full decision-making authority as it is shared with the minority interest owners, as the minority interest owners are considered a related party, Vertex is considered the most closely associated party to Systax and is required to consolidate. Systax's assets may only be used to settle its own obligations and this will continue until such time as Vertex owns 100% of the VIE. As of March 31, 2020, the net assets of Systax were \$20,550 (unaudited). Vertex is at risk to the extent of its current 60% ownership of Systax, which risk will increase over time in proportion to increases in percentage ownership as Vertex exercises its future share purchase commitment through 2023. See Note 2.

Unaudited Interim Financial Information

The accompanying interim consolidated balance sheet as of March 31, 2020 and the consolidated interim statements of comprehensive income (loss), cash flows, and changes in equity during the three months ended March 31, 2020 and 2019 are unaudited. The unaudited interim consolidated financial statements have been prepared on a basis consistent with the annual audited financial statements consolidated and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary to present fairly the Company's financial position as of March 31, 2020 and its results of operations, comprehensive income (loss) and cash flows for the three months ended March 31, 2020 and 2019. The interim results of operations for the three months ended March 31, 2020 and 2019 are not necessarily indicative of the results to be expected for the full fiscal year or for any other future annual or interim periods.

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

1. Summary of significant accounting policies (Continued)

Segments

The Company operates its business as one operating segment. Operating segments are defined as components of an enterprise about which separate financial information is evaluated regularly by the chief operating decision maker ("CODM"), the Company's Chief Executive Officer, in deciding how to allocate resources and assess performance. The Company's CODM allocates resources and assesses performance based upon discrete financial information at the consolidated level. For the years ended December 31, 2019 and 2018 approximately 4% and 3% of the Company's revenue were generated outside of the United States, respectively. For the three months ended March 31, 2020 and 2019 approximately 3% and 3% of the Company's revenue was generated outside of the United States, respectively (unaudited). As of December 31, 2019 and 2018, none of the Company's long-lived assets were held outside of the U.S. As of March 31, 2020, 19%, or \$20,518, of the Company's long-lived assets were held outside of the U.S. (unaudited) and consists primarily of goodwill of \$20,231 (unaudited) at March 31, 2020 related to the acquisition of the controlling interest in Systax, which is located in Brazil. See Note 2.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to credit risk consist principally of cash and cash equivalents, funds held for customers, accounts receivable and investment securities.

The Company maintains the majority of its cash and cash equivalent balances and funds held for customers in four banks. These amounts exceed federally-insured ("FDIC") limits. The Company periodically evaluates the creditworthiness of the banks. The Company has not experienced any losses in these accounts and believes they are not exposed to significant credit risk on such accounts.

The Company does not require collateral from its customers. Allowances are maintained for subscription cancellations. Credit risk related to accounts receivable is limited due to the industry and geographic diversity within the Company's customer base. No single customer accounted for more than 10% of revenues for the years ended December 31, 2019 and 2018 or for the three months ended March 31, 2020 and 2019 (unaudited).

Fair Value of Financial Instruments

The carrying amounts reported in the consolidated balance sheets for cash and cash equivalents, funds held for customers, accounts receivable, accounts payable, accrued expenses and debt approximate their related fair values.

Use of Estimates

The preparation of consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, equity, revenues and expenses during the reporting period. Significant estimates used in preparing these consolidated financial statements include: (i) the estimated allowance for subscription cancellations, (ii) the reserve for self-insurance, (iii) assumptions related to achievement of technological feasibility for software developed for sale, (iv) product life cycles, (v) estimated useful lives and potential impairment of long-lived assets,

Vertex, Inc.**Notes to Consolidated Financial Statements (Continued)****December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)****(Amounts in thousands, except per share data)****1. Summary of significant accounting policies (Continued)**

intangible assets and goodwill, (vi) determination of the fair value of tangible and intangible assets acquired, liabilities assumed and consideration transferred in an acquisition, (vii) amortization period of material rights and deferred commissions (viii) valuation for the Company's stock used for stock-based compensation, and (ix) the potential outcome of future tax consequences of events that have been recognized in the consolidated financial statements or tax returns. Actual results may differ from these estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with an initial maturity date of three months or less to be cash equivalents.

Funds Held for Stockholder Distributions (unaudited)

Funds held for stockholder distributions of \$110,000 at March 31, 2020 is reserved for distribution to stockholders to be paid within 90 days of March 31, 2020, the closing date of the new credit agreement, and is reflected in noncurrent assets in the consolidated balance sheet. If a distribution is not made within this time frame, such amount must be repaid to the bank.

Funds Held for Customers

Funds held for customers in the consolidated balance sheets represents customer funds advanced for transaction tax returns outsourcing. Funds held for customers are restricted for the sole purpose of remitting such funds to satisfy obligations on behalf of such customers and are deposited at FDIC-insured institutions. Customer obligations are included in current liabilities in the consolidated balance sheets, as the obligations are expected to be settled within one year.

Property and Equipment

Property and equipment are stated at cost or fair value when acquired and presented net of accumulated depreciation. Normal maintenance and repairs are charged to expense, while major renewals and betterments are capitalized. Assets under capital leases are recorded at the lower of the present value of the minimum lease payments or the fair value of the assets and are depreciated over the shorter of the asset's useful life or lease term. Depreciation and amortization are computed straight-line over the estimated useful lives of the assets, as follows:

Leasehold improvements	1 - 12 years
Equipment	3 - 10 years
Computer software	3 - 7 years
Internal-use software developed	3 - 5 years
Furniture and fixtures	7 - 10 years
Automobiles	5 years

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

1. Summary of significant accounting policies (Continued)

Software Development Costs

Internal-Use Software

The Company follows Accounting Standard Codification ("ASC") 350-40, *Goodwill and Other, Internal-Use Software*, to account for development costs incurred for the costs of computer software developed or obtained for internal use. ASC 350-40 requires such costs to be capitalized once certain criteria are met. Capitalized internal-use software costs are primarily comprised of direct labor, related expenses and initial software licenses. ASC 350-40 includes specific guidance on costs not to be capitalized, such as overhead, general and administrative and training costs. Internal-use software includes software utilized for cloud-based solutions as well as software for internal systems and tools. Costs are capitalized once the project is defined, funding is committed and it is confirmed the software will be used for its intended purpose. Capitalization of these costs concludes once the project is substantially complete and the software is ready for its intended purpose. Post-configuration training and maintenance costs are expensed as incurred. Internal-use software is included in internal-use software developed in property and equipment in the consolidated balance sheets once available for its intended use and is depreciated over periods between 3 to 5 years. Depreciation expense for internal-use software utilized for cloud-based solutions and for software for internal systems and tools is included in cost of revenues, software subscriptions and depreciation expense, respectively, in the consolidated statements of comprehensive income (loss).

Software Developed for Sale

The costs incurred for the development of computer software to be sold, leased, or otherwise marketed are capitalized in accordance with ASC 985-20, *Costs of Software to be Sold, Leased or Marketed*, when technological feasibility has been established. Technological feasibility generally occurs when all planning, design, coding and testing activities are completed that are necessary to establish that the product can be produced to meet its design specifications, including functions, features and technical performance requirements. The establishment of technological feasibility is an ongoing assessment of judgment by management with respect to certain external factors, including, but not limited to, anticipated future revenues, estimated economic life and changes in technology. Capitalized software includes direct labor and related expenses for software development for new products and enhancements to existing products and acquired software.

Amortization of capitalized software development costs begins when the product is available for general release. Amortization is provided on a product-by-product basis using the straight-line method over periods between 3 to 5 years. Unamortized capitalized software development costs determined to be in excess of the net realizable value of the product are expensed immediately.

Capitalized software costs are subject to an ongoing assessment of recoverability based on anticipated future revenues and changes in software technologies. At each balance sheet date, unamortized capitalized software costs are compared to the net realizable value of the related product. The carrying value of the related assets are written down to the net realizable value to the extent the unamortized capitalized costs exceed such value. The net realizable value is the estimated future gross

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

1. Summary of significant accounting policies (Continued)

revenues from the related product reduced by the estimated future costs of completing and disposing of such product, including the costs of providing related maintenance and customer support.

Assessment of Long-Lived Assets

The Company reviews the carrying value of long-lived assets, including internal-use software, for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be fully recoverable. Whenever such events or circumstances are present, an impairment loss equal to the excess of the asset carrying value over its fair value, if any, is recorded.

Business Combinations

Upon acquisition of a company, the Company determines if the transaction is a business combination, which is accounted for using the acquisition method of accounting. Under the acquisition method, once control is obtained of a business, the assets acquired, liabilities assumed, consideration transferred and amounts attributed to noncontrolling interests, are recorded at fair value. The Company uses its best estimates and assumptions to assign fair value to the tangible and intangible assets acquired, liabilities assumed, consideration transferred and amounts attributed to noncontrolling interests at the acquisition date. One of the most significant estimates relates to the determination of the fair value of these assets and liabilities. The determination of the fair values is based on estimates and judgments made by Management. The Company's estimates of fair value are based upon assumptions it believes to be reasonable, but which are inherently uncertain and unpredictable. Measurement period adjustments to these values as of the acquisition date are reflected at the time identified, up through the conclusion of the measurement period, which is the time at which all information for determination of the values of assets acquired, liabilities assumed, consideration transferred and noncontrolling interests is received, and is not to exceed one year from the acquisition date (the "Measurement Period"). The Company may record adjustments to the fair value of these tangible and intangible assets acquired, liabilities assumed, consideration transferred and noncontrolling interests, with the corresponding offset to goodwill. Additionally, uncertain tax positions and tax-related valuation allowances are initially recorded in connection with a business combination as of the acquisition date. The Company continues to collect information and reevaluate these estimates and assumptions periodically and record any adjustments to preliminary estimates to goodwill, provided the Company is within the Measurement Period with any adjustments to amortization of new or previously recorded identifiable intangibles being recorded to the consolidated statements of comprehensive income (loss) in the period in which they arise. In addition, if outside of the Measurement Period, any subsequent adjustments to the acquisition date fair values are recorded to the consolidated statements of comprehensive income (loss) in the period in which they arise.

Goodwill

Goodwill represents the excess of the purchase price over the fair value of net tangible and intangible assets acquired in a business combination. The Company evaluates goodwill for impairment annually at December 31 and whenever events or circumstances make it more likely than not that impairment may have occurred. The Company has determined that its business comprises one reporting

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

1. Summary of significant accounting policies (Continued)

unit. The Company has the option to first assess qualitative factors to determine whether events or circumstances indicate it is more likely than not that the fair value of a reporting unit is greater than its carrying amount, in which case a quantitative impairment test is not required.

The quantitative goodwill impairment test is performed by comparing the fair value of the reporting unit with its carrying amount, including goodwill. If the fair value of the reporting unit exceeds its carrying amount, goodwill is not impaired. An impairment loss is recognized for any excess of the carrying amount of the reporting unit's goodwill over the fair value up to the amount of goodwill allocated to the reporting unit. Income tax effects from any tax-deductible goodwill on the carrying amount of the reporting unit are considered when measuring the goodwill impairment loss, if applicable.

The changes in goodwill for the three months ended March 31, 2020 are as follows:

Balance, January 1, 2020	\$ —
Acquisition of Systax	26,124
Foreign currency revaluation	(5,893)
Balance, March 31, 2020	<u>\$ 20,231</u>

Deferred Financing Costs

The Company capitalizes costs related to obtaining, renewing or extending loan agreements and amortizes these costs on a straight-line basis, which approximates the interest method, over the life of the loan. Deferred financing costs related to outstanding borrowings under bank debt are reflected as a reduction of current portion of long-term debt and long-term debt, net of current portion. Deferred financing costs related to undrawn debt are reflected in deposits and other assets in the consolidated balance sheets in accordance with ASC 835-30, *Interest—Imputation of Interest*.

Accounting for Stock-Based Compensation

The Company applies the provisions of ASC 718, *Compensation—Stock Compensation*, for the award of equity-based instruments. The provisions of ASC 718 require a company to measure the fair value of stock-based compensation as of the grant date of the award. The Company has stock options and stock appreciation rights ("SAR(s)") (collectively, the "awards") outstanding that are subject to guidance set forth in ASC 718. The Company's Board of Directors (the "Board") intends all awards granted to be exercisable at a price per share not less than the per share fair value of the Company's common stock underlying such awards on the date of grant. Stock-based compensation expense reflects the cost of employee services received in exchange for the awards.

SARs are accounted for as liabilities under ASC 718 and, as such, the Company recognizes stock-based compensation expense by remeasuring the SARs at the end of each reporting period and accruing the portion of the requisite service rendered at that date. As a nonpublic entity, the Company has elected to measure SARs based on their intrinsic values. Management measures the intrinsic value of the SARs as the difference between the fair value of the Company's Class B common stock less the

Vertex, Inc.**Notes to Consolidated Financial Statements (Continued)****December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)****(Amounts in thousands, except per share data)****1. Summary of significant accounting policies (Continued)**

grant date fair value of the underlying shares as this is the value the SAR participant can derive from exercise of the SAR award. The fair value of the Company's common stock is determined periodically by the Board with the assistance of management and a third-party valuation firm. Management plans to continue to record changes in the intrinsic value of the SARs in 2020 up to the date on which the Company becomes a public entity. Upon becoming a public entity and thereafter, Management will remeasure SARs using the fair value-based method under ASC 718. Any impact from such change in measurement on the date on which the Company becomes a public entity will be accounted for as a change in accounting policy in that period. To the extent the fair value-based measure of the SARs differs materially from the intrinsic value of the SARs, this effect could be material. As the fair value-based measure of the SARs is not determinable at this time, such amount cannot be reasonably estimated with any degree of certainty. Outstanding SARs are included in deferred compensation, current and deferred compensation, net of current portion in the consolidated balance sheets.

Due to the option holders having the right to require the Company to repurchase shares issued in connection with option exercises after six months of share issuance, the options are classified as temporary equity and reflected in options for redeemable shares on the consolidated balance sheets at their redemption value, which equals the options' intrinsic value, as of the end of each balance sheet measurement period. Changes as a result of remeasurement of the redemption value of options for redeemable shares are recorded as adjustments to accumulated deficit.

The fair value of the common stock underlying the awards is determined by the Board with assistance from management and an independent third-party valuation firm. The determination of value uses the market and income approaches, with an adjustment for marketability discount in arriving at the per share fair value (the "valuation methodology"). Under the market approach, the guideline public company method is used, which estimates the fair value of the Company based on market prices of stock of guideline public companies. The income approach involves projecting the future benefits of owning an asset and estimating the present value of those future benefits by discounting them based upon the time value of money and the investment risks associated with ownership. At the end of 2019, due to the consideration by the Board of pursuing an initial public offering of the Company's common stock during 2020, the valuation methodology began to consider the impact of such an event on the value of the Company's common stock underlying the awards. As the Company approaches the offering, Management expects this will result in an increase in the intrinsic value of the awards that will correspondingly result in increases to compensation expense in the consolidated comprehensive statements of income during 2020 that exceed historical results.

Operating Leases and Deferred Rent

Rent expense for operating leases is recognized on a straight-line basis over the period of the related lease. For lease agreements that include future specific rent increases, rent concessions and/or tenant improvement allowances, the difference between the rent payments and the straight-line rent expense is included in deferred rent liability in the consolidated balance sheets.

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

1. Summary of significant accounting policies (Continued)

Self-insurance

The Company is self-insured for the majority of its health insurance costs, including medical claims subject to certain stop-loss provisions. Management periodically reviews the adequacy of the Company's stop-loss insurance coverage. The Company records an estimate of claims incurred but not reported, based on management's judgment and historical experience. Self-insurance accruals are \$1,473 and \$1,408 at December 31, 2019 and 2018, respectively, and \$1,663 at March 31, 2020 (unaudited), and are reflected in accrued salaries and benefits in the consolidated balance sheets. Material differences may result in the amount and timing of insurance expense if actual experience differs significantly from management's estimates.

Revenue Recognition**Revenue from contracts with customers**

On January 1, 2018, the Company adopted Accounting Standards Update ("ASU") 2014-09, *Revenue from Contracts with Customers*, ("ASC 606"). Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration expected to be received in exchange for those products or services. The Company enters into contracts that can include various combinations of products and services, which are generally capable of being distinct, and accounted for as separate performance obligations. Revenue is recognized net of allowance for subscription and non-renewal cancellations and any taxes collected from customers, which are subsequently remitted to governmental authorities.

Nature of goods and services

Licenses for on-premise software subscriptions provide the customer with a right to use the software as it exists when made available to the customer. Customers purchase a subscription to these licenses, which includes the related software and tax content updates (collectively "updates") and product support. The updates and support, which are part of the subscription agreement, are essential to the continued utility of the software; therefore, the Company has determined the software and the related updates and support to be a single performance obligation. Accordingly, when on-premise software is licensed, the revenue associated with this combined performance obligation is recognized ratably over the license term as these subscriptions are provided for the duration of the license term. Revenue recognition begins on the later of the beginning of the subscription period or the date the software is made available to the customer to download. The Company's on-premise software subscription prices in the initial subscription year are higher than standard renewal prices. The excess initial year price over the renewal price ("new sale premium") is a material right that provides customers with the right to this reduced renewal price. The Company recognizes revenue associated with this material right over the estimated period of benefit to the customer, which is generally three years.

Cloud-based subscriptions allow customers to use Company-hosted software over the contract period without taking possession of the software. The cloud-based offerings also include related updates and support. Cloud-based contracts consistently provide a benefit to the customer during the

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

1. Summary of significant accounting policies (Continued)

subscription period, thus the associated revenue is recognized ratably over the related subscription period. Revenue recognition begins on the later of the beginning of the subscription period or the date the customer is provided access to the cloud-based solutions.

Revenue from deliverable-based services is recognized as services are delivered. Revenue from fixed fee services is recognized as services are performed using the percentage of completion input method.

The Company has elected the "right to invoice" practical expedient for revenue related to services that are billed on an hourly basis, which enables revenue to be recognized as the services are performed.

The Company has determined that the methods applied to measuring its progress toward complete satisfaction of performance obligations recognized over time are a faithful depiction of the transfer of control of software subscriptions and services to customers.

Significant Judgments

Contracts with customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. Identification of the amortization periods of material rights and contract costs requires significant judgement by management.

Disaggregation of revenue

The table reflects revenue by major source for the following periods:

	For the years ended		For the three months ended	
	December 31,		March 31,	
	2019	2018	2020	2019
	(unaudited)			
Sources of revenue:				
Software subscriptions	\$ 275,629	\$ 235,663	\$ 75,760	\$ 64,384
Services	45,871	36,740	13,485	10,230
Total revenue	<u>\$ 321,500</u>	<u>\$ 272,403</u>	<u>\$ 89,245</u>	<u>\$ 74,614</u>

Contract balances

Timing of revenue recognition may differ from the timing of invoicing customers. A receivable is recorded in the consolidated balance sheets when customers are billed related to revenue to be collected and recognized for subscription agreements as there is an unconditional right to invoice and receive payment in the future related to these subscriptions. A receivable and related revenue may also be recorded in advance of billings to the extent services have been performed and the Company has a right under the contract to bill and collect for such performance. Subscription-based customers are

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

1. Summary of significant accounting policies (Continued)

generally invoiced annually at the beginning of each annual subscription period. Accounts receivable is presented net of an allowance for potentially uncollectible accounts and estimated cancellations of software license and cloud-based subscriptions (the "allowance") of \$7,515 and \$5,527 at December 31, 2019 and 2018, respectively, and \$7,476 at March 31, 2020 (unaudited). The allowance is based on management's assessment of uncollectible accounts on a specific identification basis, with the estimate of potential cancellations being determined based on management's review of historical cancellation rates.

The beginning and ending balances of accounts receivable, net of allowance, are as follows:

	For the years ended December 31,		For the three months ended March 31, 2020 (unaudited)
	2019	2018	
Balance, beginning of period	\$ 62,235	\$ 46,487	\$ 70,367
Balance, end of period	70,367	62,235	61,653
Increase (decrease), net	<u>\$ 8,132</u>	<u>\$ 15,748</u>	<u>\$ (8,714)</u>

A contract liability is recorded as deferred revenue on the consolidated balance sheets when customers are billed in advance of performance obligations being satisfied, and revenue is recognized after invoicing ratably over the subscription period or over the amortization period of material rights. Deferred revenue is reflected net of a related deferred allowance for subscription cancellations (the "deferred allowance") of \$5,614 and \$4,858 at December 31, 2019 and 2018, respectively, and \$5,118 at March 31, 2020 (unaudited). The deferred allowance represents the portion of the allowance for subscription cancellations associated with deferred revenue.

The beginning and ending balances of and changes to the allowance and the deferred allowance are as follows:

	For the year ended December 31, 2018	
	Balance	Net Change
Allowance balance, January 1	\$ (4,320)	
Allowance balance, December 31	(5,527)	
Change in allowance		\$ 1,207
Deferred allowance balance, January 1	3,888	
Deferred allowance balance, December 31	4,858	
Change in deferred allowance		(970)
Net amount charged to revenue		<u>\$ 237</u>

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

1. Summary of significant accounting policies (Continued)

	For the year ended December 31, 2019	
	Balance	Net Change
Allowance balance, January 1	\$ (5,527)	
Allowance balance, December 31	(7,515)	
Change in allowance		\$ 1,988
Deferred allowance balance, January 1	4,858	
Deferred allowance balance, December 31	5,614	
Change in deferred allowance		(756)
Net amount charged to revenue		\$ 1,232

	For the three months ended March 31, 2020 (unaudited)	
	Balance	Net Change
Allowance balance, January 1	\$ (7,515)	
Allowance balance, March 31	(7,476)	
Change in allowance		\$ (39)
Deferred allowance balance, January 1	5,614	
Deferred allowance balance, March 31	5,118	
Change in deferred allowance		496
Net amount charged to revenue		\$ (457)

The amount of revenue recognized during the year ended December 31, 2019 that was included in the opening deferred revenue balance as of December 31, 2018 was approximately \$163,939. The portion of deferred revenue expected to be recognized in revenue beyond one year is included in deferred revenue, net of current portion in the consolidated balance sheets.

The table provides information about the balances of and changes to deferred revenue for the following periods:

	As of December 31,		As of
	2019	2018	March 31, 2020 (unaudited)
Balances:			
Deferred revenue, current	\$ 191,745	\$ 163,939	\$ 189,426
Deferred revenue, non-current	14,046	14,764	12,058
Total deferred revenue, end of period	\$ 205,791	\$ 178,703	\$ 201,484

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

1. Summary of significant accounting policies (Continued)

	For the years ended December 31,		For the three months ended March 31,	
	2019	2018	2020	2019
Changes to deferred revenue:				(unaudited)
Beginning balance	\$ 178,703	\$ 139,059	\$ 205,791	\$ 178,703
Additional amounts deferred	348,588	312,047	84,938	77,868
Revenue recognized	(321,500)	(272,403)	(89,245)	(74,614)
Ending balance	<u>\$ 205,791</u>	<u>\$ 178,703</u>	<u>\$ 201,484</u>	<u>\$ 181,957</u>

Deferred revenue at December 31, 2019 will be recognized as follows for all future years:

Years Ending December 31,	
2020	\$ 191,745
2021	7,473
2022	4,798
2023	1,775
Total	<u>\$ 205,791</u>

Contract costs

Deferred sales commissions earned by the Company's sales force and certain sales incentive programs and vendor referral agreements are considered incremental and recoverable costs of obtaining a contract with a customer. An asset is recognized for these incremental contract costs and reflected as deferred commissions in the consolidated balance sheets. These contract costs are amortized on a straight-line basis over a period consistent with the transfer of the associated product and services to the customer, which is generally three years. Amortization of these costs are included in selling and marketing expense in the consolidated statements of comprehensive income (loss). The Company periodically reviews these contract assets to determine whether events or changes in circumstances have occurred that could impact the period of benefit of these assets. There were no impairment losses recorded for the periods presented.

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

1. Summary of significant accounting policies (Continued)

The table provides information about the changes to contract cost balances as of and for the following periods:

	As of December 31,		As of
	2019	2018	March 31, 2020 (unaudited)
Deferred commissions:			
Beginning balance	\$ 8,830	\$ 5,676	\$ 11,196
Additions	10,140	8,691	1,972
Amortization	(7,774)	(5,537)	(2,605)
Ending balance	<u>\$ 11,196</u>	<u>\$ 8,830</u>	<u>\$ 10,563</u>

Payment terms

Payment terms and conditions vary by contract, although the Company's terms generally include a requirement of payment within 30 days. In instances where the timing of revenue recognition differs from the timing of payment, the Company has determined that its contracts do not include a significant financing component. The primary purpose of invoicing terms is to provide customers with simplified and predictable ways of purchasing products and services, not to receive financing from customers or to provide customers with financing.

Cost of Revenues

Cost of revenues, software subscriptions includes the direct cost to develop, host and distribute software products, the direct cost to provide customer support, and amortization of costs capitalized for software developed for sale and for internal-use software utilized for cloud-based subscriptions. Cost of revenues, services includes the direct costs of implementation, training, transaction tax returns outsourcing and other tax-related services.

Reimbursable Costs

Reimbursable costs passed through and invoiced to customers of the Company are recorded as services revenues with the associated expenses recorded as cost of revenues, services in the consolidated statements of comprehensive income (loss). These amounts were \$1,107 and \$902 for the years ended December 31, 2019 and 2018, respectively, and \$185 and \$220 for the three months ended March 31, 2020 and 2019, respectively (unaudited).

Research and Development

Research and development costs consist primarily of personnel and related expenses for research and development activities including salaries, benefits and other compensation. Research and development costs are expensed as incurred in accordance with ASC 730, *Research and Development*, and are included in the consolidated statements of comprehensive income (loss).

Vertex, Inc.**Notes to Consolidated Financial Statements (Continued)****December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)****(Amounts in thousands, except per share data)****1. Summary of significant accounting policies (Continued)****Advertising**

Advertising expense is recorded as incurred and is reflected in selling and marketing expense in the consolidated statements of comprehensive income (loss). Total advertising expense was \$11,921 and \$8,956 for the years ended December 31, 2019 and 2018, respectively, and \$1,523 and \$1,787 for the three months ended March 31, 2020 and 2019, respectively (unaudited).

Foreign Currency

The Company transacts business in various foreign currencies. Management has concluded that the local country's currency is the functional currency of its foreign operations. Consequently, operating activities outside the U.S. are translated into U.S. Dollars using average exchange rates, while assets and liabilities of operations outside the U.S. are translated into U.S. Dollars using exchange rates at the balance sheet date. The effects of foreign currency translation adjustments are included in stockholders' deficit as a component of accumulated other comprehensive loss in the consolidated balance sheets. Related periodic movements in exchange rates are included in other comprehensive income (loss) in the consolidated statements of comprehensive income (loss). Other expense (income), net in the consolidated statements of comprehensive income (loss) includes net foreign exchange transaction losses of \$84 and \$121 for the years ended December 31, 2019 and 2018, respectively, and \$107 and \$41 for the three months ended March 31, 2020 and 2019, respectively (unaudited).

Income Taxes

Vertex is taxed as an S-corporation for U.S. federal income tax purposes and for most states. As a result, net income or loss is allocated to the stockholders and is included on their individual income tax returns. In certain states, Vertex is taxed at the corporate level. Accordingly, the income tax provision or benefit is based on taxable income allocated to these states. In certain foreign jurisdictions, Vertex subsidiaries are taxed at the corporate level. Similar to states, the income tax provision or benefit is based on taxable income sourced to these foreign jurisdictions.

Certain direct and indirect wholly-owned subsidiaries are treated as disregarded entities for U.S. federal income tax purposes and most states under the Internal Revenue Service ("IRS") "check-the-box" regulations. The income and loss from these disregarded entities are reported on the Company's U.S. federal and most state income tax returns in addition to being reported on a foreign jurisdiction tax return if a foreign subsidiary. Other foreign subsidiaries in which we own greater than 50% of the equity by measure of vote or value are treated as controlled foreign companies ("CFCs") for U.S. federal income tax purposes and most states under the IRS foreign tax regulations. The income and loss from these entities is reported on the Company's U.S. federal and some state income tax returns when the foreign earnings are repatriated or deemed to be repatriated to the U.S.

The Company records deferred income taxes using the liability method. The Company recognizes deferred tax assets and liabilities for future tax consequences of events that have been previously recognized in the Company's consolidated financial statements and tax returns. The measurement of deferred tax assets and liabilities is based on provisions of the enacted tax law. The effects of future changes in tax laws or rates are not anticipated.

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

1. Summary of significant accounting policies (Continued)

The Company records uncertain tax positions in accordance with ASC 740, *Income Taxes*, on the basis of a two step process whereby: (i) management determines whether it is more likely than not that the tax positions will be sustained based on the technical merits of the position, and (ii) for those tax positions that meet the more likely than not recognition threshold, management recognizes the largest amount of tax benefit that is greater than 50 percent likely to be realized upon ultimate settlement with the related tax authority. The impact as a result of the application of ASC 740 is reflected in the consolidated financial statements.

Total Comprehensive Income (Loss)

Total comprehensive income (loss) consists of net income and other comprehensive income (loss). Other comprehensive income (loss) refers to revenues, expenses, gains and losses that under U.S. GAAP are recorded as elements of stockholders' deficit but are excluded from net income. Other comprehensive income (loss) is comprised of foreign currency translation adjustments and revaluations.

Earnings Per Share

The Company calculates basic and diluted net income per share attributable to common stockholders using the treasury stock method. The Company has Class A voting common stock ("Class A common stock") and Class B non-voting common stock ("Class B common stock") outstanding. Neither class of stock has any liquidity or dividend preferences and are both considered to be participating securities. The diluted net income per share attributable to common stockholders is computed by giving effect to all potential dilutive common stock equivalents outstanding for the period. For purposes of this calculation, options to purchase common stock are considered common stock equivalents.

The table below illustrates the calculation of basic and diluted net income (loss) per common share for the Class A and Class B common stock for the following periods:

Class A common stock:	For the years ended December 31,		For the three months ended March 31,	
	2019	2018	2020	2019
				(unaudited)
Numerator:				
Net income (loss) attributable to all stockholders	\$ 31,057	\$ (6,106)	\$ (29,064)	\$ 7,325
Class A stock as a percentage of total shares outstanding	0.12%	0.12%	0.12%	0.12%
Net income (loss) attributable to Class A stockholders	\$ 38	\$ (7)	\$ (35)	9
Denominator:				
Weighted-average Class A stock outstanding—basic	49	49	49	49
Dilutive effect of stock equivalents	—	—	—	—
Weighted-average Class A stock outstanding—diluted	49	49	49	49
Net income (loss) per Class A share, basic and diluted	\$ 0.77	\$ (0.15)	\$ (0.72)	0.18

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

1. Summary of significant accounting policies (Continued)

Class B common stock:	For the years ended December 31,		For the three months ended March 31,	
	2019	2018	2020	2019
	(unaudited)			
Numerator:				
Net income (loss) attributable to all stockholders	\$ 31,057	\$ (6,106)	\$ (29,064)	\$ 7,325
Class B stock as a percentage of total stock outstanding	99.88%	99.88%	99.88%	99.88%
Net income (loss) attributable to Class B stockholders	<u>\$ 31,019</u>	<u>\$ (6,099)</u>	<u>\$ (29,029)</u>	<u>\$ 7,316</u>
Denominator:				
Weighted-average Class B stock outstanding—basic	40,129	40,160	40,090	40,090
Dilutive effect of stock equivalents	1,244	—	—	1,303
Weighted-average Class B stock outstanding—diluted	<u>41,373</u>	<u>40,160</u>	<u>40,090</u>	<u>41,393</u>
Net income (loss) per Class B share, basic	<u>\$ 0.77</u>	<u>\$ (0.15)</u>	<u>\$ (0.72)</u>	<u>0.18</u>
Net income (loss) per Class B share, diluted	<u>\$ 0.75</u>	<u>\$ (0.15)</u>	<u>\$ (0.72)</u>	<u>0.18</u>

Unaudited Pro Forma Balance Sheet

The company has presented a pro forma balance sheet as of March 31, 2020 to reflect the impact to cash, funds held for stockholder distributions and accumulated deficit of the \$123,000 distribution to stockholders on May 29, 2020.

Unaudited Pro Forma Income Taxes

These financial statements have been prepared in anticipation of a proposed initial public offering (the "Offering") of the common stock of Vertex, Inc. In connection with the Offering, the Company will convert and be taxed as a C corporation for U.S. income tax purposes. Accordingly, a pro forma income tax provision has been disclosed as if the Company was a taxable Corporation for the periods ended December 31, 2019 and March 31, 2020. The Company has computed pro forma entity level income tax expense using an estimated effective tax rate of approximately 25% for the periods ended December 31, 2019 and March 31, 2020, inclusive of all applicable U.S. federal, state, local and foreign income taxes.

Unaudited Pro Forma Earnings Per Share

The Company has presented pro forma earnings per share for the year ended December 31, 2019 and the three months ended March 31, 2020. Pro forma basic and diluted income per share was computed to give effect to the number of shares whose proceeds would be necessary to repay the outstanding \$175,000 term loan which is required to be repaid in the event the Offering occurs, as if such shares were issued and outstanding for the year ended December 31, 2019 and the three months ended March 31, 2020. The pro forma shares have been computed, assuming an initial public offering price of \$ per share, to give effect to the number of shares whose proceeds would be necessary to repay the term loan. The Company has assumed an Offering price of \$, the midpoint in the

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

1. Summary of significant accounting policies (Continued)

estimated price range set forth on the cover of the prospectus included in the Company's Form S-1 Registration Statement.

Supplemental Cash Flow Disclosures

Supplemental cash flow disclosures are as follows for the respective periods:

	For the years ended December 31,		For the three months ended March 31,	
	2019	2018	2020 (unaudited)	2019 (unaudited)
Cash paid for:				
Interest	\$ 1,766	\$ 1,853	\$ 559	\$ 460
Income taxes	\$ 945	\$ 668	\$ 104	\$ 105
Non-cash investing and financing activities:				
Exercised options exchanged in lieu of income taxes	\$ 184	\$ 209	\$ —	\$ —
Acquisition purchase commitment liability	\$ —	\$ —	\$ 14,344	\$ —
Equipment acquired through capital leases	\$ 1,904	\$ —	\$ —	\$ —
Remeasurement of options for redeemable shares	\$ 2,763	\$ 1,027	\$ 15,242	\$ 607
Distributions payable	\$ 13,183	\$ 10,892	\$ —	\$ —

Recently Issued Accounting Pronouncements

As an "emerging growth company," the Jumpstart Our Business Startups Act (the "JOBS Act") allows the Company to delay adoption of new or revised accounting pronouncements applicable to public companies until such pronouncements are made applicable to private companies. The Company has elected to delay adoption of certain new or revised accounting standards. As a result, the Company's financial statements may not be comparable to the financial statements of issuers who are required to comply with the effective date for new or revised accounting standards that are applicable to public companies.

In November 2016, ASU No. 2016-18, *Restricted Cash*, related to the classification of restricted cash in the cash flow statement was issued. This adds and clarifies guidance on the classification and presentation of changes in restricted cash on the statement of cash flows and to eliminate the diversity in practice related to such classifications. The guidance in ASU No. 2016-18 is required for annual reporting periods beginning after December 15, 2017, for business entities that are public, and after December 15, 2018 for all other entities. The Company adopted this guidance effective January 1, 2019 on a retrospective basis.

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

1. Summary of significant accounting policies (Continued)

In February 2016, the FASB issued ASU No. 2016-02, *Leases*. This standard amends several of aspects of lease accounting, including requiring lessees to recognize operating leases with a term greater than one year on their balance sheet as a right-of-use asset, and a corresponding lease liability, measured at the present value of the future minimum lease payments. The standard is effective for public entities for fiscal years beginning after December 15, 2018, and after December 15, 2020 for all other companies, with early adoption permitted. The Company intends to adopt this standard effective January 1, 2021 using the modified retrospective transition method and therefore will not restate comparative periods. The Company expects to elect the "package of three" practical expedients permitted under the transition guidance, which allows (i) a carry forward of the historical lease classification conclusions, (ii) management's assessment on whether a contract is or contains a lease, and (iii) the initial direct costs for any leases that exist prior to adoption of the new standard. The Company is currently evaluating the impact this guidance will have on the Company's consolidated financial statements. While the Company has not yet quantified the impact, resulting adjustments are expected to materially increase total assets and total liabilities relative to such amounts reported prior to adoption, but not have a material impact on the consolidated statements of comprehensive income (loss) or consolidated statements of cash flows.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, ("ASU 2016-13") which replaces the existing incurred loss impairment model with an expected credit loss model and requires financial assets, including trade receivables, to be measured at amortized cost to be presented at the net amount expected to be collected. ASU 2016-13 is effective for annual periods, and interim periods within those years, beginning after December 15, 2019, for business entities that are public and meet the definition of an SEC filer (excluding smaller reporting companies), and after December 15, 2022 for all other entities. The Company has elected to delay adoption of this guidance until January 1, 2021. The implementation of ASC 2016-13 is not expected to have a material impact on the Company's financial position.

In January 2017, the FASB issued ASU 2017-04, *Simplifying the Test for Goodwill Impairment*, ("ASU 2017-04") to eliminate step two of the goodwill impairment test requiring a hypothetical purchase price allocation. Goodwill impairment, if any, is determined by comparing the reporting unit's fair value to its carrying value. An impairment loss is recognized in an amount equal to the excess of the reporting unit's carrying value over its fair value, up to the amount of goodwill allocated to the reporting unit. In addition, income tax effects from any tax-deductible goodwill on the carrying amount of the reporting unit should be considered when measuring the goodwill impairment loss, if applicable. ASU 2017-04 is effective for annual periods, and interim periods within those years, beginning after December 15, 2019, for business entities that are public and meet the definition of an SEC filer (excluding smaller reporting companies), and after December 15, 2022 for all other entities. The Company has adopted this guidance effective as of January 1, 2020.

In January 2017, the FASB issued ASU 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business*, ("ASU 2017-01") which clarifies when transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The definition of a business affects many areas of accounting including acquisitions, disposals, goodwill and consolidation. This new guidance is effective

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

1. Summary of significant accounting policies (Continued)

for annual reporting periods beginning after December 15, 2017, for business entities that are public, and after December 15, 2018 for all other entities, with early adoption permitted. The Company adopted this guidance as of January 1, 2019.

In December 2019, the FASB issued ASU Update No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, ("ASU 2019-12") which simplifies the accounting for income taxes. The guidance in ASU 2019-12 is required for annual reporting periods, including interim periods within those annual periods, beginning after December 15, 2020, for business entities that are public, and after December 15, 2021, including interim periods within those annual periods for all other entities, with early adoption permitted. The Company will adopt this guidance on January 1, 2021. The Company is currently evaluating the impact this guidance will have on the Company's consolidated financial statements.

Risks and Uncertainties

In December 2019, a novel strain of coronavirus, COVID-19, appeared. The spread of COVID-19 has negatively impacted the global economy and may continue to result in reduced economic activity. This could lead to declines in our customers' revenue, spending and fewer transactions for which transaction tax is due, any of which may result in decreased revenue. However, the extent to which COVID-19 may impact our business will depend on future developments, which are highly uncertain and cannot be predicted.

2. Acquisition (unaudited)

On January 7, 2020, the Company acquired a 60% controlling interest in Systax, a provider of Brazilian transaction tax content and software. Cash consideration for the purchase was \$12,374 and was funded through borrowings under the revolving line of credit (the "Line of Credit"). This acquisition provides the Company with full access to a sizeable database of Brazilian tax content that is critical to supporting its global multi-national customers' business expansion into Brazil. The Company has a contractual purchase commitment to acquire the remaining 40% equity interest from the original Systax Quotaholders incrementally between 2021 through 2024. Future purchase commitment payments for these incremental acquisition amounts are based on a multiple of Systax revenue and earnings before interest, depreciation, amortization and income taxes ("EBITDA") performance at the end of 2020, 2022 and 2023, whereby the Company will have full ownership after the final transaction in 2024. Management has determined these future purchase commitments to be a forward contract, resulting in the Company being required to estimate and record an estimated future purchase commitment amount (the "Purchase Commitment Liability") in connection with recording the initial purchase. The Purchase Commitment Liability is estimated to be \$14,344 at the acquisition date based on information currently available. This amount is reflected in future acquisition commitment in the consolidated balance sheet at March 31, 2020, and any adjustments to the acquisition date fair value of this commitment will be adjusted to goodwill during the Measurement Period. Adjustments to the settlement date value that arise as a result of remeasurement at future balance sheet dates will be recorded as interest expense in the consolidated statements of comprehensive income (loss) in the period the change is identified.

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

2. Acquisition (unaudited) (Continued)

The acquisition was accounted for as a business combination and the total preliminary purchase price was allocated to the net tangible assets acquired and liabilities assumed based on their estimated fair values on the acquisition date, with the excess being recorded as goodwill. The net tangible assets acquired and liabilities assumed were valued at their respective carrying amounts as of the acquisition date pending the receipt of additional information during the Measurement Period. The contractual value of accounts receivable was \$867 at acquisition date. The excess of the purchase consideration over the net tangible assets is recorded as goodwill and primarily reflects the value of the tax content database, the assembled workforce and expected future synergies. Goodwill is deductible for tax purposes. The preliminary values recorded will be adjusted during the Measurement Period as more detailed analyses are performed and further information becomes available regarding the fair values of these amounts as of the acquisition date. Any such adjustments may be material. Subsequent adjustments to these values not associated with determination of their fair values on the acquisition date would be recorded in the consolidated statements of comprehensive income (loss) in the period the change is identified. The following table presents the preliminary purchase price allocation recorded in the Company's consolidated balance sheet as of the acquisition date (unaudited):

<u>Net Assets and Assumed Liabilities</u>	<u>Initial Purchase Price Allocation (unaudited) (in thousands)</u>
Cash and cash equivalents	\$ 56
Accounts receivable	867
Property and equipment	48
Other assets	18
Goodwill	26,124
Accounts payable and accrued expenses	(228)
Accrued compensation	(162)
Other liabilities	(5)
Total consideration at acquisition date	<u>\$ 26,718</u>

The Company has included the financial results of Systax in the consolidated statement of comprehensive income (loss) from the date of acquisition in accordance with ASC 810 due to the Company having a controlling financial interest in Systax. Systax revenue and net loss for the three months ended March 31, 2020 reflected in the consolidated statement of comprehensive income (loss) were \$1,143 and \$(256), respectively. As the Systax acquisition did not have a material impact on the Company's reported revenue or net loss for the three months ended March 31, 2020. Accordingly, pro forma financial information has not been presented. The transaction costs associated with the acquisition were approximately \$504 and were recorded in general and administrative expense in the year ending December 31, 2019.

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

3. Property and equipment

The major components of property and equipment are as follows:

	As of December 31,		As of
	2019	2018	March 31, 2020 (unaudited)
Leasehold improvements	\$ 20,887	\$ 20,884	\$ 20,881
Equipment	40,598	35,608	42,013
Computer software acquired	11,232	10,777	11,275
Internal-use software developed			
Cloud-based services	51,442	43,073	54,689
Internal systems and tools	23,957	16,197	24,584
Furniture and fixtures	7,451	7,516	7,500
Automobiles	27	27	61
In-process internal-use software	809	1,881	1,133
	156,403	135,963	162,136
Less accumulated depreciation	(101,676)	(86,482)	(106,426)
Property and equipment, net	\$ 54,727	\$ 49,481	\$ 55,710

Depreciation expense for property and equipment, excluding all internal-use software, was \$7,951 and \$7,319 for the years ended December 31, 2019 and 2018, respectively, and \$2,343 and \$1,479 for the three months ended March 31, 2020 and 2019, respectively (unaudited), and is reflected in depreciation and amortization in the consolidated statements of comprehensive income (loss).

Assets under capital leases of \$1,455 and \$116, net of accumulated depreciation of \$627 and \$62, at December 31, 2019 and 2018, respectively, are included in property and equipment in the consolidated balance sheets. Depreciation expense for assets held under capital leases was \$565 and \$40 for the years ended December 31, 2019 and 2018, respectively, and is included in depreciation and amortization expense in the consolidated statements of comprehensive income (loss). Assets under capital leases of \$1,287, net of accumulated depreciation of \$794, at March 31, 2020 (unaudited) are included in property and equipment in the consolidated balance sheets. Depreciation expense for assets held under capital leases was \$168 and \$62 for the three months ended March 31, 2020 and 2019, respectively (unaudited), and is included in depreciation and amortization expense in the consolidated statements of comprehensive income (loss).

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

3. Property and equipment (Continued)

The major components of internal-use software are as follows:

	As of December 31,		As of
	2019	2018	March 31, 2020 (unaudited)
Internal-use software developed	\$ 75,399	\$ 59,270	\$ 79,274
Less accumulated depreciation	(53,852)	(44,824)	(56,390)
	21,547	14,446	22,884
In-process internal-use software	809	1,881	1,133
Internal-use software developed, net	<u>\$ 22,356</u>	<u>\$ 16,327</u>	<u>\$ 24,017</u>

Amounts capitalized for internal-use software and included in property and equipment additions on the consolidated statements of cash flows are as follows:

	For the years ended December 31,		As of
	2019	2018	March 31, 2020 (unaudited)
Cloud-based solutions	\$ 10,179	\$ 14,345	\$ 3,834
Internal systems and tools	4,860	2,484	382
Total	<u>\$ 15,039</u>	<u>\$ 16,829</u>	<u>\$ 4,216</u>

In-process internal-use software is not depreciated until it is available for its intended use. Depreciation expense for internal-use software used for cloud-based solutions for the years ended December 31, 2019 and 2018 was \$7,983 and \$11,707, respectively, and is included in cost of revenues, software subscriptions in the consolidated statements of comprehensive income (loss). Depreciation expense for internal-use software utilized for internal systems and tools for the years ended December 31, 2019 and 2018 was \$1,045 and \$618, respectively, and is included in depreciation and amortization in the consolidated statements of comprehensive income (loss). Research and development costs associated with internal-use software were \$813 and \$2,345 for the years ended December 31, 2019 and December 31, 2018, respectively.

Depreciation expense for internal-use software used for cloud-based solutions for the three months ended March 31, 2020 and 2019 was \$2,011 and \$2,114, respectively (unaudited), and is included in cost of revenues, software subscriptions in the consolidated statements of comprehensive income (loss). Depreciation expense for internal-use software utilized for internal systems and tools for the three months ended March 31, 2020 and 2019 was \$526 and \$566, respectively (unaudited), and is included in depreciation and amortization in the consolidated statements of comprehensive income (loss). Research and development costs associated with internal-use software were \$495 and \$187 for the three months ended March 31, 2020 and 2019, respectively (unaudited).

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

**December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)**

(Amounts in thousands, except per share data)

3. Property and equipment (Continued)

Amortization expense of internal-use software, excluding in-process internal-use software not yet available for its intended use, at December 31, 2019 is as follows for all future years:

<u>Years Ending December 31,</u>	<u>Internal solutions</u>	<u>Cloud-based Systems</u>
2020	\$ 7,404	\$ 2,100
2021	5,087	1,990
2022	2,265	1,677
2023	346	715
2024	—	308
Total	<u>\$ 15,102</u>	<u>\$ 6,790</u>

During the year ended December 31, 2018, the Company recorded an impairment of capitalized internal-use software previously utilized to provide cloud-based solutions to customers of \$32,692, net of accumulated amortization of \$11,907, due to a product strategy shift that resulted in this service no longer being offered to customers after 2018. The software was deemed to be fully impaired due to the net book value of the software exceeding expected future cash flows. This amount is included in impairment of assets in the 2018 consolidated statement of comprehensive income (loss).

4. Capitalized software

Capitalized software includes acquired software and direct labor and related expenses for software developed for sale for new products and enhancements to existing products. Software development costs capitalized for the years ended December 31, 2019 and 2018 were \$17,221 and \$12,261, respectively, and for the three months ended March 31, 2020 and 2019 were \$3,706 and \$3,915, respectively (unaudited).

The major components of capitalized software are as follows:

	<u>As of December 31,</u>		<u>As of</u>
	<u>2019</u>	<u>2018</u>	<u>March 31,</u>
Capitalized software	\$ 47,862	\$ 29,669	\$ 47,862
Less accumulated amortization	20,281	12,069	22,837
	<u>27,581</u>	<u>17,600</u>	<u>25,025</u>
In-process capitalized software	4,494	5,466	8,200
Capitalized software, net	<u>\$ 32,075</u>	<u>\$ 23,066</u>	<u>\$ 33,225</u>

Capitalized software amortization expense for the years ended December 31, 2019 and 2018 was \$8,212 and \$5,257, respectively, and \$2,556 and \$1,815 for the three months ended March 31, 2020 and 2019, respectively (unaudited), and is included in cost of revenues, software subscriptions in the consolidated statements of comprehensive income (loss).

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

4. Capitalized software (Continued)

In-process capitalized software at December 31, 2019 was not available for general release to customers as of the balance sheet date and therefore not included in the table below. Amortization expense of capitalized software available for general release to customers as of December 31, 2019 is as follows for all future years:

Years Ending December 31,	
2020	\$ 9,926
2021	8,156
2022	4,927
2023	2,890
2024	1,682
Total	<u>\$ 27,581</u>

5. Debt

In November 2015, the Company entered into a \$105,000 credit agreement (the "Credit Agreement") consisting of a \$65,000 term loan (the "Term Loan") and a \$40,000 committed Line of Credit. The Company has the option to select an applicable interest rate at either the bank base rate plus an applicable margin (the "Base Rate Option") or the London Interbank Offered Rate ("LIBOR") plus an applicable margin (the "LIBOR Option"). The applicable margins are determined by certain financial covenant performance as defined in the Credit Agreement. At December 31, 2019 and 2018, the Base Rate Option resulted in rates of 4.75% and 5.50%, respectively. At December 31, 2019 and 2018, the LIBOR Option resulted in rates of 2.69% and 3.60%, respectively. The Credit Agreement is collateralized by certain assets of the Company. The Credit Agreement contains financial and operating covenants, which include limitations on the amount of dividends payable in a given period. The Company was in compliance with these covenants at December 31, 2019.

Term Loan

The Term Loan requires quarterly principal payments over five years, with a balloon payment in November 2020. The interest rate on the Term Loan was 2.69% at December 31, 2019 as the Company selected the LIBOR Option. Term Loan outstanding amounts are reported in current portion of long-term debt and long-term debt, net of current portion, in the consolidated balance sheets. As a result of the Term Loan becoming due in November 2020, the balance outstanding of \$50,375 is included in current portion of long-term debt on the consolidated balance sheet at December 31, 2019.

Line of Credit

The Line of Credit expires on November 1, 2020. The Company is required to pay a quarterly fee on the difference between the \$40,000 maximum borrowings allowed under the Line of Credit and the unpaid principal balance outstanding under the line at an applicable rate. The applicable rate, determined by certain financial covenant performance as defined in the Credit Agreement, was 0.200%

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

5. Debt (Continued)

and 0.225% as of December 31, 2019 and 2018, respectively. During the years ended December 31, 2019 and 2018, there were no advances against the Line of Credit.

Deferred Financing Costs

Unamortized deferred financing costs of \$221 and \$487 at December 31, 2019 and 2018, respectively, are included as a reduction in current portion of long-term debt and long-term debt, net of current portion in the consolidated balance sheets. Amortization expense of deferred financing costs was \$266 for each of the years ended December 31, 2019 and 2018 and is included in interest expense in the consolidated statements of comprehensive income (loss). Amortization expense of deferred financing costs will be \$221 in 2020.

Capital Leases

Capital lease obligations are included in current portion of long-term debt and long-term debt, net of current portion in the consolidated balance sheets.

Future minimum capital lease payments as of December 31, 2019 are as follows:

Years Ending December 31,	
2020	\$ 696
2021	696
2022	10
Total	<u>1,402</u>
Less amount representing interest	70
Present value of minimum lease payments	<u>1,332</u>
Less current portion	650
Capital lease obligations, net of current portion	<u>\$ 682</u>

New Credit Agreement (unaudited)

On March 31, 2020, the Company entered into a new credit agreement with a bank, which was subsequently amended on April 3, 2020 to permit another bank to be a party to the agreement, consisting of a \$175,000 term loan (the "New Term Loan") and a \$100,000 committed line of credit (the "New Line of Credit") (collectively, the "New Credit Agreement"). Absent the occurrence of a triggering event, such as an initial public offering which requires immediate repayment of the New Term Loan, the New Term Loan matures in March 2023 and requires quarterly principal payments of \$4,375 starting October 1, 2020, with a balloon payment on the payoff date. The Company is required to distribute not less than \$110,000 and not more than \$125,000 to stockholders within 90 days of the closing date of the New Credit Facility or such amount must be repaid to the lender. The Company has reflected the \$110,000 as funds held for distribution to stockholders in the consolidated balance sheet at March 31, 2020. Net proceeds from the New Term Loan after payment of financing fees of \$2,904

Vertex, Inc.**Notes to Consolidated Financial Statements (Continued)****December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)****(Amounts in thousands, except per share data)****5. Debt (Continued)**

and repayment of the amounts outstanding under the previous credit agreement of \$61,656, were used to fund a portion of the \$123,000 distribution made to the stockholders on May 29, 2020. The New Line of Credit matures in March 2025 and had no outstanding borrowings at closing. The Company has the option to select an applicable interest rate at either the bank base rate plus an applicable margin (the "New Base Rate Option") or the LIBOR plus an applicable margin (the "New LIBOR Option"). The applicable margins are determined by certain financial covenant performance as defined in the New Credit Agreement. At March 31, 2020 and May 31, 2020, the New Base Rate Option and New LIBOR Option were 3.75% and 2.50%, respectively. The New Credit Agreement is collateralized by certain assets of the Company. The New Credit Agreement contains financial and operating covenants.

6. Options for redeemable shares

Prior to 2006, Vertex issued stock options under separate option agreements, not subject to an option plan, permitting certain key members of management and the Board to purchase shares of Class B common stock. At December 31, 2019, 1,283 shares of Class B common stock were reserved for issuance under these option agreements. The exercise price of the shares under these option agreements is equal to the fair value of the shares as of the grant date, as determined by the Board with assistance from management and an independent third-party valuation provider. All options are fully vested at December 31, 2019.

The options are exercisable upon: (i) any time after the option holder is no longer an employee of the Company or a member of the Board; (ii) the Grantee's death or disability; (iii) the occurrence of a Partial Triggering Event (as defined below); or (iv) the occurrence of a Triggering Event (as defined below). In addition, the option agreements provide employee option holders with the ability to exercise a portion of their options between April 15 and April 30 of each year based upon the fair value of the Class B common stock as of December 31 of the prior calendar year, provided that certain Company performance is achieved. At the election of the Company, the option agreements allow option holders to satisfy tax withholding obligations incurred in connection with the exercise by exchanging exercised options in lieu of payment of income taxes paid by the Company on their behalf. The fair value of exchanged exercised options is recorded as a reduction to stockholders' deficit as part of the exercise of the related options, net of cash received.

Since these option agreements permit the option holders to put their exercised shares back to the Company for a price per share based upon the fair value of the Class B common stock determined six months after the holder exercised the options, they are classified as temporary equity and included in options for redeemable shares on the consolidated balance sheets. In addition, these option agreements permit the Company to call the shares based upon the fair value of the Class B common stock determined six months after the options were exercised. The Company has never exercised its right to call any shares issued from option exercises. In the event of the sale of at least 50% of the Company's stock or all the assets of the Company ("Triggering Event") in a single or multiple transactions, the option holders have the right to exercise their options and sell their related shares in connection with the transactions. Unexercised options expire after a Triggering Event. In the event of a sale of at least 25% of the Company's assets to an unrelated third-party in a single or multiple transactions ("Partial

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

6. Options for redeemable shares (Continued)

Triggering Event"), the option holders have the right to exercise a portion of their options pro rata based on the sales price and sell their related shares in connection with the transaction. Unexercised options remaining after a Partial Triggering Event remain outstanding. In addition, in the event stockholders owning at least 51% of the outstanding stock of the Company (the "selling stockholders") sell a portion of their stock to an unrelated third-party, the option holders have the right to exercise and sell an amount of options in the same proportion as the selling stockholders (a "tag-along right"). The option holders may also be required to exercise all their outstanding options and sell all related shares in the event the selling stockholders sell at least 51% of their ownership to an unrelated third-party (a "drag-along right").

The table below reflects stock option activity for the following periods:

	Options	Intrinsic values	Per share range of option prices	Per share weighted average option prices
Outstanding at January 1, 2018	1,531	\$ 13,554	\$0.46—\$2.14	\$ 0.65
Exercised	(156)	\$ 1,310	\$0.46—\$2.14	\$ 1.13
Outstanding at December 31, 2018	1,375	\$ 14,581	\$0.46—\$2.14	\$ 0.59
Exercised	(92)	\$ 957	\$0.46—\$1.15	\$ 0.74
Outstanding at December 31, 2019	1,283	\$ 17,344	\$0.46—\$2.14	\$ 0.58
Outstanding at March 31, 2020 (unaudited)	1,283	\$ 32,586	\$0.46—\$2.14	\$ 0.58

No options have been issued since December 2005.

7. Stockholders' deficit

Common Stock

There are no dividend or liquidation preference differences between the Class A or Class B common stock.

In April 2019, Vertex issued 75 shares of Class B common stock in connection with the exercise of stock options by option holders for cash of \$68, net of 17 shares that were immediately returned to Vertex upon exercise in lieu of payment of income taxes payable by the option holders of \$184. Vertex repurchased the 75 shares of Class B common stock in October 2019 at the request of the option holders for cash of \$841.

In April 2018, Vertex issued 134 shares of Class B common stock in connection with the exercise of stock options by option holders for cash of \$177, net of 22 shares that were immediately returned to Vertex upon exercise in lieu of payment of income taxes payable by the option holders of \$209. Vertex repurchased the 134 shares of Class B common stock in October 2018 at the request of the option holders for cash of \$1,277.

Vertex, Inc.**Notes to Consolidated Financial Statements (Continued)****December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)****(Amounts in thousands, except per share data)****7. Stockholders' deficit (Continued)**

At December 31, 2019 and 2018, repurchased shares ("Treasury Stock") aggregating 13,970 and 13,895, respectively, are carried at cost and included in Treasury Stock in the consolidated balance sheets. Treasury Stock includes 13,919 and 13,844 shares of Class B common stock at December 31, 2019 and 2018, respectively, and 51 shares of Class A common stock for both years.

The Board declared aggregate distributions to stockholders of the Class A and Class B common stock of \$13,183 and \$10,892 in December 2019 and 2018, respectively, to be paid pro rata to stockholders in January 2020 and 2019, respectively. Such amounts are reflected in distributions payable on the consolidated balance sheets. Payment of distributions to stockholders is limited by certain debt covenants.

The Board declared and paid aggregate distributions pro rata to stockholders of the Class A and Class B common stock of \$4,010 during the three months ended March 31, 2020 (unaudited). In May 2020 the Board declared and paid aggregate distributions pro rata to stockholders of the Class A and Class B common stock of \$123,000 (unaudited).

8. Employee benefit and deferred compensation plans**401(k) Plan**

The Company maintains a 401(k) plan that covers eligible employees subject to certain age and length of service requirements. The Company matches up to 3% of eligible compensation during the period in which an eligible participant contributes to the plan. Matching contributions were \$3,419 and \$2,893 for the years ended December 31, 2019 and 2018, respectively, and \$1,125 and \$1,150 for the three months ended March 31, 2020 and 2019, respectively (unaudited). In addition, a discretionary profit-sharing contribution of 3% of eligible compensation for eligible employees was approved and aggregated \$3,363 and \$2,886 for the years ended December 31, 2019 and 2018, respectively, and is reflected in accrued salaries and benefits in the consolidated balance sheets.

Long-Term Rewards Plan

The Company has a long-term rewards ("LTR") plan for certain key employees which provides for compensation related to growth in certain financial measures over a three-year period (the "Reward Performance Period"), subject to achieving an annual minimum net income target (the "Net Income Target") during each year of the Reward Performance Period. Each year, eligible LTR plan participants receive an individual target award opportunity ("Award Opportunity") for a new three-year Reward Performance Period (i.e. target award grant made in 2018 is for years 2018 through 2020). For Reward Performance Periods prior to 2018, compensation earned for growth in the financial measures over each Reward Performance Period is paid in cash in the year following the end of the respective Reward Performance Period, assuming the Net Income Target was achieved for each year of the respective Reward Performance Period. Starting in 2018, the Net Income Target is only required to be achieved in the final year of the Reward Performance Period. Estimated compensation is recorded during each year of a Reward Performance Period ("accrued LTR Award Opportunities").

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

8. Employee benefit and deferred compensation plans (Continued)

Compensation expense of \$2,462 and \$2,012 was recorded in the consolidated statements of comprehensive income (loss) for accrued LTR Award Opportunities for the years ended December 31, 2019 and 2018, respectively, and \$798 and \$492 for the three months ended March 31, 2020 and 2019, respectively (unaudited), for open Reward Performance Periods. The Net Income Target was not achieved in 2018, which would have resulted in the LTR Award Opportunities being zero for the three-year Reward Performance Periods that started in 2016 and 2017. The Board waived the 2018 Net Income Target requirement for these Reward Performance Periods. Amounts to be paid to participants in 2020 for the Reward Performance Period starting in 2017 of \$2,717, and amounts paid in 2019 for the Reward Performance Period that started in 2017 are reflected in deferred compensation, current in the consolidated balance sheets as of December 31, 2019 and 2018, respectively. The remaining balances of accrued LTR Award Opportunities for open Reward Performance Periods of \$1,812 and \$2,085 at December 31, 2019 and 2018, respectively, and \$2,610 as of March 31, 2020 (unaudited) are reflected in deferred compensation, net of current portion, in the consolidated balance sheets.

SAR Plan

The Company has a SAR plan for the purpose of providing incentives to key members of management to contribute to the growth and financial success of the Company. SAR plan awards ("SAR Awards") are represented as a fixed number of shares of Class B common stock ("SAR Units"). SAR Units outstanding aggregated 4,092 and 3,557 at December 31, 2019 and 2018, respectively, and 4,051 at March 31, 2020 (unaudited). SAR Units are issued at the equivalent of the fair value of the equivalent number of shares of the Company's Class B common stock on the grant date ("Base Value"), as determined by the Board with assistance from management and an independent third-party valuation provider, and compensation is based upon the appreciation of the SAR Units in excess of the Base Value over the service vesting period. SAR Awards are exercisable upon 50% vesting or upon the occurrence of a triggering event.

Vested SAR units are redeemed upon the occurrence of a triggering event. Triggering events include: (i) expiration of the term of the SAR; (ii) a change of control of the Company whereby stockholders holding at least 50% of the voting stock of the company sell their shares; (iii) a merger of the Company with an unrelated third-party; (iv) an initial public offering; and (v) death, disability or retirement of a SAR participant.

SAR participants are limited to exercising no more than 25% of their vested SAR Units in any given year. SAR Awards generally vest 50% and 100% after two years and five years, respectively, from the grant date, or as determined by the Board. Maximum contractual terms range from ten years to term of employment of the participant. SAR Awards are settled in cash only, not through the issuance of shares. SAR Award exercises are limited each year to the proportion of the vested SAR units to the total units outstanding multiplied by adjusted net cash from operating activities (the "Liquidity Pool"), which is defined as cash from operating activities less cash paid for property and equipment and capitalized software for a given period.

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

**December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)**

(Amounts in thousands, except per share data)

8. Employee benefit and deferred compensation plans (Continued)

The below table represents SAR activity for the following periods:

	Vested Units	Nonvested Units	Total Units	Range of Grant Values
Balance, January 1, 2018	1,803	1,503	3,306	\$2.77–\$9.50
Granted	49	542	591	\$9.50
Exercised	(319)	—	(319)	\$2.77–\$7.50
Forfeited	—	(21)	(21)	\$7.50
Vested	430	(430)	—	
Balance, December 31, 2018	1,963	1,594	3,557	\$2.77–\$9.50
Granted	99	704	803	\$11.20
Exercised	(203)	—	(203)	\$3.94–\$7.50
Forfeited	—	(65)	(65)	\$6.40–\$7.50
Vested	210	(210)	—	
Balance, December 31, 2019	2,069	2,023	4,092	\$2.77–\$11.20
Granted (unaudited)	7	227	234	\$14.10
Exercised (unaudited)	(254)	—	(254)	\$3.94–\$7.50
Forfeited (unaudited)	—	(21)	(21)	\$7.50
Vested (unaudited)	418	(418)	—	
Balance, March 31, 2020 (unaudited)	2,240	1,811	4,051	\$2.77–\$14.10

The weighted average grant date intrinsic value of the SARs on grant date is zero as the Company's Board grants all awards at a price per share not less than the per share fair value of the Company's Class B common stock underlying such awards on the date of grant.

During the years ended December 31, 2019 and 2018, \$9,460 and \$5,108, respectively, and the three months ended March 31, 2020 and 2019, \$34,920 and \$1,310, respectively (unaudited), was recorded as compensation expense in the consolidated statements of comprehensive income (loss) to reflect the appreciation in value of the vested portion of outstanding SAR Awards over the Base Value from the grant date. SAR Awards totaling \$1,229 and \$1,825 were exercised during 2019 and 2018, respectively, and \$2,391 during the three months ended March 31, 2020 (unaudited). Accrued SAR Awards of \$5,790 and \$3,979 at December 31, 2019 and 2018, respectively, and \$5,790 at March 31, 2020 (unaudited), representing SAR Units scheduled for redemption and 25% of the vested SAR Units eligible for exercise in 2020 and 2019, respectively, are reflected in deferred compensation in the consolidated balance sheets. The remaining balances of accrued SAR Awards of \$16,506 and \$10,086 at December 31, 2019 and 2018, respectively, and \$49,035 at March 31, 2020 (unaudited) are reflected as deferred compensation, net of current portion, in the consolidated balance sheets. We had approximately \$3,900 and \$16,772 of total unrecognized compensation expense for unvested SAR Awards at December 31, 2019 and March 31, 2020 (unaudited), respectively, which we expect to recognize over a period of approximately one to five years.

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

9. Related parties

The Company advanced amounts to certain stockholders of the Company of \$283 and \$140 at December 31, 2019 and 2018, respectively, and \$218 at March 31, 2020 (unaudited). These amounts are non-interest bearing as they are short-term in nature and repaid within three months. These amounts are included in advances to stockholders in the consolidated balance sheets.

10. Commitments and contingencies

The Company leases office space under operating leases that expire at various dates through September 2028. Rent expense under all property operating leases was \$6,408 and \$6,291 for the years ended December 31, 2019 and 2018, respectively, and \$1,697 and \$1,518 for the three months ended March 31, 2020 and 2019, respectively (unaudited). These amounts are reflected in general and administrative expense in the consolidated statements of comprehensive income (loss).

Future minimum lease obligations as of December 31, 2019 for all operating property leases for all future years, excluding operating costs, are as follows:

Years Ending December 31,	
2020	\$ 4,534
2021	4,486
2022	3,944
2023	4,007
2024	3,996
Thereafter	14,947
Total	<u>\$ 35,914</u>

11. Income taxes

The components of net income (loss) before income taxes, by geography, consists of the following for the years ended December 31:

	<u>2019</u>	<u>2018</u>
U.S.	\$ 32,131	\$ (1,999)
Foreign	(1,229)	(2,428)
Net income (loss) before income taxes	<u>\$ 30,902</u>	<u>\$ (4,427)</u>

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

11. Income taxes (Continued)

Income tax benefit (expense) consists of the following for the years ended December 31:

	2019	2018
Current income taxes:		
State and local	\$ (578)	\$ (537)
Foreign	(115)	(295)
Total current	<u>(693)</u>	<u>(832)</u>
Deferred income taxes:		
State and local	677	(818)
Foreign	171	(29)
Total deferred	<u>848</u>	<u>(847)</u>
Income tax benefit (expense)	<u>\$ 155</u>	<u>\$ (1,679)</u>

The reconciliation of the effective tax rate to tax at the statutory rates for the years ended December 31 is as follows:

	2019		2018	
	Total	Tax Rate	Total	Tax Rate
Pretax net income (loss)	\$ 30,902		\$ (4,427)	
Taxes:				
U.S. federal income tax at statutory rate	—	0.0%	—	0.0%
State income taxes	\$ (98)	(0.3%)	\$ 1,355	(30.6%)
Impact of foreign operations	(57)	(0.2%)	324	(7.3%)
Taxes and effective tax rate	<u>\$ (155)</u>	<u>(0.5%)</u>	<u>\$ 1,679</u>	<u>(37.9%)</u>

Vertex, Inc.

Notes to Consolidated Financial Statements (Continued)

December 31, 2019 and 2018 and
March 31, 2020 and 2019 (unaudited)

(Amounts in thousands, except per share data)

11. Income taxes (Continued)

Significant components of the Company's net deferred tax assets (liabilities) are as follows at December 31:

	2019	2018
Deferred tax assets:		
Deferred revenue	\$ 326	\$ 209
State operating loss carry forwards	56	73
Foreign loss carry forwards	217	13
Accrued expenses	98	116
Accrued variable compensation	(47)	(49)
Deferred compensation	548	384
Other	46	13
Deferred tax assets	<u>1,244</u>	<u>759</u>
Valuation allowance	(46)	(13)
Total deferred tax assets	<u>1,198</u>	<u>746</u>
Deferred tax liabilities:		
Depreciation and amortization	(860)	(754)
Prepaid expenses	(40)	(45)
Total deferred tax liabilities	<u>(900)</u>	<u>(799)</u>
Net deferred tax asset (liability)	<u>\$ 298</u>	<u>\$ (53)</u>

At December 31, 2019, the Company has available foreign operating losses of approximately \$1,169, some of which expire as early as 2025, and others which carry forward indefinitely. In addition, the Company has \$54 of foreign non-operating losses, which carryforward indefinitely. A valuation allowance for a portion of the foreign operating and all of the foreign non-operating losses are recorded at December 31, 2019 and 2018.

At December 31, 2019, the Company has available U.S. state operating loss carry forwards of \$1,255 which expire through 2026. Management expects to fully utilize these state operating loss carry forwards.

The Company files tax returns as prescribed by the tax laws of the jurisdictions in which the Company operates. Under applicable U.S. federal statutes, tax years ended December 31, 2016 through December 31, 2019 remain subject to examination. Under applicable statutes, state and foreign corporate tax returns filed for the Company and its respective foreign subsidiaries for years ended December 31, 2014 through December 31, 2019 remain subject to examination by the respective authorities.

The Company used an annual effective tax rate approach to calculate income taxes for the three months ended March 31, 2020 and 2019. The annual effective tax rate differs from the U.S. federal statutory rate due primarily to state tax expense in states that do not recognize the federal S corporation election but instead tax the Company at the corporate level. Income taxes for international operations are not material for the three months ended March 31, 2020 and 2019 (unaudited).

The effective income tax rate was an expense of (0.9%) and 2.7% for the three months ended March 31, 2020 and 2019, respectively (unaudited). The difference is due primarily to a pretax loss for the three months ended March 31, 2020 from an increase in deferred compensation costs during the quarter.

Through and including _____, 2020 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

Shares



Vertex, Inc.

Class A Common Stock

PROSPECTUS

, 2020

PART II**INFORMATION NOT REQUIRED IN PROSPECTUS****Item 13. Other Expenses of Issuance and Distribution**

The following table sets forth the costs and expenses, other than the underwriting discounts and commissions, payable by the registrant in connection with the offering and sale of the Class A common stock being registered. All amounts shown are estimates except for the SEC registration fee, the Financial Industry Regulatory Authority, Inc. ("FINRA") filing fee and the exchange listing fee.

	Amount Paid or to Be Paid
SEC registration fee	\$ *
FINRA filing fee	*
Exchange listing fee	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Blue sky fees and expenses	*
Transfer agent and registrar fees and expenses	*
Miscellaneous expenses	*
Total	<u>\$ *</u>

* To be provided by amendment

Item 14. Indemnification of Directors and Officers

Section 102 of the General Corporation Law of the State of Delaware permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his or her duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. We expect to adopt an amended and restated certificate of incorporation, or Amended Charter, which will become effective upon the consummation of this offering, and which will provide that none of our directors shall be personally liable to us or to our stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the General Corporation Law of the State of Delaware provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he or she was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or

matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Upon consummation of this offering, our Amended Charter and our amended and restated bylaws, or Amended Bylaws, will provide indemnification for our directors and officers to the fullest extent permitted by the General Corporation Law of the State of Delaware, subject to certain limited exceptions. We will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of us) by reason of the fact that he or she is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. Our Amended Charter and Amended Bylaws will provide that we will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of us to procure a judgment in our favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by us against all expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

We have entered into indemnification agreements with each of our directors. Prior to the consummation of this offering, we entered into separate indemnification agreements with each of our executive officers. Each indemnification agreement provides, or will provide, among other things, for indemnification to the fullest extent permitted by law and our Amended Charter and Amended Bylaws against any and all expenses, judgments, fines, penalties and amounts paid in settlement of any claim. The indemnification agreements will provide for the advancement or payment of all expenses to the indemnitee and for the reimbursement to us if it is found that such indemnitee is not entitled to such indemnification under applicable law and our Amended Charter and Amended Bylaws.

We maintain a general liability insurance policy that covers certain liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

In any underwriting agreement we enter into in connection with the sale of common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, us, our directors,

our officers and persons who control us within the meaning of the Securities Act of 1933, as amended (the "Securities Act") against certain liabilities.

Item 15. Recent Sales of Unregistered Securities

None.

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits

A list of exhibits required to be filed under this item is set forth on the Exhibit Index of this registration statement and is incorporated in this Item 16(a) by reference.

(b) Financial Statement Schedules.

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

Item 17. Undertakings

The undersigned Registrant hereby undertakes to provide to the underwriter at the closing specified in the underwriting agreements certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

INDEX TO EXHIBITS

The following exhibits are filed as part of this registration statement.

<u>Exhibit No.</u>	
1.1*	Form of Underwriting Agreement.
3.1*	Form of Amended and Restated Certificate of Incorporation of Vertex, Inc.
3.2*	Form of Amended and Restated Bylaws of Vertex, Inc.
4.1*	Specimen Stock Certificate evidencing the shares of Class A common stock.
4.2*	Form of Third Amended and Restated Stockholders' Agreement.
5.1*	Opinion of Latham & Watkins LLP.
10.1	Credit Agreement by and among Vertex, Inc., the guarantors party thereto, PNC Bank, National Association, and the lenders party thereto, dated as of March 31, 2020.
10.2	First Amendment to Loan Documents, by and among Vertex, Inc., the guarantors party thereto, the lenders party thereto and PNC Bank, National Association, dated as of April 3, 2020.
10.3#*	Form of Indemnification Agreement between Vertex, Inc. and each of its Executive Officers and Directors.
10.4	2007 Stock Appreciation Rights Plan.
10.5#*	Executive Employment Agreement, dated as of February 12, 2015, by and between Vertex, Inc. and Lisa A. Butler.
10.6#*	Executive Employment Agreement, dated as of October 7, 2015, by and between Vertex, Inc. and David J. DeStefano.
10.7#*	Executive Employment Agreement, dated as of April 10, 2017, by and between Vertex, Inc. and Bryan Rowland.
10.8#*	Executive Employment Agreement, dated as of December 30, 2019, by and between Vertex, Inc. and John R. Schwab.
10.9*	Tax Matters Agreement.
16.1	Letter of Baker Tilly Virchow Krause, LLP to the Securities and Exchange Commission.
21.1*	List of Subsidiaries.
23.1*	Consent of Latham & Watkins LLP (included in Exhibit 5.1).
23.2	Consent of Crowe LLP.
24.1	Powers of Attorney (included in the signature pages to this registration statement).

* To be filed by amendment.

Indicates a management contract or compensatory plan.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ TERRENCE KYLE</u> Terrence Kyle	Director	July 2, 2020
<u>/s/ KEVIN ROBERT</u> Kevin Robert	Director	July 2, 2020
<u>/s/ J. RICHARD STAMM</u> J. Richard Stamm	Director	July 2, 2020
<u>/s/ AMANDA WESTPHAL RADCLIFFE</u> Amanda Westphal Radcliffe	Director	July 2, 2020
<u>/s/ STEFANIE WESTPHAL THOMPSON</u> Stefanie Westphal Thompson	Director	July 2, 2020
<u>/s/ JEFFREY WESTPHAL</u> Jeffrey Westphal	Director	July 2, 2020

**\$100,000,000 REVOLVING CREDIT FACILITY
\$175,000,000 TERM LOAN**

CREDIT AGREEMENT

by and among

VERTEX, INC., as Borrower

and

THE GUARANTORS PARTY HERETO

and

THE LENDERS PARTY HERETO

and

PNC BANK, NATIONAL ASSOCIATION, as Administrative Agent

Dated as of March 31, 2020

PNC CAPITAL MARKETS LLC, as Sole Lead Arranger and Sole Bookrunner

TABLE OF CONTENTS

	<u>Page</u>	
1.	CERTAIN DEFINITIONS	1
1.1	Certain Definitions	1
1.2	Construction	37
1.3	Accounting Principles; Changes in GAAP	37
1.4	Currency Calculations	38
1.5	Divisions	38
1.6	Euro-Rate Notification	38
2.	REVOLVING CREDIT AND SWING LOAN FACILITIES	38
2.1	Revolving Credit Commitments	38
2.1.1	Revolving Credit Loans; Optional Currency Loans	38
2.1.2	Swing Loan Commitment	39
2.2	Nature of Lenders' Obligations with Respect to Revolving Credit Loans	39
2.3	Commitment Fees	39
2.4	Termination or Reduction of Revolving Credit Commitments	40
2.4.1	Termination or Reduction of Revolving Credit Commitments	40
2.5	Revolving Credit Loan Requests; Swing Loan Requests	40
2.5.1	Revolving Credit Loan Requests	40
2.5.2	Swing Loan Requests	41
2.6	Making Revolving Credit Loans and Swing Loans; Presumptions by the Administrative Agent; Repayment of Revolving Credit Loans; Borrowings to Repay Swing Loans	41
2.6.1	Making Revolving Credit Loans	41
2.6.2	Presumptions by the Administrative Agent	42
2.6.3	Making Swing Loans	42
2.6.4	Repayment of Revolving Credit Loans	42
2.6.5	Borrowings to Repay Swing Loans	42
2.6.6	Swing Loans Under Cash Management Agreements	43
2.7	Notes	43
2.8	Use of Proceeds — Revolving Credit Facility	44
2.9	Letter of Credit Subfacility	44
2.9.1	Issuance of Letters of Credit	44
2.9.2	Letter of Credit Fees	45
2.9.3	Disbursements, Reimbursement	45
2.9.4	Repayment of Participation Advances	47
2.9.5	Documentation	47
2.9.6	Determinations to Honor Drawing Requests	48
2.9.7	Nature of Participation and Reimbursement Obligations	48
2.9.8	Indemnity	49
2.9.9	Liability for Acts and Omissions	50
2.9.10	Issuing Lender Reporting Requirements	51
2.10	Defaulting Lenders	51
2.11	Utilization of Commitments in Optional Currencies	53

2.11.1	Periodic Computations of Dollar Equivalent Amounts of Revolving Credit Loans that are Optional Currency Loans and Letters of Credit Outstanding; Repayment in Same Currency	53
2.11.2	European Monetary Union	53
2.12	Funding by Branch, Subsidiary or Affiliate	54
2.13	Currency Repayments	54
2.14	Optional Currency Amounts	55
3.	TERM LOANS	55
3.1	Term Loan Commitments	55
3.2	Nature of Lenders' Obligations with Respect to Term Loans; Repayment Terms	55
3.3	Use of Proceeds — Term Loan Facility	55
3A	INCREMENTAL FACILITIES	55
3A.1	Incremental Commitments	55
4.	INTEREST RATES	58
4.1	Interest Rate Options	58
4.1.1	Revolving Credit Interest Rate Options; Swing Line Interest Rate	58
4.1.2	Term Loan Interest Rate Options	59
4.1.3	Interest Act (Canada)	59
4.1.4	Rate Calculations; Rate Quotations	59
4.2	Interest Periods	59
4.2.1	Amount of Borrowing Tranche	60
4.2.2	Renewals	60
4.2.3	No Conversion of Optional Currency Loans	60
4.3	Interest After Default	60
4.3.1	Interest Rate	60
4.3.2	Letter of Credit Fees and Other Obligations	60
4.3.3	Acknowledgment	61
4.4	Rates Unascertainable; Illegality; Increased Costs; Deposits Not Available; Optional Currency Not Available	61
4.4.1	Unascertainable	61
4.4.2	Illegality; Increased Costs	61
4.4.3	Optional Currency Not Available	61
4.4.4	Administrative Agent's and Lender's Rights	62
4.5	Selection of Interest Rate Options	63
4.6	Successor Euro-Rate Index	63
5.	PAYMENTS	66
5.1	Payments	66
5.2	Pro Rata Treatment of Lenders	67
5.3	Sharing of Payments by Lenders	67
5.4	Presumptions by Administrative Agent	68
5.5	Interest Payment Dates	68
5.6	Voluntary Prepayments	69
5.6.1	Right to Prepay	69

5.6.2	Replacement of a Lender	70
5.6.3	Designation of a Different Lending Office	71
5.7	Mandatory Prepayments	71
5.7.1	Sale of Assets	71
5.7.2	Issuance of Debt; Issuance of Equity Interests; No Specified Distribution	71
5.7.3	Material Recovery Event	72
5.7.4	Currency Fluctuations	72
5.7.5	Application of Payments	72
5.7.6	Application Among Interest Rate Options	72
5.8	Increased Costs	73
5.8.1	Increased Costs Generally	73
5.8.2	Capital Requirements	73
5.8.3	Certificates for Reimbursement; Repayment of Outstanding Loans; Borrowing of New Loans	74
5.8.4	Delay in Requests	74
5.8.5	Additional Reserve Requirements	74
5.9	Taxes	74
5.9.1	Issuing Lender	74
5.9.2	Payments Free of Taxes	75
5.9.3	Payment of Other Taxes by the Loan Parties	75
5.9.4	Indemnification by the Loan Parties	75
5.9.5	Indemnification by the Lenders	75
5.9.6	Evidence of Payments	75
5.9.7	Status of Lenders	76
5.9.8	Treatment of Certain Refunds	78
5.9.9	Survival	78
5.10	Indemnity	78
5.11	Settlement Date Procedures	79
5.12	Currency Conversion Procedures for Judgments	79
5.13	Indemnity in Certain Events	80
6.	REPRESENTATIONS AND WARRANTIES	80
6.1	Representations and Warranties	80
6.1.1	Organization and Qualification; Power and Authority; Compliance With Laws; Title to Properties; Event of Default	80
6.1.2	Subsidiaries and Owners; Investment Companies	80
6.1.3	Validity and Binding Effect	81
6.1.4	No Conflict; Material Agreements; Consents	81
6.1.5	Litigation	81
6.1.6	Financial Statements	82
6.1.7	Margin Stock	82
6.1.8	Full Disclosure	82
6.1.9	Taxes	83
6.1.10	Patents, Trademarks, Copyrights, Licenses, Etc.	83
6.1.11	Liens in the Collateral	83
6.1.12	Insurance	83
6.1.13	ERISA Compliance	83

	6.1.14	Environmental Matters	84
	6.1.15	Solvency	84
	6.1.16	Anti-Terrorism Laws	84
	6.1.17	Anti-Corruption	85
	6.1.18	Certificate of Beneficial Ownership	85
7.		CONDITIONS OF LENDING AND ISSUANCE OF LETTERS OF CREDIT	85
	7.1	First Loans and Letters of Credit	85
		8.1.1 Deliveries	85
		8.1.2 Payment of Fees	87
	7.2	Each Loan or Letter of Credit	87
8.		COVENANTS	87
	8.1	Affirmative Covenants	87
		8.1.1 Preservation of Existence, Etc.	87
		8.1.2 Payment of Liabilities, Including Taxes, Etc.	87
		8.1.3 Maintenance of Insurance	88
		8.1.4 Maintenance of Properties and Leases	88
		8.1.5 Visitation Rights	88
		8.1.6 Keeping of Records and Books of Account	88
		8.1.7 Compliance with Laws; Use of Proceeds	89
		8.1.8 Further Assurances	89
		8.1.9 Anti-Terrorism Laws; International Trade Law Compliance	89
		8.1.10 Keepwell	89
		8.1.11 Control Agreements	90
		8.1.12 Additional Collateral; Joinder of Subsidiaries	90
		8.1.13 Certificate of Beneficial Ownership and Other Additional Information	92
		8.1.14 Certified Organizational Documents	92
		8.1.15 Financial Projections	92
	8.2	Negative Covenants	92
		8.2.1 Indebtedness	92
		8.2.2 Liens; Lien Covenants	93
		8.2.3 Guaranties	94
		8.2.4 Loans and Investments	94
		8.2.5 Dividends and Related Distributions	95
		8.2.6 Liquidations, Mergers, Consolidations, Acquisitions	95
		8.2.7 Dispositions of Assets or Subsidiaries	97
		8.2.8 Affiliate Transactions	98
		8.2.9 Subsidiaries and Partnerships	98
		8.2.10 Continuation of or Change in Business	99
		8.2.11 Fiscal Year	99
		8.2.12 Issuance of Stock	99
		8.2.13 Changes in Organizational Documents	99
		8.2.14 Minimum Fixed Charge Coverage Ratio/Minimum Interest Coverage Ratio	99
		8.2.15 Maximum Net Leverage Ratio	100
		8.2.16 Limitation on Negative Pledges	100
		8.2.17 Limitation on Restrictions on Subsidiary Distributions	100

8.2.18	Anti-Corruption	101
8.2.19	Division/Series Transaction	101
8.2.20	Restriction on Transfer of Intellectual Property	101
8.3	Reporting Requirements	101
8.3.1	Quarterly Financial Statements	102
8.3.2	Annual Financial Statements	102
8.3.3	Certificate of the Borrower	102
8.3.4	Notices	102
9.	DEFAULT	103
9.1	Events of Default	103
9.1.1	Payments Under Loan Documents	103
9.1.2	Breach of Warranty	104
9.1.3	Anti-Terrorism Laws	104
9.1.4	Breach of Negative Covenants, Visitation Rights or Anti-Terrorism Laws	104
9.1.5	Breach of Other Covenants	104
9.1.6	Defaults in Other Agreements or Indebtedness	104
9.1.7	Final Judgments or Orders	104
9.1.8	Loan Document Unenforceable	105
9.1.9	Uninsured Losses; Proceedings Against Assets	105
9.1.10	Events Relating to Pension Plans and Multiemployer Plans	105
9.1.11	Change of Control	105
9.1.12	Relief Proceedings	105
9.2	Consequences of Event of Default	105
9.2.1	Events of Default Other Than Bankruptcy, Insolvency or Reorganization Proceedings	105
9.2.2	Bankruptcy, Insolvency or Reorganization Proceedings	106
9.2.3	Set-off	106
9.2.4	Application of Proceeds	107
10.	THE ADMINISTRATIVE AGENT	108
10.1	Appointment and Authority	108
10.2	Rights as a Lender	108
10.3	Exculpatory Provisions	108
10.4	Reliance by Administrative Agent	109
10.5	Delegation of Duties	110
10.6	Resignation of Administrative Agent	110
10.7	Non-Reliance on Administrative Agent and Other Lenders	111
10.8	No Other Duties, etc.	111
10.9	Administrative Agent's Fee	111
10.10	Authorization to Release Collateral and Guarantors	111
10.11	No Reliance on Administrative Agent's Customer Identification Program	112
10.12	Administrative Agent May File Proofs of Claim	112
10.13	Lender Provided Interest Rate Hedges, Lender Provided Foreign Currency Hedges and Other Lender Provided Financial Service Products	112
11.	MISCELLANEOUS	113

11.1	Modifications, Amendments or Waivers	113
11.1.1	Increase of Commitment	113
11.1.2	Extension of Payment; Reduction of Principal, Interest or Fees; Modification of Terms of Payment	113
11.1.3	Release of Collateral or Guarantor; Subordination of Collateral	114
11.1.4	Miscellaneous	114
11.2	No Implied Waivers; Cumulative Remedies	115
11.3	Expenses; Indemnity; Damage Waiver	115
11.3.1	Costs and Expenses	115
11.3.2	Indemnification by the Borrower	115
11.3.3	Reimbursement by Lenders	116
11.3.4	Waiver of Consequential Damages, Etc.	117
11.3.5	Payments	117
11.3.6	Survival	117
11.4	Holidays	117
11.5	Notices; Effectiveness; Electronic Communication	117
11.5.1	Notices Generally	117
11.5.2	Electronic Communications	118
11.5.3	Change of Address, Etc.	119
11.5.4	Certificates of Officers	119
11.6	Severability	119
11.7	Duration; Survival	119
11.8	Successors and Assigns	119
11.8.1	Successors and Assigns Generally	119
11.8.2	Assignments by Lenders	120
11.8.3	Register	121
11.8.4	Participations	122
11.8.5	Certain Pledges; Successors and Assigns Generally	123
11.9	Confidentiality	123
11.9.1	General	123
11.9.2	Sharing Information With Affiliates of the Lenders	124
11.10	Counterparts; Integration; Effectiveness	124
11.10.1	Counterparts; Integration; Effectiveness	124
11.11	CHOICE OF LAW; SUBMISSION TO JURISDICTION; WAIVER OF VENUE; SERVICE OF PROCESS; WAIVER OF JURY TRIAL; ADDITIONAL WAIVERS	124
11.11.1	Governing Law	124
11.11.2	SUBMISSION TO JURISDICTION	124
11.11.3	WAIVER OF VENUE	125
11.11.4	SERVICE OF PROCESS	125
11.11.5	WAIVER OF JURY TRIAL	125
11.12	USA Patriot Act Notice	126
11.13	Acknowledgement and Consent to Bail-In of Affected Financial Institutions	126
11.14	Acknowledgement Regarding Any Supported QFCs	126
11.15	Certain ERISA Matters	127
11.16	Non-Public Information	129

LIST OF SCHEDULES AND EXHIBITS

SCHEDULES

SCHEDULE 1.1(A)	-	PRICING GRID
SCHEDULE 1.1(B)	-	COMMITMENTS OF LENDERS AND ADDRESSES FOR NOTICES
SCHEDULE 1.1(L)	-	EXISTING LETTERS OF CREDIT
SCHEDULE 1.1(P)	-	EXISTING LIENS
SCHEDULE 1.1(PH)	-	PERMITTED HOLDERS
SCHEDULE 1.1(SO)	-	STOCK OPTION AGREEMENTS
SCHEDULE 6.1.1	-	[RESERVED]
SCHEDULE 6.1.2	-	SUBSIDIARIES
SCHEDULE 6.1.14	-	ENVIRONMENTAL DISCLOSURES
SCHEDULE 8.1.3	-	INSURANCE REQUIREMENTS RELATING TO COLLATERAL
SCHEDULE 8.2.1	-	EXISTING INDEBTEDNESS
SCHEDULE 8.2.4	-	EXISTING INVESTMENTS

EXHIBITS

EXHIBIT 1.1(A)	-	ASSIGNMENT AND ASSUMPTION AGREEMENT
EXHIBIT 1.1(G)	-	GUARANTEE AND COLLATERAL AGREEMENT
EXHIBIT 1.1(N)(1)	-	REVOLVING CREDIT NOTE
EXHIBIT 1.1(N)(2)	-	SWING LOAN NOTE
EXHIBIT 1.1(N)(3)	-	TERM NOTE
EXHIBIT 2.5.1	-	LOAN REQUEST
EXHIBIT 2.5.2	-	SWING LOAN REQUEST
EXHIBIT 5.9.7(A)	-	U.S. TAX COMPLIANCE CERTIFICATE (For Foreign Lenders That Are Not Partnerships For U.S. Federal Income Tax Purposes)
EXHIBIT 5.9.7(B)	-	U.S. TAX COMPLIANCE CERTIFICATE (For Foreign Participants That Are Not Partnerships For U.S. Federal Income Tax Purposes)
EXHIBIT 5.9.7(C)	-	U.S. TAX COMPLIANCE CERTIFICATE (For Foreign Participants That Are Partnerships For U.S. Federal Income Tax Purposes)
EXHIBIT 5.9.7(D)	-	U.S. TAX COMPLIANCE CERTIFICATE (For Foreign Lenders That Are Partnerships For U.S. Federal Income Tax Purposes)
EXHIBIT 8.3.3	-	QUARTERLY COMPLIANCE CERTIFICATE

CREDIT AGREEMENT

THIS CREDIT AGREEMENT (as hereafter amended, the “**Agreement**”) is dated as of March 31, 2020 and is made by and among VERTEX, INC., a Pennsylvania corporation (the “**Borrower**”), each of the GUARANTORS (as hereinafter defined), the LENDERS (as hereinafter defined), and PNC BANK, NATIONAL ASSOCIATION, in its capacity as administrative agent for the Lenders under this Agreement (hereinafter referred to in such capacity as the “**Administrative Agent**”).

The Borrower has requested that the Lenders provide (i) a revolving credit facility to the Borrower in an aggregate principal amount not to exceed \$100,000,000 and (ii) a \$175,000,000 term loan facility. In consideration of their mutual covenants and agreements hereinafter set forth and intending to be legally bound hereby, the parties hereto covenant and agree as follows:

1. CERTAIN DEFINITIONS

1.1 Certain Definitions. In addition to words and terms defined elsewhere in this Agreement, the following words and terms shall have the following meanings, respectively, unless the context hereof clearly requires otherwise:

Accession Agreement shall have the meaning set forth in Section 3A.1(vii) [Amendment to Loan Documents - Incremental Facilities].

Administrative Agent shall mean PNC Bank, National Association, and its successors and assigns, in its capacity as administrative agent hereunder.

Administrative Agent’s Fee shall have the meaning specified in Section 10.9 [Administrative Agent’s Fee].

Administrative Agent’s Letter shall have the meaning specified in Section 10.9 [Administrative Agent’s Fee].

Affected Financial Institution shall mean (i) any EEA Financial Institution or (ii) any UK Financial Institution.

Affiliate as to any Person shall mean any other Person (i) which directly or indirectly controls, is controlled by, or is under common control with such Person, (ii) which beneficially owns or holds 10% or more of any class of the voting or other equity interests of such Person, or (iii) 10% or more of any class of voting interests or other equity interests of which is beneficially owned or held, directly or indirectly, by such Person. For purposes of this definition, “control” of a Person means the power, directly or indirectly, to direct or cause the direction of the management and policies of such Person, whether by contract or otherwise.

Alternative Source shall have the meaning specified in the definition of Euro-Rate.

Anti-Terrorism Laws shall mean any Laws relating to terrorism, trade sanctions programs and embargoes, import/export licensing, money laundering, corruption or bribery

(including Executive Order No. 13224, the USA Patriot Act, the Laws comprising or implementing the Bank Secrecy Act, the FCPA, and the Laws administered by the United States Treasury Department Office of Foreign Asset Control, the United States Department of State, the United Nations Security Council, the European Union, any European Union member state, Her Majesty's Treasury of the United Kingdom or any other relevant sanctions authority), and any regulation, order, or directive promulgated, issued or enforced pursuant to such Laws, as any of the foregoing Laws may be amended, supplemented renewed, extended or replaced from time to time.

Applicable Commitment Fee Rate shall mean the percentage rate per annum based on the Net Leverage Ratio then in effect according to the pricing grid on Schedule 1.1(A) below the heading "Commitment Fee."

Applicable Letter of Credit Fee Rate shall mean the percentage rate per annum based on the Net Leverage Ratio then in effect according to the pricing grid on Schedule 1.1(A) below the heading "Letter of Credit Fee."

Applicable Margin shall mean, as applicable:

(i) the percentage spread to be added to the Base Rate applicable to Revolving Credit Loans under the Base Rate Option based on the Net Leverage Ratio then in effect according to the pricing grid on Schedule 1.1(A) below the heading "Revolving Credit Base Rate Spread",

(ii) the percentage spread to be added to the Base Rate applicable to Term Loans under the Base Rate Option based on the Net Leverage Ratio then in effect according to the pricing grid on Schedule 1.1(A) below the heading "Term Loan Base Rate Spread",

(iii) the percentage spread to be added to the Euro-Rate applicable to Revolving Credit Loans under the Euro-Rate Option based on the Net Leverage Ratio then in effect according to the pricing grid on Schedule 1.1(A) below the heading "Revolving Credit Euro-Rate Spread", or

(iv) the percentage spread to be added to the Euro-Rate applicable to Term Loans under the Euro-Rate Option based on the Net Leverage Ratio then in effect according to the pricing grid on Schedule 1.1(A) below the heading "Term Loan Euro-Rate Spread".

Approved Fund shall mean any fund that is engaged in making, purchasing, holding or investing in bank loans and similar extensions of credit in the ordinary course of business and that is administered or managed by (i) a Lender, (ii) an Affiliate of a Lender or (iii) an entity or an Affiliate of an entity that administers or manages a Lender.

Asset Sale shall have the meaning assigned to such term in Section 5.7.1 [Sale of Assets Etc.].

Assignment and Assumption Agreement shall mean an assignment and assumption agreement entered into by a Lender and an assignee permitted under Section 11.8 [Successors and Assigns], in substantially the form of Exhibit 1.1(A).

Authorized Officer shall mean, with respect to any Loan Party, the Chairman of the Board, the Chief Executive Officer, President, Executive Vice President, Chief Financial Officer, Treasurer, Assistant Treasurer, Secretary, General Counsel or Controller of such Loan Party, any manager or the members (as applicable) in the case of any Loan Party which is a limited liability company, or such other individuals, designated by written notice to the Administrative Agent from the Borrower, authorized to execute notices, reports and other documents on behalf of such Loan Party required hereunder. The Borrower may amend such list of individuals from time to time by giving written notice of such amendment to the Administrative Agent.

Available Currencies shall mean, at any time, Dollars and all Optional Currencies at such time; individually, an "Available Currency".

Bail-In Action shall mean the exercise of any Write-Down and Conversion Powers by the applicable Resolution Authority in respect of any liability of an Affected Financial Institution.

Bail-In Legislation shall mean (i) with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law, regulation, rule or requirement for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule and (ii) with respect to the United Kingdom, Part I of the United Kingdom Banking Act 2009 (as amended from time to time) and any other law, regulation or rule applicable in the United Kingdom relating to the resolution of unsound or failing banks, investment firms or other financial institutions or their affiliates (other than through liquidation, administration or other insolvency proceedings).

Bankruptcy Event shall have the meaning specified in the definition of Defaulting Lender.

Base Rate shall mean, for any day, a fluctuating per annum rate of interest equal to the highest of (i) the Overnight Bank Funding Rate, plus 0.5%, (ii) the Prime Rate, and (iii) so long as the Daily LIBOR Rate is offered, ascertainable and not unlawful, the Daily LIBOR Rate, plus 100 basis points (1.0%). Any change in the Base Rate (or any component thereof) shall take effect at the opening of business on the day such change occurs. Notwithstanding the foregoing, (x) with respect to Term Loans bearing interest at the Base Rate Option, if the Base Rate would be less than one percent (1.00%), such rate shall be deemed to be one percent (1.00%) for purposes of this Agreement and (y) with respect to Revolving Credit Loans and other Obligations bearing interest at the Base Rate, if the Base Rate would be less than zero (0.00), such rate shall be deemed to be zero (0.00) for purposes of this Agreement.

Base Rate Option shall mean the option of the Borrower to have Loans bear interest at the rate and under the terms set forth in either Section 4.1.1(i) [Revolving Credit Base Rate Options] or Section 4.1.2(i) [Term Loan Base Rate Options], as applicable.

Beneficial Owner shall mean each of the following: (i) each individual, if any, who, directly or indirectly, owns 25% or more of the Borrower's Capital Stock; and (ii) a single individual with significant responsibility to control, manage, or direct the Borrower.

Benefit Plan shall mean any of (i) an "employee benefit plan" (as defined in ERISA) that is subject to Title I of ERISA, (ii) a "plan" as defined in and subject to Section 4975 of the Code or (iii) any Person whose assets include (for purposes of ERISA Section 3(42) or otherwise for purposes of Title I of ERISA or Section 4975 of the Code) the assets of any such "employee benefit plan" or "plan".

Borrower shall have the meaning specified in the introductory paragraph.

Borrower Equityholder shall mean, at any time, a holder of Borrower Equity Interests at such time.

Borrower Equity Interests shall have the meaning specified in Section 6.1.2 [Subsidiaries and Owners; Investment Companies].

Borrower Parent Company shall mean any Person of which the Borrower is a direct or indirect wholly owned Subsidiary.

Borrowing Date shall mean, with respect to any Loan, the date for the making thereof or the renewal or conversion thereof at or to the same or a different Interest Rate Option, which shall be a Business Day.

Borrowing Tranche shall mean specified portions of Loans outstanding as follows: (i) any Loans to which a Euro-Rate Option applies which are in Dollars or in the same Optional Currency advanced under the same Loan Request by the Borrower and which have the same Interest Period shall constitute one Borrowing Tranche, and (ii) all Loans to which a Base Rate Option applies shall constitute one Borrowing Tranche.

Brazil Acquisition Agreement shall mean such agreement, dated as of December 27, 2019, under which Vertex Inc. purchased 60% of the equity issued by SYSTAX Sistemas Fiscais Ltda. with the expectation of acquiring the remaining 40% over a period of time (as amended, supplemented or otherwise supplemented, provided that the Administrative Agent, with the consent of the Required Lenders, shall have consented to modifications materially adverse to the Lenders).

British Pounds Sterling shall mean the official currency of the United Kingdom of Great Britain and Northern Ireland.

Business Day shall mean a day other than a Saturday, Sunday or other day on which commercial banks in Pittsburgh, Pennsylvania, are authorized or required by law to close and (i) if the applicable Business Day relates to any Loan to which the Euro-Rate Option applies, such day must also be a day on which dealings are carried on in the London interbank market, (ii) with respect to advances or payments of Loans or any other matters relating to Loans denominated in an Optional Currency, such day also shall be a day on which dealings in deposits in the relevant Optional Currency are carried on in the Relevant Interbank Market, and (iii) with

respect to advances or payments of Loans denominated in an Optional Currency, such day shall also be a day on which all applicable banks into which Loan proceeds may be deposited are open for business and foreign exchange markets are open for business in the principal financial center of the country of such currency.

Capital Lease Obligations shall mean with respect to any Person, the obligations of such Person to pay rent or other amounts under any lease of (or other arrangement conveying the right to use) any real or personal property, or a combination thereof, which obligations are required to be classified and accounted for as capital leases on a balance sheet of such Person under GAAP; and the amount of such obligations shall be the capitalized amount thereof determined in accordance with GAAP. For purposes of Section 8.2.2 [Liens; Lien Covenants], a Capital Lease Obligation shall be deemed to be secured by a Lien on the property being leased and such property shall be deemed to be owned by the lessee.

Capital Stock shall mean any and all shares, interests, participations or other equivalents (however designated) of capital stock of a corporation, any and all equivalent ownership interests in a Person (other than a corporation) and any and all warrants, rights or options to purchase any of the foregoing.

Cash Collateralize shall mean to pledge and deposit with or deliver to the Administrative Agent, for the benefit of the Issuing Lender and the Lenders, as collateral for the Letter of Credit Obligations, cash or deposit account balances pursuant to documentation reasonably satisfactory to the Administrative Agent and the Issuing Lender (which documents are hereby consented to by the Lenders). Such cash collateral shall be maintained in blocked, non-interest bearing (unless otherwise agreed by the Administrative Agent in its sole discretion) deposit account(s) at the Administrative Agent.

Cash Management Agreements shall have the meaning specified in Section 2.6.6 [Swing Loans Under Cash Management Agreements].

CEA shall mean the Commodity Exchange Act (7 U.S.C. §1 et seq.), as amended from time to time, and any successor statute.

Certificate of Beneficial Ownership shall mean a certificate in form and substance acceptable to the Administrative Agent (as amended or modified by the Administrative Agent from time to time in its sole discretion), certifying, among other things, the Beneficial Owner of the Borrower.

CFTC shall mean the Commodity Futures Trading Commission.

Change in Law shall mean the occurrence, after the date of this Agreement, of any of the following: (i) the adoption or taking effect of any Law, (ii) any change in any Law or in the administration, interpretation, implementation or application thereof by any Official Body or (iii) the making or issuance of any request, rule, guideline or directive (whether or not having the force of Law) by any Official Body; provided that notwithstanding anything herein to the contrary, (x) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, regulations, guidelines, interpretations or directives thereunder or issued in connection therewith (whether or not having the force of Law) and (y) all requests, rules, regulations,

guidelines, interpretations or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities (whether or not having the force of Law), in each case pursuant to Basel III, shall in each case be deemed to be a Change in Law regardless of the date enacted, adopted, issued, promulgated or implemented.

Change of Control shall mean (a) prior to the occurrence of an IPO, Permitted Holders shall cease to own, beneficially and of record, free and clear of all Liens or other encumbrances, except Liens in favor of other Permitted Holders, (i) at least eighty percent (80%) of the outstanding voting Borrower Equity Interests on a fully diluted basis and (ii) at least eighty percent (80%) of each other class of outstanding Borrower Equity Interests on a fully diluted basis; (b) from and after the occurrence of an IPO, the failure by the Permitted Holders to own, beneficially and of record, Equity Interests in the Borrower representing at least seventy percent (70%) of the aggregate ordinary voting power represented by the issued and outstanding Equity Interests in the Borrower; or (c) during any period of twelve (12) consecutive months, commencing before or after the Closing Date, individuals who on the first day of such period were directors of the Borrower (together with any replacement or additional directors who were nominated, approved or elected by a majority of directors then in office) ceasing to constitute a majority of the board of directors of the Borrower.

CIP Regulations shall have the meaning specified in Section 10.11 [No Reliance on Administrative Agent's Customer Identification Program].

Closing Date shall mean the Business Day on which the first Loan shall be made, which shall be March 31, 2020.

Code shall mean the Internal Revenue Code of 1986, as amended, and the rules and regulations thereunder, as from time to time in effect.

Collateral shall mean the collateral under the (i) Guarantee and Collateral Agreement, (ii) the IP Security Agreements and (iii) any other Collateral Document.

Collateral Document shall mean the Guarantee and Collateral Agreement, the IP Security Agreements and each other security agreement or other instrument or document executed pursuant to this Agreement (including pursuant to Section 8.1.12 [Additional Collateral; Joinder of Subsidiaries]) to secure the Secured Obligations.

Commitment shall mean as to any Lender the aggregate of its Revolving Credit Commitment, Term Loan Commitment and Incremental Commitment and, in the case of PNC, its Swing Loan Commitment, and Commitments shall mean the aggregate of the Revolving Credit Commitments, Term Loan Commitments, Incremental Commitments and Swing Loan Commitment of all of the Lenders.

Commitment Fee shall have the meaning specified in Section 2.3 [Commitment Fees].

Compliance Certificate shall have the meaning specified in Section 8.3.3 [Certificate of the Borrower].

Computation Date shall have the meaning specified in Section 2.11.1 [Periodic Computations of Dollar Equivalent amounts of Revolving Credit Loans and Letters of Credit Outstanding, Etc.].

Connection Income Taxes shall mean Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

Consolidated Cash Interest Expense shall mean, for any period, the excess of (i) the sum, without duplication, of (a) the interest expense (including imputed interest expense in respect of Capital Lease Obligations) of the Borrower and its consolidated Subsidiaries for such period, determined on a consolidated basis in accordance with GAAP, (b) any interest or other financing costs becoming payable during such period in respect of Indebtedness of the Borrower or its consolidated Subsidiaries to the extent such interest or other financing costs shall have been capitalized rather than included in consolidated interest expense for such period in accordance with GAAP (excluding capitalized loan origination costs and fees incurred on or prior to the Closing Date in connection with the Transactions) and (c) any cash payments made during such period in respect of obligations referred to in clause (ii)(b) below that were amortized or accrued in a previous period, minus (ii) to the extent included in such consolidated interest expense for such period, the sum of (a) noncash amounts attributable to amortization or write-off of capitalized interest or other financing costs paid in a previous period and (b) noncash amounts attributable to amortization of debt discounts or accrued interest payable in kind for such period.

Consolidated EBITDA for any period of determination shall mean (i) net income plus, without duplication and to the extent deducted in determining such net income, the sum of (a) depreciation, amortization, interest expense and income tax expense, (b) other non-cash charges to net income, but excluding non-cash charges that are expected to become cash charges in a future period or that are reserves for future cash charges, (c) beginning with the fiscal year ending December 31, 2019, non-cash charges related to stock-based compensation expense or “mark-to-market” expenses related to stock-based compensation liabilities that have reduced net income in such period and have been reflected on the balance sheet of the Borrower and its Subsidiaries (whether or not expected to result in a future cash payment), (d) third party out-of-pocket fees and expenses (including legal costs) in connection with the consummation of an IPO (whether or not successful), and (e) third party out-of-pocket fees and expenses (including legal costs) in connection with an unsuccessful attempt at an IPO, minus (ii) without duplication and to the extent included in determining such net income, (a) non-cash credits to net income (excluding non-cash credits that are to become cash credits in a future period and represent an accrual or reserve for a future or potential future cash payment) and (b) the portion of any cash payment made in relation to the exercise or settlement of any stock-based compensation, simultaneously with the reduction of any such balance sheet liability or reserve in such period that the payment was made (whether or not such payment increased or decreased net income in that period) related to non-cash charges added to Consolidated EBITDA pursuant to clause (c) above and only to the extent so added.

Covered Entity shall mean (a) the Borrower, each of Borrower’s Subsidiaries, all Guarantors and all pledgors of Collateral, and (b) each Person that, directly or indirectly, is in

control of a Person described in clause (a) above. For purposes of this definition, control of a Person shall mean the direct or indirect (x) ownership of, or power to vote, 25% or more of the issued and outstanding equity interests having ordinary voting power for the election of directors of such Person or other Persons performing similar functions for such Person, or (y) power to direct or cause the direction of the management and policies of such Person whether by ownership of equity interests, contract or otherwise.

Daily LIBOR Rate shall mean, for any day, the rate per annum determined by the Administrative Agent as the Published Rate, as adjusted for any additional costs pursuant to Section 5.8.5(ii) [Additional Reserve Requirements]. Notwithstanding the foregoing, if the Daily LIBOR Rate as determined above would be less than zero (0.00), such rate shall be deemed to be zero (0.00) for purposes of this Agreement.

Defaulting Lender shall mean any Lender that (i) has failed, within two Business Days of the date required to be funded or paid, to (a) fund any portion of its Loans, (b) fund any portion of its participations in Letters of Credit or Swing Loans or (c) pay over to the Administrative Agent, the Issuing Lender, PNC (as the Swing Loan Lender) or any Lender any other amount required to be paid by it hereunder, unless, in the case of clause (a) above, such Lender notifies the Administrative Agent in writing that such failure is the result of such Lender's good faith determination that a condition precedent to funding (specifically identified and including the particular default, if any) has not been satisfied, (ii) has notified the Borrower or the Administrative Agent in writing, or has made a public statement to the effect, that it does not intend or expect to comply with any of its funding obligations under this Agreement (unless such writing or public statement indicates that such position is based on such Lender's good faith determination that a condition precedent (specifically identified and including the particular default, if any) to funding a loan under this Agreement cannot be satisfied) or generally under other agreements in which it commits to extend credit, (iii) has failed, within two Business Days after request by the Administrative Agent or the Borrower, acting in good faith, to provide a certification in writing from an authorized officer of such Lender that it will comply with its obligations (and is financially able to meet such obligations) to fund prospective Loans and participations in then outstanding Letters of Credit and Swing Loans under this Agreement, provided that such Lender shall cease to be a Defaulting Lender pursuant to this clause (iii) upon the Administrative Agent's or the Borrower's receipt of such certification in form and substance satisfactory to the Administrative Agent or the Borrower, as the case may be, (iv) has become the subject of a Bankruptcy Event, (v) has failed at any time to comply with the provisions of Section 5.3 [Sharing of Payments by Lenders] with respect to purchasing participations from the other Lenders, whereby such Lender's share of any payment received, whether by setoff or otherwise, is in excess of its Ratable Share of such payments due and payable to all of the Lenders or (vi) has become, or has a direct or indirect parent company that has become, the subject of a Bail-In Action.

As used in this definition and in Section 2.10 [Defaulting Lenders], the term "**Bankruptcy Event**" means, with respect to any Person, such Person or such Person's direct or indirect parent company becoming the subject of a bankruptcy or insolvency proceeding, or having had a receiver, conservator, trustee, administrator, custodian, assignee for the benefit of creditors or similar Person charged with the reorganization or liquidation of its business appointed for it, or, in the good faith determination of the Administrative Agent, has taken any

action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any such proceeding or appointment, provided that a Bankruptcy Event shall not result solely by virtue of any ownership interest, or the acquisition of any ownership interest, in such Person or such Person's direct or indirect parent company by an Official Body or instrumentality thereof if, and only if, such ownership interest does not result in or provide such Person with immunity from the jurisdiction of courts within the United States or from the enforcement of judgments or writs of attachment on its assets or permit such Person (or such Official Body or instrumentality) to reject, repudiate, disavow or disaffirm any contracts or agreements made by such Person.

Distribution shall mean any dividend or other distribution of any nature (whether in cash, property, securities or otherwise) on account of or in respect of any Loan Party's shares of Capital Stock or on account of the purchase, redemption, retirement or acquisition of any Loan Party's shares of Capital Stock (or warrants, options or rights therefor).

Division/Series Transaction shall mean, with respect to any Loan Party and its Subsidiaries, that any such Person (i) divides into two or more Persons (whether or not the original Loan Party or Subsidiary thereof survives such division) or (ii) creates, or reorganizes into, one or more series, in each case as contemplated under the laws of any jurisdiction (including any division or Plan of Division under Delaware law or any comparable event under a different jurisdiction's law).

Dollar, Dollars, U.S. Dollars and the symbol \$ shall mean lawful money of the United States of America.

Dollar Equivalent shall mean, with respect to any amount of any currency, as of any Computation Date, the Equivalent Amount of such currency expressed in Dollars.

Domestic Subsidiary shall mean any Subsidiary of the Borrower incorporated or organized under the Laws of the United States of America, any State thereof or the District of Columbia.

Drawing Date shall have the meaning specified in Section 2.9.3 [Disbursements, Reimbursement].

EEA Financial Institution shall mean (i) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (ii) any entity established in an EEA Member Country which is a parent of an institution described in clause (i) of this definition, or (iii) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (i) or (ii) of this definition and is subject to consolidated supervision with its parent.

EEA Member Country shall mean any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

EEA Resolution Authority shall mean any public administrative authority or any person entrusted with public administrative authority of any EEA Member Country (including any delegatee) having responsibility for the resolution of any EEA Financial Institution.

Effective Date shall mean the date indicated in a document or agreement to be the date on which such document or agreement becomes effective, or, if there is no such indication, the date of execution of such document or agreement.

Eligible Assignee shall mean any Person eligible to become an assignee of a Lender under 11.8.2. [Assignment by Lenders]

Eligible Contract Participant shall mean an “eligible contract participant” as defined in the CEA and regulations thereunder.

Eligibility Date shall mean, with respect to each Loan Party and each Swap, the date on which this Agreement or any other Loan Document becomes effective with respect to such Swap (for the avoidance of doubt, the Eligibility Date shall be the Effective Date of such Swap if this Agreement or any other Loan Document is then in effect with respect to such Loan Party, and otherwise it shall be the Effective Date of this Agreement and/or such other Loan Document(s) to which such Loan Party is a party).

Environmental Laws shall mean all applicable federal, state, local, tribal, territorial and foreign Laws (including common law), constitutions, statutes, treaties, regulations, rules, ordinances and codes and any consent decrees, settlement agreements, judgments, orders, directives, policies or programs issued by or entered into with an Official Body pertaining or relating to: (i) pollution or pollution control; (ii) protection of human health from exposure to regulated substances; (iii) protection of the environment and/or natural resources; (iv) employee safety in the workplace; (v) the presence, use, management, generation, manufacture, processing, extraction, treatment, recycling, refining, reclamation, labeling, packaging, sale, transport, storage, collection, distribution, disposal or release or threat of release of regulated substances; (vi) the presence of contamination; (vii) the protection of endangered or threatened species; and (viii) the protection of environmentally sensitive areas.

Equity Interests shall have the meaning specified in Section 6.1.2 [Subsidiaries and Owners; Investment Companies].

Equivalent Amount shall mean, at any time, as determined by the Administrative Agent (which determination shall be conclusive absent manifest error), with respect to an amount of any currency (the “**Reference Currency**”) which is to be computed as an equivalent amount of another currency (the “**Equivalent Currency**”): (i) if the Reference Currency and the Equivalent Currency are the same, the amount of such Reference Currency, or (ii) if the Reference Currency and the Equivalent Currency are not the same, the amount of such Equivalent Currency converted from such Reference Currency at the Administrative Agent’s spot selling rate (based on the market rates then prevailing and available to the Administrative Agent) for the sale of such Equivalent Currency for such Reference Currency at a time determined by the Administrative Agent on the second Business Day immediately preceding the event for which such calculation is made.

Equivalent Currency shall have the meaning specified in the definition of “Equivalent Amount”.

10

ERISA shall mean the Employee Retirement Income Security Act of 1974, as the same may be amended or supplemented from time to time, and any successor statute of similar import, and the rules and regulations thereunder, as from time to time in effect.

ERISA Event shall mean (i) with respect to a Pension Plan, a reportable event under Section 4043 of ERISA as to which event (after taking into account notice waivers provided for in the regulations) there is a duty to give notice to the PBGC; (ii) a withdrawal by the Borrower or any member of the ERISA Group from a Pension Plan subject to Section 4063 of ERISA during a plan year in which it was a substantial employer (as defined in Section 4001(a)(2) of ERISA) or a cessation of operations that is treated as such a withdrawal under Section 4062(e) of ERISA; (iii) a complete or partial withdrawal by the Borrower or any member of the ERISA Group from a Multiemployer Plan, notification that a Multiemployer Plan is in reorganization, or occurrence of an event described in Section 4041A(a) of ERISA that results in the termination of a Multiemployer Plan; (iv) the filing of a notice of intent to terminate a Pension Plan, the treatment of a Pension Plan amendment as a termination under Section 4041(e) of ERISA, or the commencement of proceedings by the PBGC to terminate a Pension Plan; (v) an event or condition which constitutes grounds under Section 4042 of ERISA for the termination of, or the appointment of a trustee to administer, any Pension Plan; or (vi) the imposition of any liability under Title IV of ERISA, other than for PBGC premiums due but not delinquent under Section 4007 of ERISA, upon the Borrower or any member of the ERISA Group.

ERISA Group shall mean the Borrower and all members of a controlled group of corporations and all trades or businesses (whether or not incorporated) under common control and all other entities which, together with the Borrower, are treated as a single employer under Section 414 of the Code or Section 4001(b)(1) of ERISA.

Euro shall mean the European common currency pursuant to the European Monetary Union.

Euro-Rate shall mean the following:

(i) with respect to the U.S. Dollar Loans comprising any Borrowing Tranche to which the Euro-Rate Option applies for any Interest Period, the interest rate per annum determined by the Administrative Agent as the rate which appears on the Bloomberg Page BBAM1 (or on such other substitute Bloomberg page that displays rates at which U.S. Dollar deposits are offered by leading banks in the London interbank deposit market), rounded upwards, if necessary, to the nearest 1/100th of 1% per annum, or the rate which is quoted by another source selected by the Administrative Agent as an authorized information vendor for the purpose of displaying rates at which U.S. Dollar deposits are offered by leading banks in the London interbank deposit market at approximately 11:00 a.m., London time, two (2) Business Days prior to the commencement of such Interest Period as the Relevant Interbank Market offered rate for U.S. Dollars for an amount comparable to such Borrowing Tranche and having a borrowing date and a maturity comparable to such Interest Period.

(ii) with respect to Optional Currency Loans in Euros or British Pounds Sterling comprising any Borrowing Tranche for any Interest Period, the interest rate per annum

11

determined by the Administrative Agent as the rate which appears on the Bloomberg Page BBAM1 (or on such other substitute Bloomberg page that displays rates at which the relevant Optional Currency is offered by leading banks in the London interbank deposit market), rounded upwards, if necessary, to the nearest 1/100th of 1% per annum, or the rate which is quoted by another source selected by the Administrative Agent as an authorized information vendor for the purpose of displaying rates at which such applicable Optional Currencies are offered by leading banks in the London interbank deposit market at approximately 11:00 a.m., London time, two (2) Business Days prior to the commencement of such Interest Period as the Relevant Interbank Market offered rate for deposits in the Euros or British Pounds Sterling for an amount comparable to the principal amount of such Borrowing Tranche and having a borrowing date and a maturity comparable to such Interest Period.

(iii) with respect to Optional Currency Loans denominated in Canadian Dollars comprising any Borrowing Tranche, the interest rate per annum (the “**CDOR Rate**”) as determined by the Administrative Agent, equal to the arithmetic average rate applicable to Canadian Dollar bankers’ acceptances (C\$BAs) for the applicable Interest Period appearing on the Bloomberg page BTMM CA, rounded to the nearest 1/100th of 1% per annum, at approximately 11:00 a.m. Eastern Time, two Business Days prior to the commencement of such Interest Period, or if such day is not a Business Day, then on the immediately preceding Business Day, provided that if such rate does not appear on the Bloomberg page BTMM CA on such day the CDOR Rate on such day shall be the rate for such period applicable to Canadian Dollar bankers’ acceptances quoted by a bank listed in Schedule I of the Bank Act (Canada), as selected by the Administrative Agent, as of 11:00 a.m. Eastern Time on such day or, if such day is not a Business Day, then on the immediately preceding Business Day.

(iv) If, at any time, the Administrative Agent and all of the Lenders approve an additional Optional Currency pursuant to the definition of that term, any reference in this Agreement to the Euro-Rate applicable to any Loan in such additional Optional Currency shall be a reference to the rate to be determined by the Administrative Agent in accordance with its then current practices with respect to such additional Optional Currency.

(v) The Euro-Rate for any Loans shall be based upon the Euro-Rate for the currency in which such Loans are requested. With respect to any Loans available at a Euro-Rate, if at any time, for any reason, the source(s) for the Euro-Rate described above for the applicable currency or currencies is no longer available, then, subject to provisions of Section 4.6 [Successor Euro-Rate Index], the Administrative Agent may determine a comparable replacement rate (an “**Alternative Source**”) at such time (which determination shall be conclusive absent manifest error).

(vi) The Administrative Agent shall give prompt notice to the Borrower of the Euro-Rate as determined or adjusted in accordance herewith, which determination shall be conclusive absent manifest error.

(vii) Notwithstanding the foregoing, if the Euro-Rate as determined under any method above would be less than (x) with respect to Term Loans bearing interest at the Euro-Rate for any Available Currency, one percent (1.00), such rate shall be deemed to be one percent (1.00%) for purposes of this Agreement and (y) with respect to Revolving Credit Loans bearing

interest at the Euro-Rate for any Available Currency or any other Obligation bearing interest at the Euro-Rate (other than the Term Loans), zero (0.00), such rate shall be deemed to be zero (0.00) for purposes of this Agreement.

EU Bail-In Legislation Schedule shall mean the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor person), as in effect from time to time.

Euro-Rate Option shall mean the option of the Borrower to have Loans bear interest at the rate and under the terms set forth in Section 4.1.1(ii) [Revolving Credit Euro-Rate Option] or Section 4.1.2(ii) [Term Loan Euro-Rate Option], as applicable.

Event of Default shall mean any of the events described in Section 9.1 [Events of Default] and referred to therein as an “Event of Default.”

Exchange Act shall mean the United States Exchange Act of 1934.

Excluded Capital Stock shall have the meaning specified in the Guarantee and Collateral Agreement.

Excluded Deposit Account shall mean (i) a deposit account that contains customer monies for remittance to taxing authorities to pay tax obligations of such customers and similar trust, escrow or deposit accounts for the benefit of persons other than the Borrower or any Subsidiary thereof so long as, in each case, such account is segregated from the concentration and operating accounts of the Borrower and its Subsidiaries and contains no funds of the Borrower or any Subsidiary thereof, (ii) any deposit account that is used solely for payment of taxes, payroll, bonuses, other compensation and related expenses, in each case, for employees or former employees, and (iii) fiduciary or trust accounts.

Excluded Hedge Liability or Liabilities shall mean, with respect to each Loan Party, each of its Swap Obligations if, and only to the extent that, all or any portion of this Agreement or any other Loan Document that relates to such Swap Obligation is or becomes illegal under the CEA, or any rule, regulation or order of the CFTC, solely by virtue of such Loan Party’s failure to qualify as an Eligible Contract Participant on the Eligibility Date for such Swap. Notwithstanding anything to the contrary contained in the foregoing or in any other provision of this Agreement or any other Loan Document, the foregoing is subject to the following provisos: (i) if a Swap Obligation arises under a master agreement governing more than one Swap, this definition shall apply only to the portion of such Swap Obligation that is attributable to Swaps for which such guaranty or security interest is or becomes illegal under the CEA, or any rule, regulations or order of the CFTC, solely as a result of the failure by such Loan Party for any reason to qualify as an Eligible Contract Participant on the Eligibility Date for such Swap, (ii) if a guarantee of a Swap Obligation would cause such obligation to be an Excluded Hedge Liability but the grant of a security interest would not cause such obligation to be an Excluded Hedge Liability, such Swap Obligation shall constitute an Excluded Hedge Liability for purposes of the guaranty but not for purposes of the grant of the security interest, and (iii) if there is more than one Loan Party executing this Agreement or the other Loan Documents and a Swap Obligation would be an Excluded Hedge Liability with respect to one or more of such

Persons, but not all of them, the definition of Excluded Hedge Liability or Liabilities with respect to each such Person shall only be deemed applicable to (a) the particular Swap Obligations that constitute Excluded Hedge Liabilities with respect to such Person, and (b) the particular Person with respect to which such Swap Obligations constitute Excluded Hedge Liabilities.

Excluded Taxes shall mean any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient, (i) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (a) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (b) that are Other Connection Taxes, (ii) in the case of a Lender, U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan or Commitment pursuant to a law in effect on the date on which (a) such Lender acquires such interest in such Loan or Commitment (other than pursuant to an assignment request by the Borrower under Section 5.6.2 [Replacement of a Lender]) or (b) such Lender changes its lending office, except in each case to the extent that, pursuant to Section 5.9.7 [Status of Lenders], amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office, (iii) Taxes attributable to such Recipient's failure to comply with Section 5.9.7 [Status of Lenders], and (iv) any U.S. federal withholding Taxes imposed under FATCA (except to the extent imposed due to the failure of the Borrower to provide documentation or information to the IRS).

Executive Order No. 13224 shall mean the Executive Order No. 13224 on Terrorist Financing, effective September 24, 2001, as the same has been, or shall hereafter be, renewed, extended, amended or replaced.

Existing Credit Agreement shall mean that certain Credit Agreement dated as of November 2, 2015, among the Borrower, the Guarantors party thereto, the Lenders parties thereto and PNC, as Administrative Agent.

Existing Letter of Credit shall mean each letter of credit previously issued by PNC listed on Schedule 1.1(L) that is outstanding on the Closing Date.

Facilities shall mean the credit facilities provided herein, being as of the Closing Date, each of the "**Revolving Credit Facility**" and the "**Term Loan Facility**".

Family Member shall mean, with respect to any individual, any other individual having a relationship with such individual by blood (to the second degree of consanguinity), marriage (which, for the avoidance of doubt, includes children through marriage) or adoption.

Family Trust shall mean, with respect to any individual, trusts or estate planning vehicles established for the benefit of such individual or his/her Family Members.

FATCA shall mean (i) Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not

materially more onerous to comply with), any current or future regulations or official interpretations thereof and any agreements entered into pursuant to Section 1471(b)(1) of the Code and (ii) any intergovernmental agreement implementing (i) above.

FCPA shall mean the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder.

Federal Funds Effective Rate for any day shall mean the rate per annum (based on a year of 360 days and actual days elapsed and rounded upward to the nearest 1/100 of 1%), announced by the Federal Reserve Bank of New York (or any successor) on such day as being the weighted average of the rates on overnight federal funds transactions on the previous trading day, as computed and announced by such Federal Reserve Bank (or any successor) in substantially the same manner as such Federal Reserve Bank computes and announces the weighted average it refers to as the “Federal Funds Effective Rate” as of the date of this Agreement; provided, if such Federal Reserve Bank (or its successor) does not announce such rate on any day, the “Federal Funds Effective Rate” for such day shall be the Federal Funds Effective Rate for the last day on which such rate was announced. Notwithstanding the foregoing, if the Federal Funds Effective Rate as determined above would be less than zero (0.00), such rate shall be deemed to be zero (0.00) for purposes of this Agreement.

Fixed Charge Coverage Ratio shall mean, on any date, the ratio of (i) Consolidated EBITDA to (ii) Fixed Charges for the period of four consecutive fiscal quarters of the Borrower most recently ended on or prior to such date for which financial statements have been delivered to the Lenders pursuant to Section 8.3.1 [Quarterly Financial Statements] or Section 8.3.2 [Annual Financial Statements].

Fixed Charges shall mean, without duplication, for any period of determination the sum of (a) Consolidated Cash Interest Expense, (b) cash income taxes, (c) scheduled principal installments on Indebtedness referred to in clauses (i), (ii), (v), (vi), (vii) and (viii) of the definition of Indebtedness, (d) Distributions pursuant to clauses (iii) and (v) of Section 8.2.5 [Dividends and Related Distributions] and (e) distribution or redemption payments (net of any strike price) in respect of Borrower Equity Interests made in cash pursuant to the terms of the Stock Option Agreements in excess in the aggregate of \$500,000, in each case of the Borrower and its Subsidiaries for such period determined on a consolidated basis; provided that, for purposes of determining Fixed Charges any voluntary prepayments of the Term Loans shall not reduce the amount included in scheduled principal payments on Indebtedness. By way of example, with respect to the above proviso, if the Borrower makes a voluntary payment of Term Loans on January 15, 2021, some or all of which is applied against the next four principal payments on the Term Loans due in 2021 and so the actual amount of scheduled principal payments on the Term Loans in each of those quarters is reduced, then for purposes of calculating Fixed Charges for periods involving quarters ended in 2021, such voluntary payments shall be ignored in determining the amount of scheduled principal payments in those quarters and the amount of scheduled principal payments included in Fixed Charges for the applicable periods shall be determined without giving effect to the voluntary prepayments. For the sake of clarity, the voluntary prepayments of the Term Loans themselves shall not be included as Fixed Charges, but the amount of the scheduled principal payments on the Term Loans included in the calculation of Fixed Charges shall be deemed to be the scheduled amount

prior to giving effect to any such voluntary prepayment. For the avoidance of doubt, the Specified Distribution shall not be deemed a Fixed Charge.

Foreign Currency Hedge shall mean any foreign exchange transaction, including spot and forward foreign currency purchases and sales, listed or over-the-counter options on foreign currencies, non-deliverable forwards and options, foreign currency swap agreements, currency exchange rate price hedging arrangements, and any other similar transaction providing for the purchase of one currency in exchange for the sale of another currency.

Foreign Currency Hedge Liabilities shall have the meaning assigned in the definition of Lender Provided Foreign Currency Hedge.

Foreign Lender shall mean (i) if the Borrower is a U.S. Person, a Lender that is not a U.S. Person, and (ii) if the Borrower is not a U.S. Person, a Lender that is resident or organized under the Laws of a jurisdiction other than that in which the Borrower is resident for tax purposes.

Foreign Subsidiary shall mean any Subsidiary of the Borrower that is not a Domestic Subsidiary.

Foreign Subsidiary HoldCo shall mean any Domestic Subsidiary of the Borrower formed or acquired before, on or after the Closing Date, that has no material assets other than Capital Stock and intercompany debt of Foreign Subsidiaries that are controlled foreign corporations within the meaning of Section 957(a) of the Code.

GAAP shall mean generally accepted accounting principles as are in effect from time to time, subject to the provisions of Section 1.3 [Accounting Principles; Changes in GAAP], and applied on a consistent basis both as to classification of items and amounts.

Guarantor shall mean each of the parties to this Agreement which is designated as a "Guarantor" on the signature page hereof and each other Person which joins this Agreement as a Guarantor after the date hereof.

Guarantee and Collateral Agreement shall mean the Guarantee and Collateral Agreement among the Borrower, the Guarantors and the Administrative Agent, in substantially the form of Exhibit 1.1(G), executed and delivered by the Borrower and each of the Guarantors to the Administrative Agent for the benefit of the Lenders.

Guaranty of any Person shall mean any obligation of such Person guaranteeing or in effect guaranteeing any liability or obligation of any other Person in any manner, whether directly or indirectly, including any agreement to indemnify or hold harmless any other Person, any performance bond or other suretyship arrangement and any other form of assurance against loss, except endorsement of negotiable or other instruments for deposit or collection in the ordinary course of business. The amount of any Guaranty shall be deemed to be an amount equal to the stated or determinable amount of the Indebtedness in respect of which such Guaranty is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by such Person in good faith.

Hedge Liabilities shall mean collectively, the Foreign Currency Hedge Liabilities and the Interest Rate Hedge Liabilities.

ICC shall have the meaning specified in Section 11.11.1 [Governing Law].

Increase Effective Date shall have the meaning set forth in Section 3A.1(i) [Incremental Commitments].

Incremental Commitments shall mean, collectively, the Incremental Term Commitments and the Incremental Revolving Commitments.

Incremental Facility Amendment shall have the meaning set forth in Section 3A.1(vii) [Amendment to Loan Documents - Incremental Facilities].

Incremental Lenders shall have the meaning set forth in Section 3A.1(i) [Incremental Commitments].

Incremental Loan shall mean any Incremental Term Loan and any Incremental Revolving Loan.

Incremental Revolving Commitment shall have the meaning set forth in Section 3A.1(i) [Incremental Commitments].

Incremental Revolving Loan shall mean any Revolving Credit Loan made pursuant to an Incremental Revolving Commitment.

Incremental Term Commitment shall have the meaning set forth in Section 3A.1(i) [Incremental Commitments].

Incremental Term Loan shall mean any Term Loan made pursuant to an Incremental Term Commitment.

Indebtedness shall mean, as to any Person at any time, any and all indebtedness, obligations or liabilities (whether matured or unmatured, liquidated or unliquidated, direct or indirect, absolute or contingent, or joint or several) of such Person for or in respect of: (i) borrowed money, (ii) amounts raised under or liabilities in respect of any note purchase or acceptance credit facility, (iii) reimbursement obligations (contingent or otherwise) under any letter of credit agreement, (iv) obligations under any currency swap agreement, interest rate swap, cap, collar or floor agreement or other interest rate management device, (v) any other transaction (including forward sale or purchase agreements, capitalized leases, and conditional sales agreements) having the commercial effect of a borrowing of money entered into by such Person to finance its operations or capital requirements (but not including trade payables and accrued expenses incurred in the ordinary course of business which are not represented by a promissory note or other evidence of indebtedness and which are not more than sixty (60) days past due), (vi) any obligations of such Person evidenced by bonds, debentures, notes or similar instruments, (vii) any Indebtedness of others secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien on property owned or acquired by such Person, whether or not the obligations secured thereby have

been assumed, (viii) any Guaranty of Indebtedness for borrowed money or (ix) the deferred purchase price of property or services (other than (i) trade payables, accrued expenses and intercompany liabilities arising in the ordinary course of business which are not represented by a promissory note or other evidence of indebtedness, (ii) prepaid or deferred revenue arising in the ordinary course of business, (iii) purchase price holdbacks arising in the ordinary course of business in respect of a portion of the purchase price of an asset to satisfy underperformed obligations of the seller of such asset or (iv) to the extent included as a liability on the balance sheet of such Person in accordance with GAAP, earnouts and similar obligations).

Indemnified Taxes shall mean (i) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of any Loan Party under any Loan Document, and (ii) to the extent not otherwise described in the preceding clause (i), Other Taxes.

Indemnitee shall have the meaning specified in Section 11.3.2 [Indemnification by the Borrower].

Information shall mean all information received from the Loan Parties or any of their Subsidiaries relating to the Loan Parties or any of such Subsidiaries or any of their respective businesses, other than any such information that is available to the Administrative Agent, any Lender or the Issuing Lender on a non-confidential basis prior to disclosure by the Loan Parties or any of their Subsidiaries.

Insolvency Proceeding shall mean, with respect to any Person, (i) a case, action or proceeding with respect to such Person (a) before any court or any other Official Body under any bankruptcy, insolvency, reorganization or other similar Law now or hereafter in effect, or (b) for the appointment of a receiver, liquidator, assignee, custodian, trustee, sequestrator, conservator (or similar official) of any Loan Party or otherwise relating to the liquidation, dissolution, winding-up or relief of such Person, or (ii) any general assignment for the benefit of creditors, composition, marshaling of assets for creditors, or other, similar arrangement in respect of such Person's creditors generally or any substantial portion of its creditors; undertaken under any Law.

Interest Coverage Ratio shall mean, on any date, the ratio of (i) Consolidated EBITDA to (ii) Consolidated Cash Interest Expense for the period of four consecutive fiscal quarters of the Borrower most recently ended on or prior to such date for which financial statements have been delivered to the Lenders pursuant to Section 8.3.1 [Quarterly Financial Statements] or Section 8.3.2 [Annual Financial Statements].

Interest Period shall mean the period of time selected by the Borrower in connection with (and to apply to) any election permitted hereunder by the Borrower to have Revolving Credit Loans or Term Loans bear interest under the Euro-Rate Option. Subject to the last sentence of this definition, such period shall be one, two, three or six Months. Such Interest Period shall commence on the effective date of such Interest Rate Option, which shall be (i) the Borrowing Date if the Borrower is requesting new Loans, or (ii) the date of renewal of or conversion to the Euro-Rate Option if the Borrower is renewing or converting to the Euro-Rate Option applicable to outstanding Loans. Notwithstanding the second sentence hereof: (A) the

only Interest Period available for Optional Currency Loans shall be one Month, (B) any Interest Period which would otherwise end on a date which is not a Business Day shall be extended to the next succeeding Business Day unless such Business Day falls in the next calendar month, in which case such Interest Period shall end on the next preceding Business Day, (C) the Borrower shall not select, convert to or renew an Interest Period for any portion of the Loans that would end after the Revolving Credit Expiration Date or Term Loan Maturity Date, as applicable and (D) for the first ninety (90) days after the Closing Date, the only Interest Period available for any Revolving Credit Loans and/or Term Loans shall be one Month.

Interest Rate Hedge shall mean an interest rate exchange, collar, cap, swap, floor, adjustable strike cap, adjustable strike corridor, cross-currency swap or similar agreements entered into by any Loan Party in order to provide protection to, or minimize the impact upon, such Loan Party of increasing floating rates of interest applicable to Indebtedness.

Interest Rate Hedge Liabilities shall have the meaning assigned in the definition of Lender Provided Interest Rate Hedge.

Interest Rate Option shall mean the Base Rate Option or the Euro-Rate Option.

IP Security Agreement shall have the meaning assigned to such term in the Collateral and Guarantee Agreement.

IPO shall mean an initial underwritten public offering of common Equity Interests in the Borrower or a Borrower Parent Company, in either case pursuant to an effective registration statement filed with the SEC pursuant to the Securities Act.

IRS shall mean the United States Internal Revenue Service.

ISP98 shall have the meaning specified in Section 11.11.1 [Governing Law].

Issuing Lender shall mean PNC, in its individual capacity as issuer of Letters of Credit hereunder (including as issuer of any Existing Letters of Credit), and any successor issuer pursuant to Section 10.6 [Resignation of Administrative Agent].

Joint Venture shall mean a corporation, partnership, limited liability company or other entity in which any Person other than the Loan Parties and their Subsidiaries holds, directly or indirectly, an equity interest.

Law shall mean any law(s) (including common law), constitution, statute, treaty, regulation, rule, ordinance, opinion, issued guidance, release, ruling, order, executive order, injunction, writ, decree, bond, judgment, authorization or approval, lien or award of or any settlement arrangement, by agreement, consent or otherwise, with any Official Body, foreign or domestic.

Lender Provided Foreign Currency Hedge shall mean a Foreign Currency Hedge which is (or was at the time entered into) provided by any Lender or its Affiliate and for which such Lender confirms to the Administrative Agent in writing prior to the execution thereof that it: (i) is documented in a standard International Swaps and Derivatives Association Master

Agreement or another reasonable and customary manner, (ii) provides for the method of calculating the reimbursable amount of the provider's credit exposure in a reasonable and customary manner, and (iii) is entered into for hedging (rather than speculative) purposes (or such other confirmation as shall be acceptable to the Administrative Agent in its sole discretion); provided that, so long as PNC is the Administrative Agent, such confirmation in writing shall not be required in the case of PNC. The liabilities owing to the provider of any Lender Provided Foreign Currency Hedge (the "**Foreign Currency Hedge Liabilities**") by any Loan Party that is party to such Lender Provided Foreign Currency Hedge shall, for purposes of this Agreement and all other Loan Documents be "Secured Obligations" of such Person and of each other Loan Party, be guaranteed obligations under the Guarantee and Collateral Agreement and secured obligations under any other Loan Document, as applicable, and otherwise treated as Secured Obligations for purposes of the other Loan Documents, except to the extent constituting Excluded Hedge Liabilities of such Person. The Liens securing the Foreign Currency Hedge Liabilities shall be pari passu with the Liens securing all other Secured Obligations under this Agreement and the other Loan Documents, subject to the express provisions of Section 9.2.4 [Application of Proceeds].

Lender Provided Interest Rate Hedge shall mean an Interest Rate Hedge which is (or was at the time entered into) provided by any Lender or its Affiliate and with respect to which such Lender confirms to the Administrative Agent in writing prior to the execution thereof that it: (i) is documented in a standard International Swaps and Derivatives Association Master Agreement, or another reasonable and customary manner, (ii) provides for the method of calculating the reimbursable amount of the provider's credit exposure in a reasonable and customary manner, and (iii) is entered into for hedging (rather than speculative) purposes (or such other confirmation as shall be acceptable to the Administrative Agent in its sole discretion); provided that, so long as PNC is the Administrative Agent, such confirmation in writing shall not be required in the case of PNC. The liabilities owing to the provider of any Lender Provided Interest Rate Hedge (the "**Interest Rate Hedge Liabilities**") by any Loan Party that is party to such Lender Provided Interest Rate Hedge shall, for purposes of this Agreement and all other Loan Documents be "Secured Obligations" of such Person and of each other Loan Party, be guaranteed obligations under the Guarantee and Collateral Agreement and secured obligations under any other Loan Document, as applicable, and otherwise treated as Secured Obligations for purposes of the other Loan Documents, except to the extent constituting Excluded Hedge Liabilities of such Person. The Liens securing the Interest Rate Hedge Liabilities shall be pari passu with the Liens securing all other Secured Obligations under this Agreement and the other Loan Documents, subject to the express provisions of Section 9.2.4 [Application of Proceeds].

Lenders shall mean the financial institutions named on Schedule 1.1(B) and their respective successors and assigns as permitted hereunder and any other Person that shall become a party hereto pursuant to an Incremental Facility Amendment, each of which is referred to herein as a Lender. For the purpose of any Loan Document which provides for the granting of a security interest or other Lien to the Lenders or to the Administrative Agent for the benefit of the Lenders as security for the Secured Obligations, "Lenders" shall include any Affiliate of a Lender to which such Secured Obligation is owed.

Letter of Credit shall have the meaning specified in Section 2.9.1 [Issuance of Letters of Credit].

20

Letter of Credit Borrowing shall have the meaning specified in Section 2.9.3 [Disbursements, Reimbursement].

Letter of Credit Fee shall have the meaning specified in Section 2.9.2 [Letter of Credit Fees].

Letter of Credit Obligation shall mean, as of any date of determination, the aggregate Dollar Equivalent amount available to be drawn under all outstanding Letters of Credit on such date (if any Letter of Credit shall increase in amount automatically in the future, such aggregate Dollar Equivalent amount available to be drawn shall currently give effect to any such future increase) plus the aggregate Dollar Equivalent amount of Reimbursement Obligations and Letter of Credit Borrowings on such date.

Letter of Credit Sublimit shall have the meaning specified in Section 2.9.1 [Issuance of Letters of Credit].

Lien shall mean any mortgage, deed of trust, pledge, lien, security interest, charge or other encumbrance or security arrangement of any nature whatsoever, whether voluntarily or involuntarily given, including any conditional sale or title retention arrangement, and any assignment, deposit arrangement or lease intended as, or having the effect of, security.

Liquidity shall mean, at any time, the sum of (i) the Unused Revolving Credit Commitments at such time, provided that the conditions set forth in clauses (i) and (ii) of Section 7.2 [Each Loan or Letter of Credit] shall be satisfied at such time, and (ii) the aggregate amount of Unrestricted Domestic Cash at such time.

Loan Documents shall mean this Agreement, the Administrative Agent's Letter, the Guarantee and Collateral Agreement, the IP Security Agreements, the Notes and any amendments, consents, instruments, certificates or documents delivered in connection herewith or therewith.

Loan Parties shall mean the Borrower and the Guarantors.

Loan Request shall have the meaning specified in Section 2.5 [Revolving Credit Loan Requests; Swing Loan Requests].

Loans shall mean collectively and Loan shall mean separately all Revolving Credit Loans, Swing Loans and the Term Loans or any Revolving Credit Loan, Swing Loan or the Term Loan.

Mandatory TL Prepayment (Unused Proceeds) shall have the meaning specified in Section 5.7.2(iii) [Issuance of Debt; Etc.].

Material Adverse Change shall mean any set of circumstances or events which (i) has or could reasonably be expected to have any material adverse effect upon the validity or enforceability of this Agreement or any other Loan Document, (ii) is or could reasonably be expected to have a material and adverse effect on the business, properties, assets, financial condition or results of operations of the Loan Parties taken as a whole, (iii) impairs materially or

21

could reasonably be expected to impair materially the ability of the Loan Parties taken as a whole to duly and punctually pay or perform any of the Secured Obligations, or (iv) impairs materially or could reasonably be expected to impair materially the ability of the Administrative Agent or any of the Lenders, to the extent permitted, to enforce their legal remedies pursuant to this Agreement or any other Loan Document.

MNPI shall mean, from and after the occurrence of an IPO, material information concerning the Borrower, any Borrower Parent Company or any Subsidiary of any of the foregoing, or any of their securities, that has not been disseminated in a manner making it available to investors generally, within the meaning of Regulation FD under the Exchange Act. For purposes of this definition, “material information” means information concerning the Borrower, any Borrower Parent Company or any Subsidiary of any of the foregoing, or any of their securities, that could reasonably be expected to be material for purposes of the United States Federal and state securities laws.

Month, with respect to an Interest Period shall mean the interval between the days in consecutive calendar months numerically corresponding to the first day of such Interest Period. If any Interest Period begins on a day of a calendar month for which there is no numerically corresponding day in the month in which such Interest Period is to end, the final month of such Interest Period shall be deemed to end on the last Business Day of such final month.

Moody’s shall mean Moody’s Investor Services, Inc. and its successors.

Multiemployer Plan shall mean any employee pension benefit plan which is a “multiemployer plan” within the meaning of Section 4001(a)(3) of ERISA and to which the Borrower or any member of the ERISA Group is then making or accruing an obligation to make contributions or, within the preceding five plan years, has made or had an obligation to make such contributions.

Net Leverage Ratio shall mean, on any date, the ratio of (i) Total Funded Debt of the Borrower and its Subsidiaries on such date, minus an amount equal to the lesser of (a) 100% of Unrestricted Domestic Cash as at such date, and (b) \$50,000,000, to (ii) Consolidated EBITDA (x) for the period of four consecutive fiscal quarters of the Borrower then ending if such date is a fiscal quarter end or (y) for the period of four consecutive quarters most recently ended for which financial statements have been delivered to the Lenders pursuant to Section 8.3.1 [Quarterly Financial Statements] or Section 8.3.2 [Annual Financial Statements] if such date is not a fiscal quarter end.

Net Proceeds shall mean (i) with respect to the sale, issuance or incurrence of additional Indebtedness for borrowed money by the Borrower or any Subsidiary thereof, the amount equal to (a) the aggregate amount received in cash in connection with such sale, issuance or incurrence minus (b) the underwriting discounts, the fees, commissions, stamp or other taxes and other out-of-pocket expenses incurred by the Borrower and its Subsidiaries and paid to Persons other than a Loan Party or Affiliate thereof (unless such payment to such Affiliate is approved in writing by the Administrative Agent in its sole discretion) in connection with such sale, issuance or incurrence, (ii) with respect to any Asset Sale, the amount equal to (a) the

aggregate amount received in cash (including any cash received by way of deferred payment pursuant to a note receivable or otherwise, but only as and when such cash is so received) in connection with such Asset Sale minus (b) the sum of (I) the principal amount of Indebtedness that is secured by the asset that is the subject of such Asset Sale (other than Indebtedness assumed by the purchaser of such asset) and that is required to be, and is, repaid in connection with such Asset Sale (other than Indebtedness hereunder), (II) the underwriting discounts, the fees, premiums, commissions, Taxes and other out-of-pocket expenses incurred (including reasonable estimates of taxes) by the Borrower and its Subsidiaries in connection with such Asset Sale and paid to Persons other than a Loan Party or Affiliate thereof and (III) if approved by the Administrative Agent, amounts established as a reserve, reasonably established by the Borrower or any of its Subsidiaries, against liabilities under any indemnification obligations associated with such Asset Sale or other liabilities retained by the Borrower and its Subsidiaries associated with the assets sold pursuant to such Asset Sale (provided that, to the extent and at the time such amounts are released from such reserve, such amounts shall constitute Net Proceeds), (iii) with respect to the sale or issuance after the Closing Date of any Equity Interests in an IPO, the amount equal to (a) the aggregate amount received in cash in connection such sale or issuance minus (b) the underwriting discounts, the fees, commissions, stamp or other taxes and other out-of-pocket expenses incurred by the Borrower and its Subsidiaries (or, if applicable, any Borrower Parent Company) and paid to Persons other than a Loan Party or Affiliate thereof (unless such payment to such Affiliate is approved in writing by the Administrative Agent in its sole discretion) in connection with such sale or issuance and (iv) with respect to any casualty or other insured damage to, or any taking under power of eminent domain or by condemnation or similar proceeding of, any Collateral, the amount equal to (a) the aggregate amount received in cash (including any cash received by way of deferred payment, but only as and when such cash is so received) in connection therewith minus (b) the sum of the fees, premiums, commissions, Taxes and other out-of-pocket expenses incurred (including reasonable estimates of income taxes) by the Borrower and its Subsidiaries in connection therewith and paid to Persons other than a Loan Party or Affiliate thereof.

Non-Consenting Lender shall have the meaning specified in Section 11.1 [Modifications, Amendments or Waivers].

Non-Qualifying Party shall mean any Loan Party that fails for any reason to qualify as an Eligible Contract Participant on the Effective Date of the applicable Swap.

Notes shall mean collectively, and Note shall mean separately, the promissory notes in the form of Exhibit 1.1(N)(1) evidencing the Revolving Credit Loans, in the form of Exhibit 1.1(N)(2) evidencing the Swing Loan, and in the form of Exhibit 1.1(N)(3) evidencing the Term Loans.

Obligations shall have the meaning set forth in the definition of Secured Obligations.

Official Body shall mean the government of the United States of America or any other nation, or of any political subdivision thereof, whether state, local or foreign, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or

pertaining to government (including any supra-national bodies such as the European Union or the European Central Bank) and any group or body charged with setting financial accounting or regulatory capital rules or standards (including the Financial Accounting Standards Board, the Bank for International Settlements or the Basel Committee on Banking Supervision or any successor or similar authority to any of the foregoing).

Optional Currency shall mean the following lawful currencies: Euros, British Pounds Sterling and Canadian Dollars and any other currency approved by Administrative Agent and all of the Lenders pursuant to Section 2.11.2(iii) [European Monetary Union; Requests for Additional Optional Currencies]. Subject to Section 2.11.2 [European Monetary Union], each Optional Currency must be the lawful currency of the specified country.

Optional Currency Loans shall mean Revolving Credit Loans made in an Optional Currency.

Order shall have the meaning specified in Section 2.9.9 [Liability for Acts and Omissions].

Original Currency shall have the meaning specified in Section 5.12 [Currency Conversion Procedures for Judgments].

Other Currency shall have the meaning specified in Section 5.12 [Currency Conversion Procedures for Judgments].

Other Connection Taxes shall mean, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient (or an agent or affiliate thereof) and the jurisdiction imposing such Tax (other than connections arising solely from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

Other Lender Provided Financial Service Product shall mean agreements or other arrangements under which any Lender or Affiliate of a Lender provides any of the following products or services to any of the Loan Parties: (i) credit cards, (ii) credit card processing services, (iii) debit cards, (iv) purchase cards, (v) ACH transactions, or (vi) cash management, including controlled disbursement, accounts or services.

Other Taxes shall mean all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to Section 5.6.2 [Replacement of a Lender]).

Overnight Bank Funding Rate shall mean for any day, the rate comprised of both overnight federal funds and overnight eurocurrency borrowings by U.S.-managed banking offices of depository institutions, as such composite rate shall be determined by the Federal

Reserve Bank of New York (“NYFRB”), as set forth on its public website from time to time, and as published on the next succeeding Business Day as the overnight bank funding rate by the NYFRB (or by such other recognized electronic source (such as Bloomberg) selected by the Administrative Agent for the purpose of displaying such rate); provided, that if such day is not a Business Day, the Overnight Bank Funding Rate for such day shall be such rate on the immediately preceding Business Day; provided, further, that if such rate shall at any time, for any reason, no longer exist, a comparable replacement rate determined by the Administrative Agent at such time (which determination shall be conclusive absent manifest error). If the Overnight Bank Funding Rate determined as above would be less than zero (0.00), then such rate shall be deemed to be zero (0.00). The rate of interest charged shall be adjusted as of each Business Day based on changes in the Overnight Bank Funding Rate without notice to the Borrowers.

Overnight Rate shall mean for any day with respect to any Loans in an Optional Currency, the rate of interest per annum as determined by the Administrative Agent at which overnight deposits in such currency, in an amount approximately equal to the amount with respect to which such rate is being determined, would be offered for such day in the Relevant Interbank Market. If the Overnight Rate determined as above would be less than zero (0.00), then such rate shall be deemed to be zero (0.00).

Participant has the meaning specified in Section 11.8.4 [Participations].

Participant Register shall have the meaning specified in Section 11.8.4 [Participations].

Participating Member State shall mean any member State of the European Communities that adopts or has adopted the euro as its lawful currency in accordance with legislation of the European Community relating to Economic and Monetary Union.

Participation Advance shall have the meaning specified in Section 2.9.3 [Disbursements, Reimbursement].

Payment Date shall mean the first day of each calendar quarter after the Closing Date and on the Revolving Credit Expiration Date or the Term Loan Maturity Date, as applicable, or upon acceleration of the Notes.

Payment In Full and Paid in Full shall mean the payment in full in cash of the Loans and other Obligations hereunder (except contingent indemnification obligations for which no claim has been made), termination of the Commitments and expiration or termination of all Letters of Credit (or, with respect to any undrawn Letters of Credit, the full Cash Collateralization thereof or other arrangements with respect thereto satisfactory to the Issuing Lender).

PBGC shall mean the Pension Benefit Guaranty Corporation established pursuant to Subtitle A of Title IV of ERISA or any successor.

Pension Plan shall mean at any time an “employee pension benefit plan” (as such term is defined in Section 3(2) of ERISA) (including a “multiple employer plan” as described in

Sections 4063 and 4064 of ERISA, but not a Multiemployer Plan) which is covered by Title IV of ERISA or is subject to the minimum funding standards under Section 412 or Section 430 of the Code and either is sponsored, maintained or contributed to by any member of the ERISA Group for employees of any member of the ERISA Group.

Permitted Acquisition shall have the meaning specified in Section 8.2.6 [Liquidations, Mergers, Consolidations, Acquisitions].

Permitted Distributions shall mean dividends or other distributions permitted under Section 8.2.5 [Dividends and Related Distributions].

Permitted Holder shall mean the Persons listed on Schedule 1.1(PH), their Family Members, their Family Trusts and entities created for the purpose of holding Borrower Equity Interests solely for the benefit of the foregoing.

Permitted Investments shall mean:

- (i) direct obligations of the United States of America or any agency or instrumentality thereof or obligations backed by the full faith and credit of the United States of America maturing in twelve (12) months or less from the date of acquisition;
- (ii) commercial paper maturing in 180 days or less rated not lower than A-1, by Standard & Poor's or P-1 by Moody's on the date of acquisition;
- (iii) demand deposits, time deposits or certificates of deposit maturing within one year in commercial banks whose obligations are rated A-1, A or the equivalent or better by Standard & Poor's or P-1 or the equivalent by Moody's on the date of acquisition;
- (iv) money market or mutual funds rated at least A by Standard & Poor's or at least A by Moody's;
- (v) investments made under the Cash Management Agreements or under cash management agreements with any other Lenders;
- (vi) investments in the form of municipal bonds consistent with past practice; and
- (vii) in the case of a Foreign Subsidiary, investments of a kind or type similar to the investments described above (replacing, where applicable, United States of America or any agency or instrumentality thereof with the corresponding governmental authorities of any foreign jurisdiction and using comparable ratings, if any, customary in the relevant jurisdiction) in any country other than the United States of America where such Foreign Subsidiary is organized or maintains a business location.

Permitted Liens shall mean:

- (i) Liens for taxes, assessments, or similar charges, incurred in the ordinary course of business and which are not yet due and payable;

(ii) Pledges or deposits made in the ordinary course of business to secure payment of workmen's compensation, or to participate in any fund in connection with workmen's compensation, unemployment insurance, old-age pensions or other social security programs;

(iii) Liens of mechanics, materialmen, warehousemen, carriers, or other like Liens, securing obligations incurred in the ordinary course of business that are not yet due and payable and Liens of landlords securing obligations to pay lease payments that are not yet due and payable or in default;

(iv) Good-faith pledges or deposits made in the ordinary course of business to secure performance of bids, tenders, utilities, contracts (other than for the repayment of borrowed money) or leases, not in excess of the aggregate amount due thereunder, or to secure statutory obligations, or surety, appeal, indemnity, performance or other similar bonds required in the ordinary course of business;

(v) Encumbrances consisting of zoning restrictions, easements, environmental use restrictions or other restrictions on the use of real property, none of which materially impairs the use of such property for the purpose of which the Loan Parties are using such property or the value thereof, and none of which is violated in any material respect by existing or proposed structures or land use;

(vi) Liens in favor of the Administrative Agent securing the Secured Obligations (including Lender Provided Interest Rate Hedges, Lender Provided Foreign Currency Hedges and Other Lender Provided Financial Service Products);

(vii) Any Lien existing on the date of this Agreement and described on Schedule 1.1(P) and extensions, renewals or replacements thereof, provided that the principal amount secured thereby is not hereafter increased (other than by the amount of any premiums and unpaid interest with respect to the Indebtedness being refinanced and reasonable fees and expenses relating to such extension, renewal or replacement financing), and no additional assets become subject to such Lien;

(viii) Purchase Money Security Interests; provided that (A) such Liens secure only Indebtedness permitted by clause (iii) of Section 8.2.1 [Indebtedness] and obligations relating thereto not constituting Indebtedness, and (B) such Liens shall be limited to the assets acquired with such purchase money financing or leased pursuant to such capital lease; and

(ix) The following, (A) if the validity or amount thereof is being contested in good faith by appropriate and lawful proceedings diligently conducted so long as levy and execution thereon have been stayed and continue to be stayed or (B) if a final judgment is entered and such judgment is discharged within thirty (30) days of entry, and in either case they do not affect the Collateral or, in the aggregate, materially impair the ability of any Loan Party to perform its Obligations hereunder or under the other Loan Documents:

(1) claims or Liens for Taxes due and payable and subject to interest or penalty; provided that the applicable Loan Party maintains such reserves or other appropriate

provisions as shall be required by GAAP and pays all such taxes, assessments or charges forthwith upon the commencement of proceedings to foreclose any such Lien;

(2) claims, Liens or encumbrances upon, and defects of title to, real or personal property other than the Collateral, including any attachment of personal or real property or other legal process prior to adjudication of a dispute on the merits;

(3) claims or Liens of mechanics, materialmen, warehousemen, carriers, or other statutory nonconsensual Liens; or

(4) Liens resulting from final judgments or orders in such amounts as would not constitute an Event of Default under Section 9.1.7 [Final Judgments or Orders].

(x) Any interest of title of a lessor under, and Liens arising from, precautionary Uniform Commercial Code financing statements (or equivalent filings, registrations or agreements in foreign jurisdictions) solely evidencing such lessor's interest under, operating leases permitted by this Agreement;

(xi) Normal and customary rights of setoff upon deposits of cash in favor of banks or other depository institutions holding such deposits, and Liens of a collection bank arising under Section 4-210 of the Uniform Commercial Code on items in the course of collection;

(xii) Liens securing Indebtedness permitted under clause (ix) of Section 8.2.1 [Indebtedness], which Liens attach solely to the insurance policies financed in connection with such Indebtedness and the proceeds thereof;

(xiii) Liens in respect of Excluded Deposit Accounts described in clause (i) of the definition of such term;

(xiv) Liens on property or assets acquired pursuant to an acquisition permitted under Section 8.2.6 [Liquidations, Mergers, Consolidations, Acquisitions] (and the proceeds thereof) or assets of a Subsidiary in existence at the time such Subsidiary is acquired pursuant to an acquisition permitted under Section 8.2.6 [Liquidations, Mergers, Consolidations, Acquisitions]; provided that (i) such Lien is not created in contemplation of or in connection with such acquisition or the acquisition of such Subsidiary, as the case may be, (ii) such Lien shall not apply to any other asset of the Borrower or any other Subsidiary, and (iii) such Lien shall secure only those obligations that it secures on the date of such acquisition or the date such Subsidiary is acquired, as the case may be, and any extensions, renewals and refinancings thereof that do not increase the outstanding principal amount thereof (other than by the amount of any premium and unpaid interest and reasonable fees and expenses relating to such extension, renewal or refinancing);

(xv) Liens on property or assets of Foreign Subsidiaries securing Indebtedness or other obligations in an aggregate amount not to exceed \$5,000,000; provided that (i) such Lien shall not apply to any Collateral (including any Subsidiary Equity Interests that constitute Collateral) or any other assets of the Borrower or any Domestic Subsidiary, and (ii) such Lien

shall secure only Indebtedness or other obligations of such Foreign Subsidiary permitted hereunder;

(xvi) Liens on Capital Stock in a Joint Venture securing obligations of such Joint Venture, provided that the Borrower and its Subsidiaries own, directly or indirectly, in the aggregate less than fifty percent (50%) of the Capital Stock in such Joint Venture;

(xvii) Liens solely on any cash earnest money deposits made by the Borrower or any of its Subsidiaries in connection with an Investment permitted by Section 8.2.4 [Loans and Investments]; and

(xviii) Other Liens securing obligations in an aggregate amount not to exceed \$10,000,000 at any time outstanding.

Person shall mean any individual, corporation, partnership, limited liability company, association, joint-stock company, trust, unincorporated organization, joint venture, government or political subdivision or agency thereof, or any other entity.

Platform shall have the meaning specific in Section 11.5.2 [Electronic Communications].

PNC shall mean PNC Bank, National Association, its successors and assigns.

Post-Increase Revolving Lenders shall have the meaning set forth in Section 3A.1(iv) [Adjustment of Revolving Credit Loans].

Potential Default shall mean any event or condition which with notice or passage of time, or both, would constitute an Event of Default.

Pre-Increase Revolving Lenders shall have the meaning set forth in Section 3A.1(iv) [Adjustment of Revolving Credit Loans].

Prime Rate shall mean the interest rate per annum announced from time to time by the Administrative Agent at its Principal Office as its then prime rate, which rate may not be the lowest or most favorable rate then being charged commercial borrowers or others by the Administrative Agent. Any change in the Prime Rate shall take effect at the opening of business on the day such change is announced. If the Prime Rate determined as above would be less than zero (0.00), then such rate shall be deemed to be zero (0.00).

Principal Office shall mean the main banking office of the Administrative Agent in Pittsburgh, Pennsylvania.

Prior Security Interest shall mean a valid and enforceable perfected first-priority security interest under the Uniform Commercial Code in the Collateral which is subject only to Liens described in clauses (i) through (v), (vii), (viii), (x), (xi), (xiii) and (xvi) of the definition of "Permitted Liens."

Private Side Lender Representatives shall mean, with respect to any Lender, representatives of such Lender that are not Public Side Lender Representatives.

PTE shall mean a prohibited transaction class exemption issued by the U.S. Department of Labor, as any such exemption may be amended from time to time.

Public Side Lender Representatives shall mean, with respect to any Lender, representatives of such Lender that do not wish to receive MNPI.

Published Rate shall mean the rate of interest published each Business Day in *The Wall Street Journal* "Money Rates" listing under the caption "London Interbank Offered Rates" for a one month period (provided that, if no such rate is published therein for any reason, then the Published Rate shall be the rate at which U.S. dollar deposits are offered by leading banks in the London interbank deposit market for a one month period either as published (i) in another publication selected by the Administrative Agent or (ii) in an Alternate Source) (or if there shall at any time, for any reason, no longer exist any such reference or any Alternative Source, a comparable replacement rate determined by the Administrative Agent at such time (which determination shall be conclusive absent manifest error)).

Purchase Money Security Interest shall mean Liens upon tangible personal property (including the proceeds thereof) securing loans to the Loan Parties or their Subsidiaries or deferred payments (including, without limitation, capitalized lease obligations under GAAP) by the Loan Parties or their Subsidiaries for the purchase or capital lease of such tangible personal property; provided that such security interest does not encumber any asset except the assets purchased (and the proceeds thereof); provided further that such security interest does not secure obligations in excess of such purchase price or deferred payments.

Qualified ECP Loan Party shall mean each Loan Party that on the Eligibility Date is (i) a corporation, partnership, proprietorship, organization, trust, or other entity other than a "commodity pool" as defined in Section 1a(10) of the CEA and CFTC regulations thereunder that has total assets exceeding \$10,000,000, or (ii) an Eligible Contract Participant that can cause another person to qualify as an Eligible Contract Participant on the Eligibility Date under Section 1a(18)(A)(v)(II) of the CEA by entering into or otherwise providing a "letter of credit or keepwell, support, or other agreement" for purposes of Section 1a(18)(A)(v)(II) of the CEA.

Ratable Share shall mean:

(i) with respect to a Lender's obligation to make Revolving Credit Loans, participate in Letters of Credit and other Letter of Credit Obligations, and receive payments, interest, and fees related thereto, the proportion that such Lender's Revolving Credit Commitment bears to the Revolving Credit Commitments of all of the Lenders, provided however that if the Revolving Credit Commitments have terminated or expired, the Ratable Shares for purposes of this clause shall be determined based upon the Revolving Credit Commitments most recently in effect, giving effect to any assignments.

(ii) with respect to a Lender's obligation to make Term Loans and receive payments, interest, and fees related thereto, the proportion that such Lender's Term Loans bears to the Term Loans of all of the Lenders, provided however that if the Term Loans have not yet

30

been funded, the computation in this clause shall be determined based upon the Term Loan Commitments of the Lenders and not the amount of their Term Loans.

(iii) with respect to all other matters as to a particular Lender, the percentage obtained by dividing (a) such Lender's Revolving Credit Commitment plus Term Loan, by (b) the sum of the aggregate amount of the Revolving Credit Commitments plus Term Loans of all Lenders; provided however that if the Revolving Credit Commitments have terminated or expired, the computation in this clause shall be determined based upon the Revolving Credit Commitments most recently in effect, giving effect to any assignments, and not on the current amount of the Revolving Credit Commitments and provided further in the case of Section 2.10 [Defaulting Lenders] when a Defaulting Lender shall exist, "Ratable Share" shall mean the percentage of the aggregate Commitments (disregarding any Defaulting Lender's Commitment) represented by such Lender's Commitment.

Recipient shall mean (i) the Administrative Agent, (ii) any Lender and (iii) the Issuing Lender, as applicable.

Reference Currency shall have the meaning specified in the definition of "Equivalent Amount."

Reimbursement Obligation shall have the meaning specified in Section 2.9.3 [Disbursements, Reimbursement].

Related Parties shall mean, with respect to any Person, such Person's Affiliates and the partners, directors, officers, employees, agents and advisors of such Person and of such Person's Affiliates.

Relevant Interbank Market shall mean in relation to Euro and British Pounds Sterling, the London Interbank Market, and in relation to any other currencies, the applicable offshore interbank market. Notwithstanding the foregoing, the references to the currencies listed in this definition shall only apply if such currencies are or become available as Optional Currencies in accordance with the terms hereof.

Relief Proceeding shall mean any proceeding seeking a decree or order for relief in respect of any Loan Party or Subsidiary of a Loan Party in a voluntary or involuntary case under any applicable bankruptcy, insolvency, reorganization or other similar law now or hereafter in effect, or for the appointment of a receiver, liquidator, assignee, custodian, trustee, sequestrator or conservator (or similar official) of any Loan Party or Subsidiary of a Loan Party or for any substantial part of its property, or for the winding-up or liquidation of its affairs, or an assignment for the benefit of its creditors.

Reportable Compliance Event shall mean that any Covered Entity becomes a Sanctioned Person, or is charged by indictment, criminal complaint or similar charging instrument, arraigned, or custodially detained in connection with any Anti-Terrorism Law or any predicate crime to any Anti-Terrorism Law, or has knowledge of facts or circumstances to the effect that it is reasonably likely that any aspect of its operations is in actual or probable violation of any Anti-Terrorism Law.

31

Resolution Authority shall mean an EEA Resolution Authority or, with respect to any UK Financial Institution, a UK Resolution Authority.

Required Lenders shall mean Lenders (other than any Defaulting Lender) having more than 50% of the sum of (a) the aggregate amount of the Revolving Credit Commitments of the Lenders (excluding any Defaulting Lender) or, after the termination of the Revolving Credit Commitments, the outstanding principal amount Revolving Credit Loans and Ratable Share of Letter of Credit Obligations of the Lenders (excluding any Defaulting Lender), and (b) the aggregate outstanding principal amount of any Term Loans; provided that, if at any time there are two or more Lenders that are not Defaulting Lenders, Required Lenders shall require at least two Lenders (Lenders that are Affiliates of one another being considered as one Lender for purposes of this proviso).

Required Share shall have the meaning assigned to such term in Section 5.11 [Settlement Date Procedures].

Revolving Credit Commitment shall mean, as to any Lender at any time, the amount initially set forth opposite its name on Schedule 1.1(B) in the column labeled "Amount of Commitment for Revolving Credit Loans," as such Commitment is thereafter assigned or modified as provided herein, including as such Commitment may be reduced as provided in Section 2.4.1 [Termination or Reduction of Revolving Credit Commitments] or increased as provided in Section 3A.1 [Incremental Commitments], and Revolving Credit Commitments shall mean the aggregate Revolving Credit Commitments of all of the Lenders.

Revolving Credit Expiration Date shall mean, with respect to the Revolving Credit Commitments, March 31, 2025.

Revolving Credit Exposure shall mean, as to any Lender at any time, the aggregate principal amount at such time of its outstanding Revolving Credit Loans and such Lender's Ratable Share of the outstanding Swing Loans and Letter of Credit Obligations.

Revolving Credit Loans shall mean collectively and Revolving Credit Loan shall mean separately all Revolving Credit Loans or any Revolving Credit Loan (including Incremental Revolving Loans) made by the Lenders or one of the Lenders to the Borrower pursuant to Section 2.1 [Revolving Credit Commitments], Section 2.9.3 [Disbursements, Reimbursement] or 3A.1 [Incremental Commitments].

Revolving Facility Usage shall mean at any time the sum of the Dollar Equivalent amount of the outstanding principal amount of the Revolving Credit Loans, the outstanding principal amount of the Swing Loans, and the Letter of Credit Obligations.

Sanctioned Country shall mean a country subject to a sanctions program maintained under any Anti-Terrorism Law, including, without limitation, any country that is the subject of economic or financial sanctions imposed by the Office of Foreign Assets Control of the U.S. Department of the Treasury, the U.S. Department of State, the United Nations Security Council, the European Union or Her Majesty's Treasury of the United Kingdom (e.g., including but not limited to, at the Closing Date, Cuba, Crimea, Iran, North Korea and Syria).

Sanctioned Person shall mean (i) any individual person, group, regime, entity or thing listed or otherwise recognized as a specially designated, prohibited, sanctioned or debarred person, group, regime, entity or thing, or subject to any limitations or prohibitions (including but not limited to the blocking of property or rejection of transactions), under any Anti-Terrorism Law, including, without limitation, any Person listed on any sanctions-related list maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury, the U.S. Department of State, the United Nations Security Council, the European Union, Her Majesty's Treasury of the United Kingdom or any other relevant sanctions authority, (ii) any Person operating, organized or resident in a Sanctioned Country or (iii) any Person owned or controlled by any such Person described in the foregoing clauses (i) or (ii).

SEC shall mean the United States Securities and Exchange Commission.

Secured Obligation shall mean any obligation or liability of any of the Loan Parties, howsoever created, arising or evidenced, whether direct or indirect, absolute or contingent, now or hereafter existing, or due or to become due, under or in connection with (i) this Agreement, the Notes, the Letters of Credit, the Administrative Agent's Letter or any other Loan Document whether to the Administrative Agent, any of the Lenders or their Affiliates or other persons provided for under such Loan Documents (and including obligations, liabilities, and indebtedness arising or accruing after the commencement of any bankruptcy, insolvency, reorganization, or similar proceeding with respect to a Loan Party or that would have arisen or accrued but for the commencement of such proceeding, even if the claim for such obligation, liability or indebtedness is not enforceable or allowable in such proceeding) (collectively, the "**Obligations**"), (ii) any Lender Provided Interest Rate Hedge, (iii) any Lender Provided Foreign Currency Hedge, and (iv) any Other Lender Provided Financial Service Product. Notwithstanding anything to the contrary contained in the foregoing, neither the Obligations nor the Secured Obligations shall include any Excluded Hedge Liabilities.

Securities Act shall mean the United States Securities Act of 1933, as amended, and the rules and regulations thereunder, as from time to time in effect.

Settlement Date shall mean the Business Day on which the Administrative Agent elects to effect settlement pursuant to Section 5.11 [Settlement Date Procedures].

Solvent shall mean, with respect to any Person on any date of determination, taking into account any right of reimbursement, contribution or similar right available to such Person from other Persons, that on such date (i) the fair value of the property of such Person is greater than the total amount of liabilities, including contingent liabilities, of such Person, (ii) the present fair saleable value of the assets of such Person is not less than the amount that will be required to pay the probable liability of such Person on its debts as they become absolute and matured, (iii) such Person is able to realize upon its assets and pay its debts and other liabilities, contingent obligations and other commitments as they mature in the normal course of business, (iv) such Person does not intend to, and does not believe that it will, incur debts or liabilities beyond such Person's ability to pay as such debts and liabilities mature, and (v) such Person is not engaged in business or a transaction, and is not about to engage in business or a transaction, for which such Person's property would constitute unreasonably small capital after giving due consideration to the prevailing practice in the industry in which such Person is engaged. In

computing the amount of contingent liabilities at any time, it is intended that such liabilities will be computed at the amount which, in light of all the facts and circumstances existing at such time, represents the amount that can reasonably be expected to become an actual or matured liability.

Specified Distribution shall mean the dividends or distributions to be paid in cash in respect of the Borrower's shares of Capital Stock in an aggregate amount not less than \$120,000,000 and not more than \$125,000,000, a portion of which may be utilized to pay tax obligations of the holders of such Capital Stock; provided that, such dividend or distributions shall be paid on a date on or before ninety (90) days after the Closing Date.

Standard & Poor's shall mean S&P Global Ratings, a division of S&P Global, Inc.

Statements shall have the meaning specified in Section 6.1.6(i) [Historical Statements].

Stock Option Agreements shall mean the stock option agreements described on Schedule 1.1(SO), together with any replacements, supplements or amendments thereto.

Subsidiary of any Person at any time shall mean any corporation, trust, partnership, limited liability company or other business entity (i) of which more than 50% of the outstanding voting securities or other interests normally entitled to vote for the election of one or more directors or trustees (regardless of any contingency which does or may suspend or dilute the voting rights) is at such time owned directly or indirectly by such Person or one or more of such Person's Subsidiaries, or (ii) which is controlled or capable of being controlled by such Person or one or more of such Person's Subsidiaries.

Subsidiary Equity Interests shall have the meaning specified in Section 6.1.2 [Subsidiaries and Owners; Investment Companies].

Swap shall mean any "swap" as defined in Section 1a(47) of the CEA and regulations thereunder, other than (i) a swap entered into, or subject to the rules of, a board of trade designated as a contract market under Section 5 of the CEA, or (ii) a commodity option entered into pursuant to CFTC Regulation 32.3(a).

Swap Obligation shall mean any obligation to pay or perform under any agreement, contract or transaction that constitutes a Swap which is also a Lender Provided Interest Rate Hedge or a Lender Provided Foreign Currency Hedge.

Swing Loan Commitment shall mean PNC's commitment to make Swing Loans to the Borrower pursuant to Section 2.1.2 [Swing Loan Commitment] hereof in an aggregate principal amount up to \$10,000,000; provided that, so long as PNC is the sole Lender, the amount of the Swing Loan Commitment shall be equal to the Revolving Credit Commitment of PNC then in effect.

Swing Loan Lender shall mean PNC, in its capacity as a lender of Swing Loans.

Swing Loan Note shall mean the Swing Loan Note of the Borrower in the form of Exhibit 1.1(N)(2), evidencing the Swing Loans, together with all amendments, extensions, renewals, replacements, refinancings or refundings thereof in whole or in part.

Swing Loan Request shall mean a request for Swing Loans made in accordance with Section 2.5.2 [Swing Loan Requests] hereof.

Swing Loans shall mean collectively and Swing Loan shall mean separately all Swing Loans or any Swing Loan made by PNC to the Borrower pursuant to Section 2.1.2 [Swing Loan Commitment] hereof.

Tax Distributions shall mean, solely with respect to any period in which the Borrower is or was a “pass-through” entity for U.S. income tax purposes, with respect to any period, those distributions made by the Borrower for the purpose of paying the income taxes of the Borrower Equityholders in an aggregate amount not to exceed (i) the highest marginal combined federal, state and local income tax rate (including surcharges thereon) applicable to any Borrower Equityholder multiplied by (ii) the net taxable income (as determined for federal income tax purposes) of all Borrower Equityholders attributable to the net taxable income of such Loan Party for such period, as reported on the applicable tax returns (or, where applicable, estimated tax filings) of the Borrower Equityholders.

Taxes shall mean all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Official Body, including any interest, additions to tax or penalties applicable thereto.

Term Loan shall have the meaning specified in Section 3.1 [Term Loan Commitments]; Term Loans shall mean collectively all of the Term Loans.

Term Loan Commitment shall mean, as to any Lender at any time, the amount initially set forth opposite its name on Schedule 1.1(B) in the column labeled “Amount of Commitment for Term Loans,” as such Commitment is thereafter assigned or modified as provided herein, including as such Commitment may be increased as provided in Section 3A.1 [Incremental Commitments], and Term Loan Commitments shall mean the aggregate Term Loan Commitments of all of the Lenders.

Term Loan Maturity Date shall mean, with respect to the Term Loans, March 31, 2023.

Threshold Amount shall mean an amount equal to \$500,000 in the aggregate in any four consecutive quarter period.

Total Funded Debt shall mean, without duplication, as of any date, consolidated Indebtedness of the Borrower and its Subsidiaries on such date, other than (i) obligations that constitute Indebtedness solely by reason of clause (iv) of the definition of “Indebtedness” and (ii) trade payables and accrued expenses constituting Indebtedness solely under clause (v) of the definition of “Indebtedness”.

Transactions shall mean the execution, delivery and performance of the Loan Document by each of the Loan Parties, the borrowing of the Loans and the issuance of the Letters of Credit hereunder and the use of the proceeds thereof.

UCP shall have the meaning specified in Section 11.11.1 [Governing Law].

UK Financial Institution shall mean any BRRD Undertaking (as such term is defined under the PRA Rulebook (as amended from time to time) promulgated by the United Kingdom Prudential Regulation Authority) or any person falling with IFPRU 11.6 of the FCA Handbook (as amended from time to time) promulgated by the United Kingdom Financial Conduct Authority, which includes certain credit institutions and investment firms, and certain affiliates of such credit institutions or investment firms.

UK Resolution Authority shall mean the Bank of England or any other public administrative authority having responsibility for the resolution of any UK Financial Institution.

Unrestricted Domestic Cash shall mean unrestricted cash and cash equivalents owned by the Borrower and each other Loan Party and not controlled by or subject to any Lien in favor of any creditor (other than Liens created under the Loan Documents and Liens constituting Permitted Liens of the type referred to in clause (xi) of the definition of such term).

Unused Revolving Credit Commitment shall mean, at any time, an amount equal to the excess, if any, of the Revolving Credit Commitments of all of the Lenders at such time over the Revolving Facility Usage at such time.

USA Patriot Act shall mean the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Public Law 107-56, as the same has been, or shall hereafter be, renewed, extended, amended or replaced.

U.S. Person shall mean any Person that is a "United States Person" as defined in Section 7701(a)(30) of the Code.

U.S. Tax Compliance Certificate shall have the meaning specified in Section 5.9.7 [Status of Lenders].

Withholding Agent shall mean any Loan Party and the Administrative Agent.

Write-Down and Conversion Powers shall mean, (i) with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule, and (ii) with respect to the United Kingdom, any powers of the applicable Resolution Authority under the Bail-In Legislation to cancel, reduce, modify or change the form of a liability of any UK Financial Institution or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that Person or any other Person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that Bail-In Legislation that are related to or ancillary to any of those powers.

1.2 Construction. Unless the context of this Agreement otherwise clearly requires, the following rules of construction shall apply to this Agreement and each of the other Loan Documents: (i) references to the plural include the singular, the plural, the part and the whole and the words “include,” “includes” and “including” shall be deemed to be followed by the phrase “without limitation”; (ii) the words “hereof,” “herein,” “hereunder,” “hereto” and similar terms in this Agreement or any other Loan Document refer to this Agreement or such other Loan Document as a whole; (iii) article, section, subsection, clause, schedule and exhibit references are to this Agreement or other Loan Document, as the case may be, unless otherwise specified; (iv) reference to any Person includes such Person’s successors and assigns; (v) reference to any agreement, including this Agreement and any other Loan Document together with the schedules and exhibits hereto or thereto, document or instrument means such agreement, document or instrument as amended, modified, replaced, substituted for, superseded or restated (but, if applicable, only if such amendment, modification, replacement, substitution, etc. is permitted hereunder); (vi) relative to the determination of any period of time, “from” means “from and including,” “to” means “to but excluding,” and “through” means “through and including”; (vii) the words “asset” and “property” shall be construed to have the same meaning and effect and to refer to any and all tangible and intangible assets and properties, including cash, securities, accounts and contract rights, (viii) section headings herein and in each other Loan Document are included for convenience and shall not affect the interpretation of this Agreement or such Loan Document, and (ix) unless otherwise specified, all references herein to times of day shall constitute references to Eastern Time.

1.3 Accounting Principles; Changes in GAAP. Except as otherwise provided in this Agreement, all computations and determinations as to accounting or financial matters and all financial statements to be delivered pursuant to this Agreement shall be made and prepared in accordance with GAAP (including principles of consolidation where appropriate), and all accounting or financial terms shall have the meanings ascribed to such terms by GAAP; provided, however, that all accounting terms used in Section 8.2 [Negative Covenants] (and all defined terms used in the definition of any accounting term used in Section 8.2) shall have the meaning given to such terms (and defined terms) under GAAP as in effect on the date hereof applied on a basis consistent with those used in preparing the Statements referred to in Section 6.1.6(i) [Historical Statements]. Notwithstanding the foregoing, if the Borrower notifies the Administrative Agent in writing that the Borrower wishes to amend any financial covenant in Section 8.2 of this Agreement, any related definition and/or the definition of the term Net Leverage Ratio for purposes of interest, Letter of Credit Fee and Commitment Fee determinations to eliminate the effect of any change in GAAP occurring after the Closing Date (or, with respect to Capital Lease Obligations, December 31, 2018) on the operation of such financial covenants and/or interest, Letter of Credit Fee or Commitment Fee determinations (or if the Administrative Agent notifies the Borrower in writing that the Required Lenders wish to amend any financial covenant in Section 8.2, any related definition and/or the definition of the term Net Leverage Ratio for purposes of interest, Letter of Credit Fee and Commitment Fee determinations to eliminate the effect of any such change in GAAP), then the Administrative Agent, the Lenders and the Borrower shall negotiate in good faith to amend such ratios or requirements to preserve the original intent thereof in light of such change in GAAP (subject to the approval of the Required Lenders); provided that, until so amended, the Loan Parties’ compliance with such covenants and/or the definition of the term Net Leverage Ratio for purposes of interest, Letter of Credit Fee and Commitment Fee determinations shall be

determined on the basis of GAAP in effect immediately before the relevant change in GAAP became effective, until either such notice is withdrawn or such covenants or definitions are amended in a manner satisfactory to the Borrower and the Required Lenders, and the Loan Parties shall provide to the Administrative Agent, when they deliver their financial statements pursuant to Sections 8.3.1 [Quarterly Financial Statements] and 8.3.2 [Annual Financial Statements] of this Agreement, such reconciliation statements as shall be reasonably requested by the Administrative Agent. Notwithstanding, the foregoing, leases and revenue recognition shall continue to be classified and accounted for on a basis consistent with that reflected in the Statements referred to in Section 6.1.6(i) [Historical Statements] for all purposes of this Agreement, notwithstanding any change in GAAP relating thereto occurring after December 31, 2018, unless the parties hereto shall enter into a mutually acceptable amendment addressing such changes, as provided for above. The Loan Parties shall provide to the Administrative Agent, when they deliver their financial statements pursuant to Sections 8.3.1 [Quarterly Financial Statements] and 8.3.2 [Annual Financial Statements] of this Agreement, such reconciliation statements as shall be reasonably requested by the Administrative Agent.

1.4 Currency Calculations. All financial statements and Compliance Certificates shall be set forth in Dollars. For purposes of preparing the financial statements, calculating financial covenants and determining compliance with covenants expressed in Dollars, Optional Currencies shall be converted to Dollars in accordance with GAAP.

1.5 Divisions. For all purposes under the Loan Documents, in connection with any Division/Series Transaction: (i) if any asset, right, obligation or liability of any Person becomes the asset, right, obligation or liability of a different Person, then it shall be deemed to have been transferred from the original Person to the subsequent Person, and (ii) if any new Person comes into existence, such new Person shall be deemed to have been organized on the first date of its existence by the holders of its Capital Stock at such time.

1.6 Euro-Rate Notification. Section 4.6 [Successor Euro-Rate Index] of this Agreement provides a mechanism for determining an alternative rate of interest in the event that one or more Relevant Interbank Market offered rates is no longer available or in certain other circumstances. The Administrative Agent does not warrant or accept any responsibility for and shall not have any liability with respect to, the administration, submission or any other matter related to any Relevant Interbank Market offered rate or other rates in the definition of "Euro-Rate" or with respect to any alternative or successor rate thereto, or replacement rate therefor.

2. REVOLVING CREDIT AND SWING LOAN FACILITIES

2.1 Revolving Credit Commitments.

2.1.1 Revolving Credit Loans; Optional Currency Loans. Subject to the terms and conditions hereof and relying upon the representations and warranties herein set forth, each Lender severally agrees to make Revolving Credit Loans in either Dollars or one or more Optional Currencies to the Borrower at any time or from time to time on or after the date hereof to the Revolving Credit Expiration Date; provided that after giving effect to each such Loan (i) the aggregate Dollar Equivalent amount of Revolving Credit Loans from such Lender shall not exceed such Lender's Revolving Credit Commitment minus such Lender's Ratable Share of

the outstanding Swing Loans and Letter of Credit Obligations, (ii) the Revolving Facility Usage shall not exceed the Revolving Credit Commitments, and (iii) no Revolving Credit Loan to which the Base Rate Option applies shall be made in an Optional Currency. Within such limits of time and amount and subject to the other provisions of this Agreement, the Borrower may borrow, repay and reborrow pursuant to this Section 2.1.

2.1.2 Swing Loan Commitment. Subject to the terms and conditions hereof and relying upon the representations and warranties herein set forth, and in order to facilitate loans and repayments between Settlement Dates, PNC may, at its option, cancelable at any time for any reason whatsoever, make swing loans in Dollars (the “**Swing Loans**”) to the Borrower at any time or from time to time after the date hereof to, but not including, the Revolving Credit Expiration Date, in an aggregate principal amount up to but not in excess of the Swing Loan Commitment provided that after giving effect to such Loan (i) the Revolving Facility Usage shall not exceed the aggregate Revolving Credit Commitments of the Lenders and (ii) the aggregate Dollar Equivalent amount of Revolving Credit Loans made by a Lender together with such Lender’s Ratable Share of the sum of the Letter of Credit Obligations and the aggregate principal amount of the Swing Loans then outstanding shall not exceed such Lender’s Revolving Credit Commitment. Within such limits of time and amount and subject to the other provisions of this Agreement, the Borrower may borrow, repay and reborrow pursuant to this Section 2.1.2.

2.2 Nature of Lenders’ Obligations with Respect to Revolving Credit Loans. Each Lender shall be obligated to participate in each request for Revolving Credit Loans pursuant to Section 2.5 [Revolving Credit Loan Requests; Swing Loan Requests] in accordance with its Ratable Share. The aggregate Dollar Equivalent of each Lender’s Revolving Credit Loans outstanding hereunder to the Borrower at any time shall never exceed its Revolving Credit Commitment minus its Ratable Share of the outstanding Swing Loans and Letter of Credit Obligations. The obligations of each Lender hereunder are several. The failure of any Lender to perform its obligations hereunder shall not affect the Obligations of the Borrower to any other party nor shall any other party be liable for the failure of such Lender to perform its obligations hereunder. The Lenders shall have no obligation to make Revolving Credit Loans hereunder on or after the Revolving Credit Expiration Date.

2.3 Commitment Fees. Accruing from the date hereof until the Revolving Credit Expiration Date, the Borrower agrees to pay to the Administrative Agent for the account of each Lender according to its Ratable Share, a nonrefundable commitment fee (the “**Commitment Fee**”) equal to the Applicable Commitment Fee Rate (computed on the basis of a year of 365 or 366 days, as the case may be, and actual days elapsed) multiplied by the daily difference between the amount of (i) the Revolving Credit Commitments and (ii) the Dollar Equivalent amount of the Revolving Facility Usage (provided however, that solely in connection with determining the share of each Lender in the Commitment Fee, the Revolving Facility Usage with respect to the portion of the Commitment Fee allocated to PNC shall include the full amount of the outstanding Swing Loans, and with respect to the portion of the Commitment Fee allocated by the Administrative Agent to all of the Lenders other than PNC, such portion of the Commitment Fee shall be calculated (according to each such Lender’s Ratable Share) as if the Revolving Facility Usage excludes the outstanding Swing Loans); provided, further, that any Commitment Fee accrued with respect to the Revolving Credit Commitment of a Defaulting Lender during the period prior to the time such Lender became a Defaulting Lender and unpaid at such time shall

not be payable by the Borrower so long as such Lender shall be a Defaulting Lender except to the extent that such Commitment Fee shall otherwise have been due and payable by the Borrower prior to such time; and provided further that no Commitment Fee shall accrue with respect to the Revolving Credit Commitment of a Defaulting Lender so long as such Lender shall be a Defaulting Lender. Subject to the proviso in the directly preceding sentence, all Commitment Fees shall be payable in arrears on each Payment Date and in U.S. Dollars.

2.4 Termination or Reduction of Revolving Credit Commitments.

2.4.1 Termination or Reduction of Revolving Credit Commitments. The Borrower shall have the right, upon not less than three (3) Business Days' notice to the Administrative Agent (or such shorter period as the Administrative Agent may agree in its discretion), to terminate the Revolving Credit Commitments or, from time to time, to reduce the aggregate amount of the Revolving Credit Commitments (ratably among the Lenders in proportion to their Ratable Shares); provided that no such termination or reduction of Revolving Credit Commitments shall be permitted if, after giving effect thereto and to any prepayments of the Revolving Credit Loans made on the effective date thereof, the Revolving Facility Usage would exceed the aggregate Revolving Credit Commitments of the Lenders. Any such reduction shall be in an amount equal to \$5,000,000, or a whole multiple thereof, and shall reduce permanently the Revolving Credit Commitments then in effect. Any such reduction or termination shall be accompanied by prepayment of the Notes, together with outstanding Commitment Fees, and the full amount of interest accrued on the principal sum to be prepaid (and all amounts referred to in Section 5.10 [Indemnity] hereof) to the extent necessary to cause the aggregate Revolving Facility Usage after giving effect to such prepayments to be equal to or less than the Revolving Credit Commitments as so reduced or terminated. Any notice to reduce the Revolving Credit Commitments under this Section 2.4 shall be irrevocable; provided that a notice of termination of the Revolving Credit Commitments in full delivered by the Borrower may state that such notice is conditioned upon the effectiveness of other credit facilities or debt or equity issuances, in which case such notice may be revoked by the Borrower (by notice to the Administrative Agent on or prior to the specified effective date) if such condition is not satisfied.

2.5 Revolving Credit Loan Requests; Swing Loan Requests.

2.5.1 Revolving Credit Loan Requests. Except as otherwise provided herein, the Borrower may from time to time prior to the Revolving Credit Expiration Date request the Lenders to make Revolving Credit Loans, or renew or convert the Interest Rate Option applicable to existing Revolving Credit Loans or Term Loans pursuant to Section 4.2 [Interest Periods], by delivering to the Administrative Agent, not later than 10:00 a.m., (i) three (3) Business Days prior to the proposed Borrowing Date with respect to the making of Revolving Credit Loans in Dollars to which the Euro-Rate Option applies or the conversion to or the renewal of the Euro-Rate Option for any Loans in Dollars; (ii) four (4) Business Days prior to the proposed Borrowing Date with respect to the making of Optional Currency Loans or the date of conversion to or renewal of the Euro-Rate Option for any Optional Currency Loan, and (iii) the same Business Day of the proposed Borrowing Date with respect to the making of a Revolving Credit Loan to which the Base Rate Option applies or the last day of the preceding Interest Period with respect to the conversion to the Base Rate Option for any Loan, of a duly completed request therefor substantially in the form of Exhibit 2.5.1 or a request by telephone

40

immediately confirmed in writing by letter, facsimile or telex in such form (each, a "**Loan Request**"), it being understood that the Administrative Agent may rely on the authority of any individual making such a telephonic request without the necessity of receipt of such written confirmation. Each Loan Request shall be irrevocable and shall specify (A) the aggregate amount of the proposed Loans comprising each Borrowing Tranche, and, if applicable, the Interest Period, which amount shall be in (x) the minimum amount of \$500,000 (or the Dollar Equivalent thereof) for each Borrowing Tranche, (B) which Interest Rate Option shall apply to the proposed Dollar denominated Loans comprising the applicable Borrowing Tranche and (C) the currency in which such Revolving Credit Loans shall be funded if the Borrower elects an Optional Currency and the applicable Interest Rate Option.

2.5.2 Swing Loan Requests. Except as otherwise provided herein, the Borrower may from time to time prior to the Revolving Credit Expiration Date request the Swing Loan Lender to make Swing Loans by delivery to the Swing Loan Lender not later than 12:00 noon on the proposed Borrowing Date of a duly completed request therefor substantially in the form of Exhibit 2.5.2 hereto or a request by telephone immediately confirmed in writing by letter, facsimile or telex (each, a "**Swing Loan Request**"), it being understood that the Administrative Agent may rely on the authority of any individual making such a telephonic request without the necessity of receipt of such written confirmation. Each Swing Loan Request shall be irrevocable and shall specify the proposed Borrowing Date and the principal amount of such Swing Loan, which shall be not less than \$100,000.

2.6 Making Revolving Credit Loans and Swing Loans; Presumptions by the Administrative Agent; Repayment of Revolving Credit Loans; Borrowings to Repay Swing Loans.

2.6.1 Making Revolving Credit Loans. The Administrative Agent shall, promptly after receipt by it of a Loan Request pursuant to Section 2.5 [Revolving Credit Loan Requests; Swing Loan Requests], notify the Lenders of its receipt of such Loan Request specifying the information provided by the Borrower, including the currency in which the Revolving Credit Loan is requested, and the apportionment among the Lenders of the requested Revolving Credit Loans as determined by the Administrative Agent in accordance with Section 2.2 [Nature of Lenders' Obligations with Respect to Revolving Credit Loans]. Each Lender shall remit the principal amount of each Revolving Credit Loan in the requested currency (in the case of Optional Currency Loans, in Dollars if so requested by a Lender and agreed to by the Administrative Agent in its sole discretion) to the Administrative Agent such that the Administrative Agent is able to, and the Administrative Agent shall, to the extent the Lenders have made funds available to it for such purpose and subject to Section 7.2 [Each Loan or Letter of Credit], fund such Revolving Credit Loans to the Borrower in U.S. Dollars or the requested Optional Currency (as applicable) in immediately available funds at the Principal Office prior to 2:00 p.m., on the applicable Borrowing Date; provided that if any Lender fails to remit such funds to the Administrative Agent in a timely manner, the Administrative Agent may elect in its sole discretion to fund with its own funds, including funds in the requested Optional Currency, the Revolving Credit Loans of such Lender on such Borrowing Date, and such Lender shall be subject to the repayment obligation in Section 2.6.2 [Presumptions by the Administrative Agent].

41

2.6.2 Presumptions by the Administrative Agent. Unless the Administrative Agent shall have received notice from a Lender prior to the proposed time of any Base Rate Loan, or, for Loans other than Base Rate Loans, prior to the close of business the day before the Borrowing Date, that such Lender will not make available to the Administrative Agent such Lender's share of such Loan, the Administrative Agent may assume that such Lender has made such share available in the applicable currency on such date in accordance with Section 2.6.1 [Making Revolving Credit Loans] and may, in reliance upon such assumption, make available to the Borrower a corresponding amount. In such event, if a Lender has not in fact made its share of the applicable Loan available in the applicable currency to the Administrative Agent, then the applicable Lender and the Borrower severally agree to pay to the Administrative Agent forthwith on demand such corresponding amount in the appropriate currency with interest thereon, for each day from and including the date such amount is made available to the Borrower to but excluding the date of payment to the Administrative Agent, at (i) in the case of a payment to be made by such Lender, the greater of the Federal Funds Effective Rate (or, for payments in an Optional Currency, the Overnight Rate), and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation and (ii) in the case of a payment to be made by the Borrower, the interest rate applicable to Loans under the Base Rate Option. If such Lender pays its share of the applicable Loan to the Administrative Agent, then the amount so paid shall constitute such Lender's Loan. Any payment by the Borrower shall be without prejudice to any claim the Borrower may have against a Lender that shall have failed to make such payment to the Administrative Agent.

2.6.3 Making Swing Loans. So long as PNC elects to make Swing Loans, PNC shall, after receipt by it of a Swing Loan Request pursuant to Section 2.5.2, [Swing Loan Requests] fund such Swing Loan to the Borrower in U.S. Dollars only and in immediately available funds at the Principal Office prior to 4:00 p.m. on the Borrowing Date.

2.6.4 Repayment of Revolving Credit Loans. The Borrower shall repay the Revolving Credit Loans together with all outstanding interest thereon on the Revolving Credit Expiration Date.

2.6.5 Borrowings to Repay Swing Loans. (i) PNC may, at its option, exercisable at any time for any reason whatsoever, demand repayment of the Swing Loans, and each Lender shall make a Revolving Credit Loan in an amount equal to such Lender's Ratable Share of the aggregate principal amount of the outstanding Swing Loans, provided that no Lender shall be obligated in any event to make Revolving Credit Loans in excess of its Revolving Credit Commitment minus its Ratable Share of Letter of Credit Obligations. Revolving Credit Loans made pursuant to the preceding sentence shall bear interest at the Base Rate Option and shall be deemed to have been properly requested in accordance with Section 2.5.1 [Revolving Credit Loan Requests] without regard to any of the requirements of that provision. PNC shall provide notice to the Lenders (which may be telephonic or written notice by letter, facsimile or telex) that such Revolving Credit Loans are to be made under this Section 2.6.5 and of the apportionment among the Lenders, and the Lenders shall be unconditionally obligated to fund such Revolving Credit Loans (whether or not the conditions specified in Section 2.5.1 [Revolving Credit Loan Requests] or in Section 7.2 [Each Loan or Letter of Credit] are then satisfied) by the time PNC so requests, which shall not be earlier than 3:00 p.m. on the Business Day next after the date the Lenders receive such notice from PNC.

(ii) If any Lender fails to make available to the Administrative Agent for the account of PNC (as the Swing Loan Lender) any amount required to be paid by such Lender pursuant to the foregoing provisions of this Section 2.6.5 by the time specified in Section 2.6.5(i), the Swing Loan Lender shall be entitled to recover from such Lender (acting through the Administrative Agent), on demand, such amount with interest thereon for the period from the date such payment is required to the date on which such payment is immediately available to the Swing Loan Lender at a rate per annum equal to the greater of the Federal Funds Effective Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation, plus any administrative, processing or similar fees customarily charged by the Swing Loan Lender in connection with the foregoing. If such Lender pays such amount (with interest and fees as aforesaid), the amount so paid shall constitute such Lender's Revolving Credit Loan with respect to such amount. A certificate of the Swing Loan Lender submitted to any Lender (through the Administrative Agent) with respect to any amounts owing under this clause (ii) shall be conclusive absent manifest error.

2.6.6 Swing Loans Under Cash Management Agreements. In addition to making Swing Loans pursuant to the foregoing provisions of Section 2.6.3 [Making Swing Loans], without the requirement for a specific request from the Borrower pursuant to Section 2.5.2 [Swing Loan Requests], PNC as the Swing Loan Lender may make Swing Loans to the Borrower in accordance with the provisions of the agreements between the Borrower and such Swing Loan Lender relating to the Borrower's deposit, sweep and other accounts at such Swing Loan Lender and related arrangements and agreements regarding the management and investment of the Borrower's cash assets as in effect from time to time (the "**Cash Management Agreements**") to the extent of the daily aggregate net negative balance in the Borrower's accounts which are subject to the provisions of the Cash Management Agreements. Swing Loans made pursuant to this Section 2.6.6 in accordance with the provisions of the Cash Management Agreements shall (i) be subject to the limitations as to aggregate amount set forth in Section 2.1.2 [Swing Loan Commitment], (ii) not be subject to the limitations as to individual amount set forth in Section 2.5.2 [Swing Loan Requests], (iii) be payable by the Borrower, both as to principal and interest, at the rates and times set forth in the Cash Management Agreements (but in no event later than the Revolving Credit Expiration Date), (iv) not be made at any time after such Swing Loan Lender has received written notice of the occurrence of an Event of Default and so long as such shall continue to exist, or, unless consented to by the Required Lenders, a Potential Default and so long as such shall continue to exist, (v) if not repaid by the Borrower in accordance with the provisions of the Cash Management Agreements, be subject to each Lender's obligation pursuant to Section 2.6.5 [Borrowings to Repay Swing Loans], and (vi) except as provided in the foregoing subsections (i) through (v), be subject to all of the terms and conditions of this Section 2.

2.7 Notes. The Obligation of the Borrower to repay the aggregate unpaid principal amount of the Revolving Credit Loans, Swing Loans and Term Loans made to it by each Lender, together with interest thereon, shall be evidenced by a revolving credit Note, a swing Note and a term Note, dated the Closing Date payable to the order of such Lender or its registered assigns in a face amount equal to the Revolving Credit Commitment, Swing Loan Commitment or Term Loan Commitment, as applicable, of such Lender.

2.8 Use of Proceeds — Revolving Credit Facility. The proceeds of the Revolving Credit Loans (including Incremental Revolving Loans) shall be used to fund ongoing working capital, capital expenditures, Permitted Distributions, Permitted Acquisitions, and general corporate purposes of the Borrower and its Subsidiaries.

2.9 Letter of Credit Subfacility.

2.9.1 Issuance of Letters of Credit. The Borrower or any Loan Party may at any time prior to the Revolving Credit Expiration Date request the issuance of a standby or trade letter of credit (together with any Existing Letter of Credit, each a “**Letter of Credit**”), which may be denominated in either Dollars or an Optional Currency, for its own account or the account of another Loan Party, or the amendment or extension of an existing Letter of Credit, by delivering or transmitting electronically, or having such other Loan Party deliver or transmit electronically to the Issuing Lender (with a copy to the Administrative Agent) a completed application for letter of credit, or request for such amendment or extension, as applicable, in such form as the Issuing Lender may specify from time to time by no later than 10:00 a.m. at least five (5) Business Days, or such shorter period as may be agreed to by the Issuing Lender, in advance of the proposed date of issuance. The Borrower or any Loan Party shall authorize and direct the Issuing Lender to name the Borrower or any Loan Party as the “Applicant” or “Account Party” of each Letter of Credit. Promptly after receipt of any letter of credit application, the Issuing Lender shall confirm with the Administrative Agent (by telephone or in writing) that the Administrative Agent has received a copy of such Letter of Credit application and if not, the Issuing Lender will provide the Administrative Agent with a copy thereof. Notwithstanding anything to the contrary herein, the Existing Letters of Credit shall be deemed, for all purposes of this Agreement and the other Loan Documents, to be Letters of Credit issued hereunder for the account of the Borrower.

2.9.1.1 Unless the Issuing Lender has received notice from any Lender, the Administrative Agent or any Loan Party, at least one day prior to the requested date of issuance, amendment or extension of the applicable Letter of Credit, that one or more applicable conditions in Section 7 [Conditions of Lending and Issuance of Letters of Credit] is not satisfied, then, subject to the terms and conditions hereof and in reliance on the agreements of the other Lenders set forth in this Section 2.9, the Issuing Lender or any of the Issuing Lender’s Affiliates will issue the proposed Letter of Credit or agree to such amendment or extension, provided that each Letter of Credit shall (A) have a maximum maturity of twelve (12) months from the date of issuance, and (B) in no event expire later than the Revolving Credit Expiration Date and provided further that in no event shall (i) the Letter of Credit Obligations exceed, at any one time, the Dollar Equivalent of \$10,000,000 (the “**Letter of Credit Sublimit**”) or (ii) the Revolving Facility Usage exceed, at any one time, the Revolving Credit Commitments. Notwithstanding the foregoing, any Letter of Credit may contain customary automatic renewal provisions agreed upon by the Borrower and the Issuing Lender pursuant to which the expiration date of such Letter of Credit shall automatically be extended for a period of up to 12 months (but not to a date later than the date set forth in clause (B) above), subject to a right on the part of the Issuing Lender, in its discretion, to prevent any such renewal from occurring by giving notice to the beneficiary in advance of any such renewal; provided that unless otherwise directed by the Issuing Lender, the Borrower shall not be required to make a specific request to the Issuing Lender for any such renewal. Each request by the Borrower for the issuance, amendment or

extension of a Letter of Credit shall be deemed to be a representation by the Borrower that it shall be in compliance with the preceding sentence and with Section 7 [Conditions of Lending and Issuance of Letters of Credit] after giving effect to the requested issuance, amendment or extension of such Letter of Credit. Promptly after its delivery of any Letter of Credit or any amendment to a Letter of Credit to the beneficiary thereof, the Issuing Lender will also deliver to the Borrower and the Administrative Agent a true and complete copy of such Letter of Credit or amendment.

2.9.1.2 Notwithstanding Section 2.9.1.1, the Issuing Lender shall not be under any obligation to issue any Letter of Credit if (i) any order, judgment or decree of any Official Body or arbitrator shall by its terms purport to enjoin or restrain the Issuing Lender from issuing the Letter of Credit, or any Law applicable to the Issuing Lender or any request or directive (whether or not having the force of law) from any Official Body with jurisdiction over the Issuing Lender shall prohibit, or request that the Issuing Lender refrain from, the issuance of letters of credit generally or the Letter of Credit in particular or shall impose upon the Issuing Lender with respect to the Letter of Credit any restriction, reserve or capital requirement (for which the Issuing Lender is not otherwise compensated hereunder) not in effect on the Closing Date, or shall impose upon the Issuing Lender any unreimbursed loss, cost or expense which was not applicable on the Closing Date and which the Issuing Lender in good faith deems material to it, (ii) the issuance of the Letter of Credit would violate one or more policies of the Issuing Lender applicable to letters of credit generally, or (iii) the proposed beneficiary thereof is a Sanctioned Person.

2.9.2 Letter of Credit Fees. The Borrower shall pay in Dollars (or, at the Administrative Agent's option, the Optional Currency in which each Letter of Credit is issued) (i) to the Administrative Agent for the ratable account of the Lenders a fee (the "**Letter of Credit Fee**") equal to the Applicable Letter of Credit Fee Rate on the daily amount available to be drawn under each Letter of Credit, and (ii) to the Issuing Lender for its own account a fronting fee equal to 0.25% per annum on the daily amount available to be drawn under each Letter of Credit; provided that, no fronting fee shall be payable hereunder for any period in which PNC is the sole Lender under the Revolving Credit Facility. All Letter of Credit Fees and fronting fees shall be computed on the basis of a year of 360 days and actual days elapsed and shall be payable quarterly in arrears on each Payment Date following issuance of each Letter of Credit. The Borrower shall also pay (in Dollars) to the Issuing Lender for the Issuing Lender's sole account the Issuing Lender's then in effect customary fees and administrative expenses payable with respect to the Letters of Credit as the Issuing Lender may generally charge or incur from time to time in connection with the issuance, maintenance, amendment (if any), assignment or transfer (if any), negotiation, and administration of Letters of Credit.

2.9.3 Disbursements, Reimbursement. Immediately upon the issuance of each Letter of Credit (or, in the case of the Existing Letters of Credit, on the Closing Date), each Lender shall be deemed to, and hereby irrevocably and unconditionally agrees to, purchase from the Issuing Lender a participation in such Letter of Credit and each drawing thereunder in an amount equal to such Lender's Ratable Share of the maximum amount available to be drawn under such Letter of Credit and the amount of such drawing, respectively, in each case in the currency in which each Letter of Credit is issued.

2.9.3.1 In the event of any request for a drawing under a Letter of Credit by the beneficiary or transferee thereof, the Issuing Lender will promptly notify the Borrower and the Administrative Agent thereof. Provided that it shall have received such notice, the Borrower shall reimburse (such obligation to reimburse the Issuing Lender shall sometimes be referred to as a “**Reimbursement Obligation**”) the Issuing Lender prior to 12:00 noon on each date that an amount is paid by the Issuing Lender under any Letter of Credit (each such date, a “**Drawing Date**”) by paying to the Administrative Agent for the account of the Issuing Lender an amount equal to the amount so paid by the Issuing Lender in the same currency as paid, unless otherwise required by the Administrative Agent or the Issuing Lender. In the event the Borrower fails to reimburse the Issuing Lender (through the Administrative Agent) for the full amount of any drawing under any Letter of Credit by 12:00 noon on the Drawing Date, the Administrative Agent will promptly notify each Lender thereof, and the Borrower shall be deemed to have requested that Revolving Credit Loans in U.S. Dollars (and, if the Letter of Credit was denominated in another currency, in the Dollar Equivalent amount to the amount paid by the Issuing Lender in such other currency on the Drawing Date thereof) be made by the Lenders under the Base Rate Option to be disbursed on the Drawing Date under such Letter of Credit, subject to the amount of the unutilized portion of the Revolving Credit Commitment and subject to the conditions set forth in Section 7.2 [Each Loan or Letter of Credit] other than any notice requirements. Any notice given by the Administrative Agent or Issuing Lender pursuant to this Section 2.9.3.1 may be oral if immediately confirmed in writing; provided that the lack of such an immediate confirmation shall not affect the conclusiveness or binding effect of such notice.

2.9.3.2 Each Lender shall upon any notice pursuant to Section 2.9.3.1 make available to the Administrative Agent for the account of the Issuing Lender an amount in Dollars in immediately available funds equal to its Ratable Share of the amount of the drawing (and, if the Letter of Credit was denominated in another currency, in the Dollar Equivalent amount to the amount paid by the Issuing Lender in such other currency on the Drawing Date thereof), whereupon the participating Lenders shall (subject to Section 2.9.3 [Disbursements; Reimbursement]) each be deemed to have made a Revolving Credit Loan under the Base Rate Option to the Borrower in that amount. If any Lender so notified fails to make available in Dollars to the Administrative Agent for the account of the Issuing Lender the amount of such Lender’s Ratable Share of such amount by no later than 2:00 p.m. on the Drawing Date, then interest shall accrue on such Lender’s obligation to make such payment, from the Drawing Date to the date on which such Lender makes such payment (i) at a rate per annum equal to the Federal Funds Effective Rate during the first three (3) days following the Drawing Date and (ii) at a rate per annum equal to the rate applicable to Revolving Credit Loans under the Base Rate Option on and after the fourth day following the Drawing Date. The Administrative Agent and the Issuing Lender will promptly give notice (as described in Section 2.9.3.1 above) of the occurrence of the Drawing Date, but failure of the Administrative Agent or the Issuing Lender to give any such notice on the Drawing Date or in sufficient time to enable any Lender to effect such payment on such date shall not relieve such Lender from its obligation under this Section 2.9.3.2.

2.9.3.3 With respect to any unreimbursed drawing that is not converted into Revolving Credit Loans in Dollars under the Base Rate Option to the Borrower in whole or in part as contemplated by Section 2.9.3.1, because of the Borrower’s failure to satisfy

the conditions set forth in Section 7.2 [Each Loan or Letter of Credit] other than any notice requirements, or for any other reason, the Borrower shall be deemed to have incurred from the Issuing Lender a borrowing (each a “**Letter of Credit Borrowing**”) in Dollars in the amount of such drawing (and, if the Letter of Credit was denominated in another currency, in the Dollar Equivalent amount to the amount paid by the Issuing Lender in such other currency on the Drawing Date thereof). Such Letter of Credit Borrowing shall be due and payable on demand (together with interest) and shall bear interest at the rate per annum applicable to the Revolving Credit Loans under the Base Rate Option. Each Lender’s payment to the Administrative Agent for the account of the Issuing Lender pursuant to Section 2.9.3 [Disbursements, Reimbursement] shall be deemed to be a payment in respect of its participation in such Letter of Credit Borrowing (each a “**Participation Advance**”) from such Lender in satisfaction of its participation obligation under this Section 2.9.3.

2.9.4 Repayment of Participation Advances.

2.9.4.1 Upon (and only upon) receipt by the Administrative Agent for the account of the Issuing Lender of immediately available funds from the Borrower (i) in reimbursement of any payment made by the Issuing Lender under the Letter of Credit with respect to which any Lender has made a Participation Advance to the Administrative Agent, or (ii) in payment of interest on such a payment made by the Issuing Lender under such a Letter of Credit, the Administrative Agent on behalf of the Issuing Lender will pay to each Lender, in the same funds as those received by the Administrative Agent, the amount of such Lender’s Ratable Share of such funds, except the Administrative Agent shall retain for the account of the Issuing Lender the amount of the Ratable Share of such funds of any Lender that did not make a Participation Advance in respect of such payment by the Issuing Lender.

2.9.4.2 If the Administrative Agent (or the Issuing Lender) is required at any time to return to any Loan Party, or to a trustee, receiver, liquidator, custodian, or any official in any Insolvency Proceeding, any portion of any payment made by any Loan Party to the Administrative Agent for the account of the Issuing Lender (or any payment made to the Issuing Lender directly) pursuant to this Section in reimbursement of a payment made under any Letter of Credit or interest or fees thereon, each Lender shall, on demand of the Administrative Agent, forthwith return to the Administrative Agent for the account of the Administrative Agent (or the Issuing Lender, as the case be) the amount of its Ratable Share of any amounts so returned by the Administrative Agent (or the Issuing Lender) plus interest thereon from the date such demand is made to the date such amounts are returned by such Lender to the Administrative Agent, at a rate per annum equal to the Federal Funds Effective Rate (or, for any payment in an Optional Currency, the Overnight Rate) in effect from time to time.

2.9.5 Documentation. Each Loan Party agrees to be bound by the terms of the Issuing Lender’s application and agreement for letters of credit and the Issuing Lender’s written regulations and customary practices relating to letters of credit, though such interpretation may be different from such Loan Party’s own. In the event of a conflict between such application or agreement and this Agreement, this Agreement shall govern. It is understood and agreed that, except in the case of gross negligence or willful misconduct, the Issuing Lender shall not be liable for any error, negligence and/or mistakes, whether of omission or commission,

in following any Loan Party's instructions or those contained in the Letters of Credit or any modifications, amendments or supplements thereto.

2.9.6 Determinations to Honor Drawing Requests. In determining whether to honor any request for drawing under any Letter of Credit by the beneficiary thereof, the Issuing Lender shall be responsible only to determine that the documents and certificates required to be delivered under such Letter of Credit have been delivered and that they comply on their face with the requirements of such Letter of Credit.

2.9.7 Nature of Participation and Reimbursement Obligations. Each Lender's obligation in accordance with this Agreement to make the Revolving Credit Loans or Participation Advances, as contemplated by Section 2.9.3 [Disbursements, Reimbursement], as a result of a drawing under a Letter of Credit (including the Existing Letters of Credit), and the Obligations of the Borrower to reimburse the Issuing Lender upon a draw under a Letter of Credit (including the Existing Letters of Credit), shall be absolute, unconditional and irrevocable, and shall be performed strictly in accordance with the terms of this Section 2.9 under all circumstances, including the following circumstances:

(i) any set-off, counterclaim, recoupment, defense or other right which such Lender may have against the Issuing Lender or any of its Affiliates, the Borrower or any other Person for any reason whatsoever, or which any Loan Party may have against the Issuing Lender or any of its Affiliates, any Lender or any other Person for any reason whatsoever;

(ii) the failure of any Loan Party or any other Person to comply, in connection with a Letter of Credit Borrowing, with the conditions set forth in Sections 2.1 [Revolving Credit Commitments], 2.5 [Revolving Credit Loan Requests; Swing Loan Requests], 2.6 [Making Revolving Credit Loans and Swing Loans; Etc.] or 7.2 [Each Loan or Letter of Credit] or as otherwise set forth in this Agreement for the making of a Revolving Credit Loan, it being acknowledged that such conditions are not required for the making of a Letter of Credit Borrowing and the obligation of the Lenders to make Participation Advances under Section 2.9.3 [Disbursements, Reimbursement];

(iii) any lack of validity or enforceability of any Letter of Credit;

(iv) any claim of breach of warranty that might be made by any Loan Party or any Lender against any beneficiary of a Letter of Credit, or the existence of any claim, set-off, recoupment, counterclaim, crossclaim, defense or other right which any Loan Party or any Lender may have at any time against a beneficiary, successor beneficiary, any transferee or assignee of any Letter of Credit or the proceeds thereof (or any Persons for whom any such transferee may be acting), the Issuing Lender or its Affiliates or any Lender or any other Person, whether in connection with this Agreement, the transactions contemplated herein or any unrelated transaction (including any underlying transaction between any Loan Party or Subsidiaries of a Loan Party and the beneficiary for which any Letter of Credit was procured);

(v) the lack of power or authority of any signer of (or any defect in or forgery of any signature or endorsement on) or the form of or lack of validity, sufficiency,

accuracy, enforceability or genuineness of any draft, demand, instrument, certificate or other document presented under or in connection with any Letter of Credit, or any fraud or alleged fraud in connection with any Letter of Credit, or the transport of any property or provision of services relating to a Letter of Credit, in each case even if the Issuing Lender or any of its Affiliates has been notified thereof;

(vi) payment by the Issuing Lender or any of its Affiliates under any Letter of Credit against presentation of a demand, draft or certificate or other document which does not comply with the terms of such Letter of Credit;

(vii) the solvency of, or any acts or omissions by, any beneficiary of any Letter of Credit, or any other Person having a role in any transaction or obligation relating to a Letter of Credit, or the existence, nature, quality, quantity, condition, value or other characteristic of any property or services relating to a Letter of Credit;

(viii) any failure by the Issuing Lender or any of its Affiliates to issue any Letter of Credit in the form requested by any Loan Party, unless the Issuing Lender has received written notice from such Loan Party of such failure within three Business Days after the Issuing Lender shall have furnished such Loan Party and the Administrative Agent a copy of such Letter of Credit and such error is material and no drawing has been made thereon prior to receipt of such notice;

(ix) any adverse change in the business, operations, properties, assets, condition (financial or otherwise) or prospects of any Loan Party or Subsidiaries of a Loan Party;

(x) any breach of this Agreement or any other Loan Document by any party thereto;

(xi) the occurrence or continuance of an Insolvency Proceeding with respect to any Loan Party;

(xii) the fact that an Event of Default or a Potential Default shall have occurred and be continuing;

(xiii) the fact that the Revolving Credit Expiration Date shall have passed or this Agreement or the Commitments hereunder shall have been terminated; and

(xiv) any other circumstance or happening whatsoever, whether or not similar to any of the foregoing.

2.9.8 **Indemnity.** The Borrower hereby agrees to protect, indemnify, pay and save harmless the Issuing Lender and any of its Affiliates that has issued a Letter of Credit from and against any and all claims, demands, liabilities, damages, taxes (other than Excluded Taxes), penalties, interest, judgments, losses, costs, charges and expenses (including reasonable fees, expenses and disbursements of counsel) which the Issuing Lender or any of its Affiliates may incur or be subject to as a consequence, direct or indirect, of the issuance of any Letter of Credit, other than as a result of the gross negligence or willful misconduct of the Issuing Lender as determined by a final non-appealable judgment of a court of competent jurisdiction.

2.9.9 Liability for Acts and Omissions. As between any Loan Party and the Issuing Lender, or the Issuing Lender's Affiliates, such Loan Party assumes all risks of the acts and omissions of, or misuse of the Letters of Credit by, the respective beneficiaries of such Letters of Credit. In furtherance and not in limitation of the foregoing, the Issuing Lender shall not be responsible for any of the following, including any losses or damages to any Loan Party or other Person or property relating therefrom (excluding only such damages resulting from the gross negligence or willful misconduct of the Issuing Lender in connection with the following): (i) the form, validity, sufficiency, accuracy, genuineness or legal effect of any document submitted by any party in connection with the application for an issuance of or any drawing under any such Letter of Credit, even if it should in fact prove to be in any or all respects invalid, insufficient, inaccurate, fraudulent or forged (even if the Issuing Lender or its Affiliates shall have been notified thereof); (ii) the validity or sufficiency of any instrument transferring or assigning or purporting to transfer or assign any such Letter of Credit or the rights or benefits thereunder or proceeds thereof, in whole or in part, which may prove to be invalid or ineffective for any reason; (iii) the failure of the beneficiary of any such Letter of Credit, or any other party to which such Letter of Credit may be transferred, to comply fully with any conditions required in order to draw upon such Letter of Credit or any other claim of any Loan Party against any beneficiary of such Letter of Credit, or any such transferee, or any dispute between or among any Loan Party and any beneficiary of any Letter of Credit or any such transferee; (iv) errors, omissions, interruptions or delays in transmission or delivery of any messages, by mail, cable, telegraph, telex or otherwise, whether or not they be in cipher; (v) errors in interpretation of technical terms; (vi) any loss or delay in the transmission or otherwise of any document required in order to make a drawing under any such Letter of Credit or of the proceeds thereof; (vii) the misapplication by the beneficiary of any such Letter of Credit of the proceeds of any drawing under such Letter of Credit; or (viii) any consequences arising from causes beyond the control of the Issuing Lender or its Affiliates, as applicable, including any act or omission of any Official Body, and none of the above shall affect or impair, or prevent the vesting of, any of the Issuing Lender's or its Affiliates rights or powers hereunder. Nothing in the preceding sentence shall relieve the Issuing Lender from liability for the Issuing Lender's gross negligence or willful misconduct in connection with actions or omissions described in such clauses (i) through (viii) of such sentence. In no event shall the Issuing Lender or its Affiliates be liable to any Loan Party for any indirect, consequential, incidental, punitive, exemplary or special damages or expenses (including attorneys' fees), or for any damages resulting from any change in the value of any property relating to a Letter of Credit.

Without limiting the generality of the foregoing, the Issuing Lender and each of its Affiliates (i) may rely on any oral or other communication believed in good faith by the Issuing Lender or such Affiliate to have been authorized or given by or on behalf of the applicant for a Letter of Credit, (ii) may honor any presentation if the documents presented appear on their face substantially to comply with the terms and conditions of the relevant Letter of Credit; (iii) may honor a previously dishonored presentation under a Letter of Credit, whether such dishonor was pursuant to a court order, to settle or compromise any claim of wrongful dishonor, or otherwise, and shall be entitled to reimbursement to the same extent as if such presentation had initially been honored, together with any interest paid by the Issuing Lender or its Affiliate; (iv) may honor any drawing that is payable upon presentation of a statement advising negotiation or payment, upon receipt of such statement (even if such statement indicates that a draft or other document is being delivered separately), and shall not be liable for any failure of any such draft

50

or other document to arrive, or to conform in any way with the relevant Letter of Credit; (v) may pay any paying or negotiating bank claiming that it rightfully honored under the laws or practices of the place where such bank is located; and (vi) may settle or adjust any claim or demand made on the Issuing Lender or its Affiliate in any way related to any order issued at the applicant's request to an air carrier, a letter of guarantee or of indemnity issued to a carrier or any similar document (each an "Order") and honor any drawing in connection with any Letter of Credit that is the subject of such Order, notwithstanding that any drafts or other documents presented in connection with such Letter of Credit fail to conform in any way with such Letter of Credit.

In furtherance and extension and not in limitation of the specific provisions set forth above, any action taken or omitted by the Issuing Lender or its Affiliates under or in connection with the Letters of Credit issued by it or any documents and certificates delivered thereunder, if taken or omitted in good faith and absent gross negligence, shall not put the Issuing Lender or its Affiliates under any resulting liability to the Borrower or any Lender.

2.9.10 Issuing Lender Reporting Requirements. The Issuing Lender shall, on the first Business Day of each month, provide to Administrative Agent and the Borrower a schedule of the Letters of Credit issued by it, in form and substance satisfactory to the Administrative Agent, showing the date of issuance of each Letter of Credit, the account party, the original face amount (if any), and the expiration date of any Letter of Credit outstanding at any time during the preceding month, and any other information relating to such Letter of Credit that the Administrative Agent may request.

2.10 Defaulting Lenders. Notwithstanding any provision of this Agreement to the contrary, if any Lender becomes a Defaulting Lender, then the following provisions shall apply for so long as such Lender is a Defaulting Lender:

- (i) fees shall cease to accrue on the unfunded portion of the Commitment of such Defaulting Lender pursuant to Section 2.3 [Commitment Fees];
- (ii) the Commitment and outstanding Loans of such Defaulting Lender shall not be included in determining whether the Required Lenders have taken or may take any action hereunder (including any consent to any amendment, waiver or other modification pursuant to Section 11.1 [Modifications, Amendments or Waivers]); provided, that this clause (ii) shall not apply to the extent provided in the last sentence of the next to last paragraph in Section 11.1 [Modifications, Amendments or Waivers];
- (iii) if any Swing Loans are outstanding or any Letter of Credit Obligations exist at the time such Lender becomes a Defaulting Lender, then:
 - (a) all or any part of such Defaulting Lender's participation in Letters of Credit and Swing Loans shall be reallocated among the non-Defaulting Lenders in accordance with their respective Ratable Shares of the Revolving Credit Commitments (calculated without regard to such Defaulting Lender's Revolving Credit Commitment) but only to the extent that such reallocation does not cause the Revolving Credit Exposure of any non-Defaulting Lender to exceed such non-Defaulting Lender's Revolving Credit Commitment. Subject to Section 11.13 [Acknowledgement and Consent to Bail-In of Affected Financial

51

Institutions], no reallocation hereunder shall constitute a waiver or release of any claim of any party hereunder against a Defaulting Lender arising from that Lender having become a Defaulting Lender, including any claim of a non-Defaulting Lender as a result of such non-Defaulting Lender's increased exposure following such reallocation;

(b) if the reallocation described in clause (a) above cannot, or can only partially, be effected, the Borrower shall within three (3) Business Days following notice by the Administrative Agent (x) first, prepay such outstanding Swing Loans, and (y) second, cash collateralize for the benefit of the Issuing Lender the Borrower's obligations corresponding to such Defaulting Lender's Letter of Credit Obligations (after giving effect to any partial reallocation pursuant to clause (a) above) in a deposit account held at the Administrative Agent for so long as such Letter of Credit Obligations are outstanding;

(c) if the Borrower cash collateralizes any portion of such Defaulting Lender's Letter of Credit Obligations pursuant to clause (b) above, the Borrower shall not be required to pay any fees to, or in respect of, such Defaulting Lender pursuant to Section 2.9.2 [Letter of Credit Fees] with respect to such Defaulting Lender's Letter of Credit Obligations during the period such Defaulting Lender's Letter of Credit Obligations are cash collateralized;

(d) if the Letter of Credit Obligations of the non-Defaulting Lenders are reallocated pursuant to clause (a) above, then the fees payable to the Lenders pursuant to Section 2.9.2 [Letter of Credit Fees] shall be adjusted in accordance with such non-Defaulting Lenders' Ratable Share; and

(e) if all or any portion of such Defaulting Lender's Letter of Credit Obligations are neither reallocated nor cash collateralized pursuant to clause (a) or (b) above, then, without prejudice to any rights or remedies of the Issuing Lender or any other Lender hereunder, all Letter of Credit Fees payable under Section 2.9.2 [Letter of Credit Fees] with respect to such Defaulting Lender's Letter of Credit Obligations shall be payable to the Issuing Lender (and not to such Defaulting Lender) until and to the extent that such Letter of Credit Obligations are reallocated and/or cash collateralized; and

(iv) so long as such Lender is a Defaulting Lender, PNC shall not be required to fund any Swing Loans and the Issuing Lender shall not be required to issue, amend or increase any Letter of Credit, unless PNC as Swing Loan Lender and/or the Issuing Lender, as applicable, is satisfied that the related exposure and the Defaulting Lender's then outstanding Letter of Credit Obligations and Ratable Share of Swing Loans will be 100% covered by the Revolving Credit Commitments of the non-Defaulting Lenders and/or cash collateral will be provided by the Borrower in accordance with Section 2.10(iii), and participating interests in any newly made Swing Loan or any newly issued or increased Letter of Credit shall be allocated among non-Defaulting Lenders in a manner consistent with Section 2.10(iii)(a) (and such Defaulting Lender shall not participate therein).

If (i) a Bankruptcy Event with respect to a parent company of any Lender shall occur following the date hereof and for so long as such event shall continue, or (ii) PNC or the Issuing Lender has a good faith belief that any Lender has defaulted in fulfilling its obligations under one or more

other agreements in which such Lender commits to extend credit, PNC shall not be required to fund any Swing Loan and the Issuing Lender shall not be required to issue, amend or increase any Letter of Credit, unless PNC or the Issuing Lender, as the case may be, shall have entered into arrangements with the Borrower or such Lender, satisfactory to PNC or the Issuing Lender, as the case may be, to defease any risk to it in respect of such Lender hereunder.

In the event that the Administrative Agent, the Borrower, PNC and the Issuing Lender agree in writing that a Defaulting Lender has adequately remedied all matters that caused such Lender to be a Defaulting Lender, then the Administrative Agent will so notify the parties hereto, and the Ratable Share of the Swing Loans and Letter of Credit Obligations of the Lenders shall be readjusted to reflect the inclusion of such Lender's Commitment, and on such date such Lender shall purchase at par such of the Loans of the other Lenders (other than Swing Loans) as the Administrative Agent shall determine may be necessary in order for such Lender to hold such Loans in accordance with its Ratable Share.

2.11 Utilization of Commitments in Optional Currencies.

2.11.1 Periodic Computations of Dollar Equivalent Amounts of Revolving Credit Loans that are Optional Currency Loans and Letters of Credit Outstanding; Repayment in Same Currency. For purposes of determining utilization of the Revolving Credit Commitments, the Administrative Agent will determine the Dollar Equivalent amount of (i) the outstanding and proposed Revolving Credit Loans that are Optional Currency Loans and Letters of Credit to be denominated in an Optional Currency as of the requested Borrowing Date or date of issuance, as the case may be, (ii) the outstanding Letter of Credit Obligations denominated in an Optional Currency as of the last Business Day of each month, and (iii) the outstanding Revolving Credit Loans denominated in an Optional Currency as of the end of each Interest Period (each such date under clauses (i) through (iii), and any other date on which the Administrative Agent determines it is necessary or advisable to make such computation, in its sole discretion, is referred to as a "**Computation Date**"). Unless otherwise provided in this Agreement or agreed to by the Administrative Agent and the Borrower, each Loan and Reimbursement Obligation shall be repaid or prepaid in the same currency in which the Loan was made or Letter of Credit was issued.

2.11.2 European Monetary Union.

(i) Payments In Euros Under Certain Circumstances. If (i) any Optional Currency ceases to be lawful currency of the nation issuing the same and is replaced by the Euro or (ii) any Optional Currency and the Euro are at the same time recognized by any governmental authority of the nation issuing such currency as lawful currency of such nation and the Administrative Agent or the Required Lenders shall so request in a notice delivered to the Borrower, then any amount payable hereunder by any party hereto in such Optional Currency shall instead be payable in the Euro and the amount so payable shall be determined by translating the amount payable in such Optional Currency to the Euro at the exchange rate established by that nation for the purpose of implementing the replacement of the relevant Optional Currency by the Euro (and the provisions governing payments in Optional Currencies in this Agreement shall apply to such payment in the Euro as if such payment in the Euro were a payment in an Optional Currency). Prior to the occurrence of the event or events described in clause (i) or (ii)

of the preceding sentence, each amount payable hereunder in any Optional Currency will, except as otherwise provided herein, continue to be payable only in that currency.

(ii) Additional Compensation Under Certain Circumstances. The Borrower agrees, at the request of any Lender, to compensate such Lender for any loss, cost, expense or reduction in return that such Lender shall reasonably determine shall be incurred or sustained by such Lender as a result of the replacement of any Optional Currency by the Euro and that would not have been incurred or sustained but for the transactions provided for herein. A certificate of any Lender setting forth such Lender's determination of the amount or amounts necessary to compensate such Lender shall be delivered to the Borrower and shall be conclusive absent manifest error so long as such determination is made on a reasonable basis. The Borrower shall pay such Lender the amount shown as due on any such certificate within ten (10) days after receipt thereof.

(iii) Requests for Additional Optional Currencies. The Borrower may deliver to the Administrative Agent a written request that Revolving Credit Loans hereunder also be permitted to be made in any other lawful currency (other than Dollars), in addition to the currencies specified in the definition of "Optional Currency" herein, provided that such currency must be freely traded in the offshore interbank foreign exchange markets, freely transferable, freely convertible into Dollars and available to the Lenders in the Relevant Interbank Market. The Administrative Agent will promptly notify the Lenders of any such request promptly after the Administrative Agent receives such request. The Administrative Agent will promptly notify the Borrower of the acceptance or rejection by the Administrative Agent and each of the Lenders of the Borrower's request. The requested currency shall be approved as an Optional Currency hereunder only if the Administrative Agent and all of the Lenders approve of the Borrower's request.

2.12 Funding by Branch, Subsidiary or Affiliate. Each Lender may make any Loan hereunder through an Affiliate or domestic or foreign branch of such Lender or Affiliate.

2.13 Currency Repayments. Notwithstanding anything contained herein to the contrary, the entire amount of principal of and interest on any Revolving Credit Loan made in an Optional Currency shall be repaid in the same Optional Currency in which such Loan was made, provided, however, that if it is impossible or illegal for the Borrower to effect payment of a Revolving Credit Loan owed by the Borrower in the Optional Currency in which such Loan was made, the Administrative Agent may at its option permit such payment to be made (i) at and to a different location, subsidiary, affiliate or correspondent of the Administrative Agent, (ii) in the Equivalent Amount of Dollars or (iii) in an Equivalent Amount of such other currency (freely convertible into Dollars) as the Administrative Agent may solely at its option designate. The Borrower agrees to hold each Lender harmless from and against any loss incurred by any Lender arising from the cost to such Lender of any premium, any costs of exchange, the cost of hedging and covering the Optional Currency in which any Loan to the Borrower was originally made, and from any change in the value of Dollars, or such other currency, in relation to the Optional Currency that was due and owing. Such loss shall be calculated for the period commencing with the first day of the Interest Period for such Loan and continuing through the date of payment thereof. Without prejudice to the survival of any other agreement of the Borrower hereunder, the Borrower's obligations under this Section 2.13 shall survive termination of this Agreement.

2.14 Optional Currency Amounts. Notwithstanding anything contained herein to the contrary, the Administrative Agent may, with respect to notices by the Borrower for Revolving Credit Loans in an Optional Currency or voluntary prepayments of less than the full amount of an Optional Currency Borrowing Tranche, engage in reasonable rounding of the Optional Currency amounts requested to be loaned or repaid; and, in such event, the Administrative Agent shall promptly notify the Borrower and the Lenders of such rounded amounts and the Borrower's request or notice shall thereby be deemed to reflect such rounded amounts.

3. TERM LOANS

3.1 Term Loan Commitments. Subject to the terms and conditions hereof, and relying upon the representations and warranties herein set forth, each Lender severally agrees to make a term loan (together with any Incremental Term Loan made pursuant to Section 3A.1 [Incremental Commitments], individually a "**Term Loan**" and collectively, the "**Term Loans**") to the Borrower on the Closing Date in Dollars in such principal amount as the Borrower shall request up to, but not exceeding such Lender's Term Loan Commitment.

3.2 Nature of Lenders' Obligations with Respect to Term Loans; Repayment Terms. The obligations of each Lender to make Term Loans to the Borrower on the Closing Date shall be in the proportion that such Lender's Term Loan Commitment bears to the Term Loan Commitments of all Lenders to the Borrower, but each Lender's Term Loan to the Borrower shall never exceed its Term Loan Commitment. The failure of any Lender to make a Term Loan shall not relieve any other Lender of its obligations to make a Term Loan nor shall it impose any additional liability on any other Lender hereunder. The Lenders shall have no obligation to make Term Loans hereunder after the Closing Date. The Term Loan Commitments are not revolving credit commitments, and the Borrower shall not have the right to borrow, repay and reborrow under Section 3.1 [Term Loan Commitments]. The principal amount of the Term Loans shall be payable by the Borrower in quarterly installments on the last day of each calendar quarter commencing September 30, 2020, each in an amount equal to two and one-half percent of the aggregate amount of the Term Loans made on the Closing Date (*i.e.*, \$4,375,000 per quarter), with a final payment due on the Term Loan Maturity Date equal to the total outstanding principal amount of the Term Loans. On the Term Loan Maturity Date, all accrued interest on the Term Loans shall be payable.

3.3 Use of Proceeds — Term Loan Facility. The proceeds of the Term Loans (other than Incremental Term Loans) shall be used to fund the Specified Distribution, including related tax obligations of the Borrower Equityholders, payment of costs associated with the refinancing, discharge and/or extinguishment of the Existing Credit Agreement, including any fees, costs and expenses associated with such refinancing, and general corporate purposes of the Borrower and its Subsidiaries.

3A INCREMENTAL FACILITIES

3A.1 Incremental Commitments. (i) The Borrower may by written notice to the Administrative Agent (whereupon the Administrative Agent shall promptly deliver a copy to each of the Lenders) request, from time to time (a) the extension of one or more new Term Loan Commitments or one or more increases in the existing Term Loan Commitments (any such new

or increased Term Loan Commitment, an “**Incremental Term Commitment**”) and (b) the extension of one or more new Revolving Credit Commitments or one or more increases in the existing Revolving Credit Commitments (any such new or increased Revolving Credit Commitment, an “**Incremental Revolving Commitment**”), in an aggregate amount (with respect to both Incremental Term Commitments and Incremental Revolving Commitments) not to exceed \$50,000,000. Each Incremental Commitment shall be in an aggregate amount not less than \$5,000,000 and integral multiples thereof (or such lesser amount and/or multiples as may be agreed by the Borrower and the Administrative Agent). Each notice delivered pursuant to this Section 3A.1 shall specify (I) the date (the “**Increase Effective Date**”) on which the Borrower proposes that the proposed Incremental Commitments shall be effective, which shall be a date not less than 10 Business Days after the date in which such notice is delivered to the Administrative Agent (unless otherwise consented to by the Administrative Agent in its discretion), (II) the total of the Incremental Commitments requested by the Borrower and (III) the identity of the banks, financial institutions and other entities to whom the Borrower proposes that any portion of such Incremental Commitments be allocated and the amounts of such allocations, which banks, financial institutions or other entities may or may not be existing Lenders, but who shall be Eligible Assignees. Any existing Lender approached to provide all or a portion of the Incremental Commitments may elect or decline, in its sole discretion, to provide such Incremental Commitment. Any proposed new Lender shall enter into a joinder or other agreement in form and substance reasonably satisfactory to the Administrative Agent and its counsel (such additional Eligible Assignees becoming Lenders and any existing Lenders providing an Incremental Commitment, collectively, the “**Incremental Lenders**”).

(ii) Conditions. An Incremental Commitment shall become effective, as of the Increase Effective Date specified therefor; provided, that:

(a) each of the conditions set forth in Section 7.2 [Each Loan or Letter of Credit] shall be satisfied;

(b) no Potential Default or Event of Default shall have occurred and be continuing or would result therefrom or from the borrowings to be made on such Increase Effective Date and the use of proceeds thereof;

(c) with respect to any Incremental Term Commitment only, the Borrower shall be in compliance with the covenant set forth in Section 8.2.15 [Maximum Net Leverage Ratio] on a pro forma basis after giving effect to the establishment of such Incremental Term Commitment, the incurrence of Indebtedness thereunder and any substantially concurrent use of the proceeds thereof, as if incurred on the last day of the last fiscal quarter for which financial statements have been delivered to the Lenders pursuant to Section 8.3.1 [Quarterly Financial Statements] or 8.3.2 [Annual Financial Statements].

(d) the Borrower shall deliver or cause to be delivered any legal opinions or other documents reasonably requested by the Administrative Agent in connection with such Incremental Commitment, including a certificate dated the Increase Effective Date and executed by an Authorized Officer of the Borrower certifying that all the requirements set forth in this clause (ii) have been satisfied, and including (if applicable) reasonably detailed

calculations demonstrating satisfaction of the requirement set forth in clause (c) immediately above; and

(e) the Administrative Agent and, with respect to any Incremental Revolving Commitment, the Issuing Lender and the Swing Loan Lender shall have consented to any Lender providing such Incremental Commitments (such consents not to be unreasonably withheld or delayed).

(iii) Terms of New Loans and Commitments. The terms and conditions of Loans made pursuant to any Incremental Commitment shall be identical to the terms and conditions of the existing Term Loans or Revolving Credit Loans, as applicable (including as to pricing and maturity, other than any upfront fees including upfront commitment, underwriting, syndication or other fees, and, with respect to Incremental Term Loans, other than amortization), and (a) with respect to Incremental Revolving Loans, shall be part of the same class of Loans and borrowings as the existing Revolving Credit Loans and (b) with respect to any Incremental Term Loans, unless otherwise determined by the Administrative Agent, shall be part of the same class of Loans and borrowings as the existing Term Loans.

(iv) Adjustment of Revolving Credit Loans. In the case of Incremental Revolving Commitments, on the Increase Effective Date, the Borrower shall repay all Revolving Credit Loans (together with any amounts due under Section 5.10 [Indemnity] as a result of such payment) of each of the Lenders having a Revolving Credit Commitment prior to the Increase Effective Date (the “**Pre-Increase Revolving Lenders**”) and reborrow a like amount of Revolving Credit Loans from the Lenders (including any new Lender providing an Incremental Revolving Commitment), according to their new Ratable Shares after giving effect to such Incremental Revolving Commitments. The Administrative Agent may, to the extent the Administrative Agent considers it practicable, net payments to and borrowings from the same Lender. In addition, on the Increase Effective Date for any Incremental Revolving Commitment, each of the Pre-Increase Revolving Lenders shall automatically and without any further action by any party be deemed to have assigned to the Lenders which are acquiring Incremental Revolving Commitments on the Increase Effective Date (the “**Post-Increase Revolving Lenders**”), and the Post-Increase Revolving Lenders will automatically and without any further action by any party be deemed to have assumed and purchased from the Pre-Increase Revolving Lenders, such participation interest in the Letter of Credit Obligations outstanding on such Increase Effective Date as shall be necessary in order that, after giving effect to all such deemed assignments and assumptions, the Letter of Credit Obligations shall be held by each Pre-Increase Revolving Lender and each Post-Increase Revolving Lender ratably in accordance with its Ratable Share after giving effect to the Incremental Revolving Commitments.

(v) Making of New Term Loans. On any Increase Effective Date on which Incremental Term Commitments become effective, subject to the satisfaction of the foregoing terms and conditions, each Lender providing an Incremental Term Commitment shall make an Incremental Term Loan to the Borrower in an amount equal to its Incremental Term Commitment.

(vi) Equal and Ratable Benefit. The Loans and Commitments established pursuant to this Section shall constitute Loans and Commitments under, and shall be entitled to

all the benefits afforded by, this Agreement and the other Loan Documents, and shall, without limiting the foregoing, benefit equally and ratably in right of payment from the guarantees and security interests created under the Loan Documents. The Loan Parties shall take any actions reasonably required by the Administrative Agent to ensure and/or demonstrate that the security interests granted under the Loan Documents continue to be perfected after giving effect to the establishment of any such Incremental Loans or Incremental Commitments.

(vii) Amendment to Loan Documents - Incremental Facilities. The Borrower and the Administrative Agent may, without the consent of any other Lender, enter into an amendment to any Loan Document (an “**Incremental Facility Amendment**”) to appropriately include any credit commitments or extensions contemplated by this Section 3A.1, including to provide that any Incremental Loans shall share in the optional and mandatory prepayments and commitment reductions on the same basis as the then outstanding Loans and for the amortization of any Incremental Term Loans. Each Incremental Lender, if not already a Lender hereunder, shall become a party to this Agreement by completing and delivering to the Administrative Agent a duly executed accession agreement in a form satisfactory to the Administrative Agent and the Borrower (an “**Accession Agreement**”), together with a processing and recordation fee of \$3,500 (unless waived by the Administrative Agent in its sole discretion), and on the Increase Effective Date, Schedule 1.1(B), shall be deemed to have been amended to reflect the Incremental Commitments of such Incremental Lender as provided in such Accession Agreement.

4. INTEREST RATES

4.1 Interest Rate Options. The Borrower shall pay interest in respect of the outstanding unpaid principal amount of the Loans as selected by it from the Base Rate Option or Euro-Rate Option set forth below applicable to the Loans, it being understood that, subject to the provisions of this Agreement, the Borrower may select different Interest Rate Options and different Interest Periods to apply simultaneously to the Loans comprising different Borrowing Tranches and may convert to or renew one or more Interest Rate Options with respect to all or any portion of the Loans comprising any Borrowing Tranche; provided that there shall not be at any one time outstanding more than eight (8) Borrowing Tranches in the aggregate among all of the Loans and provided further that if an Event of Default or Potential Default exists and is continuing, the Borrower may not request, convert to, or renew the Euro-Rate Option for any Loans. If at any time the designated rate applicable to any Loan made by any Lender exceeds such Lender’s highest lawful rate, the rate of interest on such Lender’s Loan shall be limited to such Lender’s highest lawful rate. Interest on the principal amount of each Optional Currency Loan shall be paid by the Borrower in such Optional Currency.

4.1.1 Revolving Credit Interest Rate Options; Swing Line Interest Rate. The Borrower shall have the right to select from the following Interest Rate Options applicable to the Revolving Credit Loans, except that no Loan to which a Base Rate applies shall be made in an Optional Currency:

(i) Revolving Credit Base Rate Option: A fluctuating rate per annum equal to the Base Rate plus the Applicable Margin for Revolving Credit Loans under the Base Rate Option, such interest rate to change automatically from time to time effective as of the effective date of each change in the Base Rate; or

(ii) Revolving Credit Euro-Rate Option: A rate per annum equal to the Euro-Rate as determined for each applicable Interest Period plus the Applicable Margin for Revolving Credit Loans under the Euro-Rate Option.

Subject to Section 4.3 [Interest After Default], interest on each Swing Loan shall be payable at a rate per annum equal to the Daily LIBOR Rate plus the Applicable Margin for Revolving Credit Loans under the Euro-Rate Option.

4.1.2 Term Loan Interest Rate Options. The Borrower shall have the right to select from the following Interest Rate Options applicable to the Term Loans:

(i) Term Loan Base Rate Option: A fluctuating rate per annum equal to the Base Rate plus the Applicable Margin for Term Loans under the Base Rate Option, such interest rate to change automatically from time to time effective as of the effective date of each change in the Base Rate; or

(ii) Term Loan Euro-Rate Option: A rate per annum equal to the Euro-Rate plus the Applicable Margin for Term Loans under the Euro-Rate Option.

4.1.3 Interest Act (Canada). For purposes of the *Interest Act* (Canada): (i) whenever any interest or fee under this Agreement is calculated on the basis of a period of time other than a calendar year, such rate used in such calculation, when expressed as an annual rate, is equivalent to (x) such rate, multiplied by (y) the actual number of days in the calendar year in which the period for which such interest or fee is calculated ends, and divided by (z) the number of days in such period of time, (ii) the principle of deemed reinvestment of interest shall not apply to any interest calculation under this Agreement, and (iii) the rates of interest stipulated in this Agreement are intended to be nominal rates and not effective rates or yields.

4.1.4 Rate Calculations; Rate Quotations. All computations of interest for Base Rate Loans (including Base Rate Loans determined by reference to the Daily LIBOR Rate) shall be made on the basis of a year of 365 or 366 days, as the case may be, and actual days elapsed. All other computations of fees and interest shall be made on the basis of a 360-day year and actual days elapsed or, in the case of interest in respect of Loans denominated in Optional Currencies as to which market practice differs from the foregoing, in accordance with such market practice. The Borrower may call the Administrative Agent on or before the date on which a Loan Request is to be delivered to receive an indication of the rates then in effect, but it is acknowledged that such projection shall not be binding on the Administrative Agent or the Lenders nor affect the rate of interest which thereafter is actually in effect when the election is made.

4.2 Interest Periods. At any time when the Borrower shall select, convert to or renew a Euro-Rate Option, the Borrower shall notify the Administrative Agent thereof by delivering a Loan Request to the Administrative Agent (i) at least three (3) Business Days prior to the effective date of such Euro-Rate Option with respect to a Loan denominated in Dollars, and (ii) at least four (4) Business Days prior to the effective date of such Euro-Rate Option with respect to an Optional Currency Loan. The notice shall specify an Interest Period during which

such Interest Rate Option shall apply. Notwithstanding the preceding sentence, the following provisions shall apply to any selection of, renewal of, or conversion to a Euro-Rate Option:

4.2.1 Amount of Borrowing Tranche. Each Borrowing Tranche of Loans under the Euro-Rate Option shall be in integral multiples of, and not less than, the respective amounts set forth in Section 2.5.1 [Revolving Credit Loan Requests]; and

4.2.2 Renewals. In the case of the renewal of a Euro-Rate Option at the end of an Interest Period, the first day of the new Interest Period shall be the last day of the preceding Interest Period, without duplication in payment of interest for such day.

4.2.3 No Conversion of Optional Currency Loans. No Optional Currency Loan may be converted into a Loan with a different Interest Rate Option (except as specifically provided in the parenthetical in the proviso to Section 4.1 [Interest Rate Options]), or a Loan denominated in a different Optional Currency.

4.3 Interest After Default.

4.3.1 Interest Rate. To the extent permitted by Law, if any principal of or interest on any Loan is not paid when due, whether at stated maturity, upon acceleration or otherwise, such overdue amount shall bear interest, after as well as before judgment, at a rate per annum equal to 2.0% per annum plus the rate otherwise applicable to such Loan as provided in Section 4.1.1 [Revolving Credit Interest Rate Options; Etc.], 4.1.2 [Term Loan Interest Rate Option] or 2.6.6 [Swing Loans Under Cash Management Agreement], as the case may be. In addition, at any time that an Event of Default shall have occurred and be continuing, at the written request of the Required Lenders and whether or not any principal or interest of any Loan has not been paid when due, all Loans shall bear interest, after as well as before judgment, at a rate per annum equal to 2% per annum plus the rate otherwise applicable to such Loans as provided in Section 4.1.1 [Revolving Credit Interest Rate Options; Etc.], 4.1.2 [Term Loan Interest Rate Option] or 2.6.6 [Swing Loans Under Cash Management Agreement], as the case may be (after as well as before judgment). For the sake of clarity, during the existence of an Event of Default specified under Section 9.1.12 [Relief Proceedings], any principal of or interest on any Loan shall automatically bear interest, after as well as before judgment, at a rate per annum equal to 2.0% per annum plus the rate otherwise applicable to such Loan as provided in Section 4.1.1 [Revolving Credit Interest Rate Options; Etc.], Section 4.1.2 [Term Loan Interest Rate Options] or Section 2.6.6 [Swing Loans Under Cash Management Agreement], as the case may be (after as well as before judgment).

4.3.2 Letter of Credit Fees and Other Obligations. To the extent permitted by Law, at any time that an Event of Default shall have occurred and be continuing, at the written request of the Required Lenders, (i) the Letter of Credit Fees otherwise applicable pursuant to Section 2.9.2 [Letter of Credit Fees] shall be increased by 2.0% per annum and (ii) each other Obligation hereunder if not paid when due shall bear interest at a rate per annum equal to the sum of the rate of interest applicable to Revolving Credit Loans under the Base Rate Option plus an additional 2.0% per annum (after as well as before judgment). For the sake of clarity, during the existence of an Event of Default specified under Section 9.1.12 [Relief Proceedings], the Letter of Credit Fees otherwise applicable pursuant to Section 2.9.2 [Letter of Credit Fees] and

60

each other Obligation hereunder if not paid when due shall automatically bear interest at the rate per annum specified in clause (i) or (ii) (as applicable) in the immediately preceding sentence (after as well as before judgment).

4.3.3 Acknowledgment. The Borrower acknowledges that the increase in rates referred to in this Section 4.3 reflects, among other things, the fact that such Loans or other amounts have become a substantially greater risk given their default status and that the Lenders are entitled to additional compensation for such risk; and all such interest shall be payable by Borrower upon demand by Administrative Agent.

4.4 Rates Unascertainable; Illegality; Increased Costs; Deposits Not Available; Optional Currency Not Available.

4.4.1 Unascertainable. If on any date on which a Euro-Rate would otherwise be determined, the Administrative Agent shall have determined that:

- (i) adequate and reasonable means do not exist for ascertaining such Euro-Rate, or
- (ii) a contingency has occurred which materially and adversely affects the Relevant Interbank Market relating to the Euro-Rate,

then the Administrative Agent shall have the rights specified in Section 4.4.4 [Administrative Agent's and Lender's Rights].

4.4.2 Illegality; Increased Costs. If at any time:

(i) any Lender shall have determined that the making, maintenance or funding of any Loan to which a Euro-Rate Option applies has been made impracticable or unlawful by compliance by such Lender in good faith with any Law or any interpretation or application thereof by any Official Body or with any request or directive of any such Official Body (whether or not having the force of Law),

(ii) if the Required Lenders shall have determined that such Euro-Rate Option will not adequately and fairly reflect the cost to such Lenders of the establishment or maintenance of any such Loan, or

(iii) after making all reasonable efforts, deposits of the relevant amount in Dollars for the relevant Interest Period for a Loan, or to banks generally, to which a LIBOR Rate Option applies, respectively, are not available to any Lender with respect to such Loan, or to banks generally, in the interbank Eurodollar market,

then the Administrative Agent shall have the rights specified in Section 4.4.4 [Administrative Agent's and Lender's Rights].

4.4.3 Optional Currency Not Available. If at any time the Administrative Agent shall have determined, or the Required Lenders shall have notified the Administrative Agent in writing that they have determined, that a fundamental change has occurred in the

61

foreign exchange or interbank markets with respect to any Optional Currency (including, without limitation, changes in national or international financial, political or economic conditions or currency exchange rates or exchange controls), then (i) the Administrative Agent shall notify the Borrower of any such determination, and (ii) the Administrative Agent shall have the rights specified in Section 4.4.4 [Administrative Agent's and Lender's Rights].

4.4.4 Administrative Agent's and Lender's Rights. In the case of any event specified in Section 4.4.1 [Unascertainable] or 4.4.3 [Optional Currency Not Available] above, the Administrative Agent shall promptly so notify the Lenders and the Borrower thereof, and in the case of an event specified in Section 4.4.2 [Illegality; Increased Costs; Deposits Not Available], such Lender or Lenders shall promptly so notify the Administrative Agent and endorse a certificate to such notice as to the specific circumstances of such notice in reasonable detail, and the Administrative Agent shall promptly send copies of such notice and certificate to the other Lenders and the Borrower. Upon such date as shall be specified in such notice (which shall not be earlier than the date such notice is given), the obligation of (A) the Lenders, in the case of such notice given by the Administrative Agent, or (B) such Lender or Lenders, in the case of such notice given by such Lender or Lenders, to allow the Borrower to select, convert to or renew a Euro-Rate Option or select an Optional Currency, as applicable, shall be suspended until the Administrative Agent shall have later notified the Borrower, or such Lender or Lenders shall have later notified the Administrative Agent, of the Administrative Agent's or such Lender's or Lenders', as the case may be, determination that the circumstances giving rise to such previous determination no longer exist. If at any time the Administrative Agent makes a determination under Section 4.4.1 [Unascertainable] and the Borrower has previously notified the Administrative Agent of its selection of, conversion to or renewal of a Euro-Rate Option and such Interest Rate Option has not yet gone into effect, such notification shall be deemed to provide for selection of, conversion to or renewal of the Base Rate Option otherwise available with respect to such Loans. If any Lender or Lenders notifies the Administrative Agent of a determination under Section 4.4.2 [Illegality; Increased Costs; Deposits Not Available], the Borrower shall, subject to the Borrower's indemnification Obligations under Section 5.10 [Indemnity], as to any Loan of such Lender or Lenders to which a Euro-Rate Option applies, on the date specified in such notice either (i) as applicable, convert such Loan to the Base Rate Option otherwise available with respect to such Loan or select a different Optional Currency or Dollars; provided that, any Optional Currency Loan converted to the Base Rate Option shall be converted to Dollars in an amount equal to the Dollar Equivalent amount of such Loan, or (ii) prepay such Loan in accordance with Section 5.6 [Voluntary Prepayments]. Absent due notice from the Borrower of conversion or prepayment, such Loan shall automatically be converted to the Base Rate Option otherwise available with respect to such Loan upon such specified date. If the Administrative Agent makes a determination under Section 4.4.3 [Optional Currency Not Available] then, until the Administrative Agent notifies the Borrower that the circumstances giving rise to such determination no longer exist, (i) the availability of Loans in the affected Optional Currency shall be suspended, (ii) the outstanding Loans in such affected Optional Currency shall be converted into Dollar Loans (in an amount equal to the Dollar Equivalent of such outstanding Optional Currency Loans) (x) on the last day of the then current Interest Period if the Lenders may lawfully continue to maintain Loans in such Optional Currency to such day, or (y) immediately if the Lenders may not lawfully continue to maintain Loans in such Optional Currency, and interest thereon shall thereafter accrue at the Base Rate Option.

4.5 Selection of Interest Rate Options. If the Borrower fails to select a new Interest Period to apply to any Borrowing Tranche of Loans under the Euro-Rate Option at the expiration of an existing Interest Period applicable to such Borrowing Tranche in accordance with the provisions of Section 4.2 [Interest Periods], the Borrower shall be deemed to have converted such Borrowing Tranche to the Base Rate Option, as applicable to Revolving Credit Loans or Term Loans as the case may be, commencing upon the last day of the existing Interest Period, and such currency conversion to U.S. Dollars shall be determined by the Administrative Agent at the time of such conversion.

4.6 Successor Euro-Rate Index.

(i) Benchmark Replacement. Notwithstanding anything to the contrary herein or in any other Loan Document, if the Administrative Agent determines that a Benchmark Transition Event or an Early Opt-in Event has occurred with respect to the Euro-Rate for any Available Currency, the Administrative Agent and the Borrower may amend this Agreement to replace the Euro-Rate for such Available Currency with a Benchmark Replacement for such Available Currency; and any such amendment will become effective at 5:00 p.m. New York City time on the fifth (5th) Business Day after the Administrative Agent has provided such proposed amendment to all Lenders so long as the Administrative Agent has not received, by such time, written notice of objection to such amendment from Lenders comprising the Required Lenders. Until the Benchmark Replacement with respect to the Euro-Rate for any Available Currency is effective, each advance, conversion and renewal of a Loan in such Available Currency under the Euro-Rate Option will continue to bear interest with reference to the Euro-Rate for such Available Currency; provided however, during a Benchmark Unavailability Period with respect to any Available Currency (a) any pending selection of, conversion to or renewal of a Loan in such Available Currency bearing interest under the Euro-Rate Option that has not yet gone into effect shall be deemed to be a selection of, conversion to or renewal of the Base Rate Option with respect to such Loan in the Dollar Equivalent amount of such Loan, (b) all outstanding Loans in such Available Currency bearing interest under the Euro-Rate Option shall automatically be (I) if in Dollars, converted to the Base Rate Option at the expiration of the existing Interest Period (or sooner, if Administrative Agent cannot continue to lawfully maintain such affected Loan under the Euro-Rate Option), (II) if in an Optional Currency, converted to a Loan in Dollars under the Base Rate Option in the Dollar Equivalent amount of such Loan at the expiration of the existing Interest Period (or sooner, if the Administrative Agent cannot continue to lawfully maintain such affected Loan under the Euro-Rate Option in such Optional Currency) and (III) the component of the Base Rate based upon the Euro-Rate will not be used in any determination of the Base Rate.

(ii) Benchmark Replacement Conforming Changes. In connection with the implementation of a Benchmark Replacement, the Administrative Agent will have the right to make Benchmark Replacement Conforming Changes from time to time and, notwithstanding anything to the contrary herein or in any other Loan Document, any amendments implementing such Benchmark Replacement Conforming Changes will become effective without any further action or consent of any other party to this Agreement.

(iii) Notices; Standards for Decisions and Determinations. The Administrative Agent will promptly notify the Borrower and the Lenders of (a) the

implementation of any Benchmark Replacement, (b) the effectiveness of any Benchmark Replacement Conforming Changes and (c) the commencement of any Benchmark Unavailability Period. Any determination, decision or election that may be made by the Administrative Agent or the Lenders pursuant to this Section 4.6 including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action, will be conclusive and binding absent manifest error and may be made in its or their sole discretion and without consent from any other party hereto, except, in each case, as expressly required pursuant to this Section 4.6.

(iv) Certain Defined Terms. As used in this Section 4.6:

“Benchmark Replacement” shall mean, with respect to any Available Currency, the sum of: (a) the alternate benchmark rate that has been selected by the Administrative Agent and the Borrower for such Available Currency giving due consideration to (I) any selection or recommendation of a replacement rate or the mechanism for determining such a rate by the Relevant Governmental Body with respect to such Available Currency or (II) any evolving or then-prevailing market convention for determining a rate of interest as a replacement to the Euro-Rate for (x) with respect to Dollar Loans under the Euro-Rate Option, U.S. dollar-denominated credit facilities or (y) with respect to Optional Currency Loans, U.S. credit facilities providing for loans in such Optional Currency and (b) the Benchmark Replacement Adjustment; provided that, if the Benchmark Replacement as so determined would be less than zero, the Benchmark Replacement will be deemed to be zero for the purposes of this Agreement.

“Benchmark Replacement Adjustment” means, with respect to any replacement of the Euro-Rate for any Available Currency with an alternate benchmark rate for each applicable Interest Period for such Available Currency, the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected by the Administrative Agent and the Borrower (a) giving due consideration to (I) any selection or recommendation of a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the Euro-Rate in such Available Currency with the applicable Benchmark Replacement for such Available Currency (excluding such spread adjustment) by the Relevant Governmental Body with respect to such Available Currency or (II) any evolving or then-prevailing market convention for determining a spread adjustment, or method for calculating or determining such spread adjustment, for such replacement of the Euro-Rate for (x) with respect to Dollar Loans under the Euro-Rate Option, U.S. dollar-denominated credit facilities at such time or (y) with respect to Optional Currency Loans, U.S. credit facilities providing for loans in such Optional Currency and (b) which may also reflect adjustments to account for (i) the effects of the transition from the Euro-Rate for such Available Currency to the Benchmark Replacement for such Available Currency and (ii) yield- or risk-based differences between the Euro-Rate and the Benchmark Replacement for such Available Currency.

“Benchmark Replacement Conforming Changes” means, with respect to any Benchmark Replacement for any Available Currency, any technical, administrative or operational changes (including changes to the definition of “Base Rate,” the definition of “Interest Period,” timing and frequency of determining rates and making payments of interest and other administrative matters) that the Administrative Agent decides may be appropriate to

reflect the adoption and implementation of such Benchmark Replacement for such Available Currency and to permit the administration thereof by the Administrative Agent in a manner substantially consistent with market practice in the United States (or, if the Administrative Agent decides that adoption of any portion of such market practice is not administratively feasible or if the Administrative Agent determines that no market practice for the administration of the Benchmark Replacement exists, in such other manner of administration as the Administrative Agent decides is reasonably necessary in connection with the administration of this Agreement).

“**Benchmark Replacement Date**” means the earlier to occur of the following events with respect to the Euro-Rate for any Available Currency:

(a) in the case of clause (a) or (b) of the definition of “Benchmark Transition Event,” the later of (I) the date of the public statement or publication of information referenced therein and (II) the date on which the administrator of the Euro-Rate for such Available Currency permanently or indefinitely ceases to provide the Euro-Rate for such Available Currency; or

(b) in the case of clause (c) of the definition of “Benchmark Transition Event,” the date of the public statement or publication of information referenced therein.

“**Benchmark Transition Event**” means the occurrence of one or more of the following events with respect to the Euro-Rate for any Available Currency:

(a) a public statement or publication of information by or on behalf of the administrator of the Euro-Rate for such Available Currency announcing that such administrator has ceased or will cease to provide the Euro-Rate for such Available Currency, permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Euro-Rate for such Available Currency;

(b) a public statement or publication of information by an Official Body having jurisdiction over the Administrative Agent, the regulatory supervisor for the administrator of the Euro-Rate for such Available Currency, the U.S. Federal Reserve System, an insolvency official with jurisdiction over the administrator for the Euro-Rate for such Available Currency, a resolution authority with jurisdiction over the administrator for the Euro-Rate for such Available Currency or a court or an entity with similar insolvency or resolution authority over the administrator for the Euro-Rate for such Available Currency, which states that the administrator of the Euro-Rate for such Available Currency has ceased or will cease to provide the Euro-Rate for such Available Currency permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Euro-Rate for such Available Currency; or

(c) a public statement or publication of information by the regulatory supervisor for the administrator of the Euro-Rate for such Available Currency or

an Official Body having jurisdiction over the Administrative Agent announcing that the Euro-Rate for such Available Currency is no longer representative.

“**Benchmark Unavailability Period**” means, with respect to any Available Currency, if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to the Euro-Rate for such Available Currency and solely to the extent that the Euro-Rate for such Available Currency has not been replaced with a Benchmark Replacement, the period (a) beginning at the time that such Benchmark Replacement Date for such Available Currency has occurred if, at such time, no Benchmark Replacement for such Available Currency has replaced the Euro-Rate for such Available Currency for all purposes hereunder in accordance with this Section 4.6 and (b) ending at the time that a Benchmark Replacement for such Available Currency has replaced the Euro-Rate for such Available Currency for all purposes hereunder pursuant to this Section 4.6.

“**Early Opt-in Event**” means a determination by the Administrative Agent that (a) with respect to Dollar Loans under the Euro-Rate Option, U.S. dollar-denominated credit facilities being executed at such time, or that include language similar to that contained in this Section 4.6, are being executed or amended, as applicable, to incorporate or adopt a new benchmark interest rate to replace the Euro-Rate for loans in Dollars or (b) with respect to Optional Currency Loans, U.S. credit facilities providing for loans in such Optional Currency being executed at such time, or that include language similar to that contained in this Section 4.6, are being executed or amended, as applicable, to incorporate or adopt a new benchmark interest rate to replace the Euro-Rate for loans in such Optional Currency.

“**Relevant Governmental Body**” means (a) the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto and (b) with respect to Optional Currency Loans, in addition to the Persons named in clause (a) of this definition, the comparable Official Body or other applicable Person for loans in such Optional Currency as determined by the Administrative Agent in its sole discretion.

5. PAYMENTS

5.1 Payments. All payments and prepayments to be made in respect of principal, interest, Commitment Fees, Letter of Credit Fees, Administrative Agent’s Fee or other fees or amounts due from the Borrower hereunder shall be payable prior to 11:00 a.m. on the date when due without presentment, demand, protest or notice of any kind, all of which are hereby expressly waived by the Borrower, and without set-off, counterclaim or other deduction of any nature, and an action therefor shall immediately accrue; provided that any payments of principal or interest on an Optional Currency Loan shall be made not later than the time that the Borrower shall be notified by the Administrative Agent for payments with respect to such Optional Currency. Such payments shall be made to the Administrative Agent at the Principal Office (or, with respect to loans in an Optional Currency, such other lending office as the Administrative Agent shall from time to time notify the Borrower) for the account of PNC with respect to the Swing Loans and for the ratable accounts of the Lenders with respect to the Revolving Credit Loans or Term Loans in U.S. Dollars (or, with respect to Optional Currency Loans, at the Principal Office or, if directed by the Administrative Agent, at such other office of the

Administrative Agent as the Administrative Agent shall so direct) and in immediately available funds, and the Administrative Agent shall promptly distribute such amounts to the Lenders in immediately available funds; provided that in the event payments are received by 11:00 a.m. by the Administrative Agent with respect to the Loans and such payments are not distributed to the Lenders on the same day received by the Administrative Agent, the Administrative Agent shall pay the Lenders interest at the Federal Funds Effective Rate in the case of Loans or other amounts due in Dollars, or the Overnight Rate in the case of Loans or other amounts due in an Optional Currency, with respect to the amount of such payments for each day held by the Administrative Agent and not distributed to the Lenders. The Administrative Agent's and each Lender's statement of account, ledger or other relevant record shall, in the absence of manifest error, be conclusive as the statement of the amount of principal of and interest on the Loans and other amounts owing under this Agreement (including the Equivalent Amounts of the applicable currencies where such computations are required) and shall be deemed an "account stated". Except as expressly provided otherwise herein, all payments of principal and interest made in respect of the Loans must be repaid in the same currency (whether Dollars or the applicable Optional Currency) in which such Loan was made and all Reimbursement Obligations with respect to each Letter of Credit shall be made in the same currency (whether Dollars or the applicable Optional Currency) in which such Letter of Credit was issued. The Administrative Agent may (but shall not be obligated to) debit the amount of any ordinary interest payment, scheduled quarterly payment of the Term Loans pursuant to Section 3.2 [Nature of Lenders' Obligations with Respect to Term Loans; Repayment Terms] and payment of Commitment Fees in accordance with Section 2.3 [Commitment Fees], in each case in respect of Obligations, which is not made by such time to any ordinary deposit account of the Borrower with the Administrative Agent.

5.2 Pro Rata Treatment of Lenders. Each borrowing of Revolving Credit Loans shall be allocated to each Lender according to its Ratable Share, and each selection of, conversion to or renewal of any Interest Rate Option and each payment or prepayment by the Borrower with respect to principal, interest, Commitment Fees and Letter of Credit Fees (but excluding the Administrative Agent's Fee and the Issuing Lender's fronting fee) shall (except as otherwise may be provided with respect to a Defaulting Lender and except as provided in Sections 4.4.4 [Administrative Agent's and Lender's Rights] in the case of an event specified in Section 4.4 [Rate Unascertainable; Etc.], 5.6.2 [Replacement of a Lender] or 5.8 [Increased Costs]) be payable ratably among the Lenders entitled to such payment in accordance with the amount of principal, interest, Commitment Fees and Letter of Credit Fees, as set forth in this Agreement. Notwithstanding any of the foregoing, each borrowing or payment or prepayment by the Borrower of principal, interest, fees or other amounts from the Borrower with respect to Swing Loans shall be made by or to PNC according to Section 2.6.5 [Borrowings to Repay Swing Loans].

5.3 Sharing of Payments by Lenders. If any Lender shall, by exercising any right of setoff, counterclaim or banker's lien, by receipt of voluntary payment, by realization upon security, or by any other non-pro rata source, obtain payment in respect of any principal of or interest on any of its Loans or other obligations hereunder resulting in such Lender's receiving payment of a proportion of the aggregate amount of its Loans and accrued interest thereon or other such obligations greater than the pro-rata share of the amount such Lender is entitled thereto, then the Lender receiving such greater proportion shall (a) notify the Administrative

Agent of such fact, and (b) purchase (for cash at face value) participations in the Loans and such other obligations of the other Lenders, or make such other adjustments as shall be equitable, so that the benefit of all such payments shall be shared by the Lenders ratably in accordance with the aggregate amount of principal of and accrued interest on their respective Loans and other amounts owing them, provided that:

(i) if any such participations are purchased and all or any portion of the payment giving rise thereto is recovered, such participations shall be rescinded and the purchase price restored to the extent of such recovery, together with interest or other amounts, if any, required by Law (including court order) to be paid by the Lender or the holder making such purchase; and

(ii) the provisions of this Section 5.3 shall not be construed to apply to (x) any payment made by the Loan Parties pursuant to and in accordance with the express terms of the Loan Documents or (y) any payment obtained by a Lender as consideration for the assignment of or sale of a participation in any of its Loans or Participation Advances to any assignee or participant, other than to the Borrower or any Subsidiary thereof (as to which the provisions of this Section 5.3 shall apply).

Each Loan Party consents to the foregoing and agrees, to the extent it may effectively do so under applicable Law, that any Lender acquiring a participation pursuant to the foregoing arrangements may exercise against each Loan Party rights of setoff and counterclaim with respect to such participation as fully as if such Lender were a direct creditor of each Loan Party in the amount of such participation.

5.4 Presumptions by Administrative Agent. Unless the Administrative Agent shall have received notice from the Borrower prior to the date on which any payment is due to the Administrative Agent for the account of the Lenders or the Issuing Lender hereunder that the Borrower will not make such payment, the Administrative Agent may assume that the Borrower has made such payment on such date in accordance herewith and may, in reliance upon such assumption, distribute to the Lenders or the Issuing Lender, as the case may be, the amount due. In such event, if the Borrower has not in fact made such payment, then each of the Lenders or the Issuing Lender, as the case may be, severally agrees to repay to the Administrative Agent forthwith on demand the amount so distributed to such Lender or the Issuing Lender, with interest thereon, for each day from and including the date such amount is distributed to it to but excluding the date of payment to the Administrative Agent, at the greater of the Federal Funds Effective Rate (or, for payments in an Optional Currency, the Overnight Rate) and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation.

5.5 Interest Payment Dates. Interest on Loans to which the Base Rate Option applies shall be due and payable in arrears on each Payment Date. Interest on Loans to which the Euro-Rate Option applies shall be due and payable on the last day of each Interest Period for those Loans and, if such Interest Period is longer than three (3) Months, also on the 90th day of such Interest Period. Interest on mandatory prepayments of principal under Section 5.7 [Mandatory Prepayments] shall be due on the date such mandatory prepayment is due. Interest on the principal amount of each Loan or other monetary Obligation shall be due and payable on demand

after such principal amount or other monetary Obligation becomes due and payable (whether on the stated Revolving Credit Expiration Date or Term Loan Maturity Date, upon acceleration or otherwise). Interest on the principal amount of each Loan or other monetary Obligation shall be due and payable in the currency in which such Loan was made on demand after such principal amount or other monetary Obligation becomes due and payable (whether on the stated maturity date, upon acceleration or otherwise).

5.6 Voluntary Prepayments.

5.6.1 Right to Prepay. The Borrower shall have the right at its option from time to time to prepay the Loans in whole or part without premium or penalty (except as provided in Section 5.8 [Increased Costs] and Section 5.10 [Indemnity]). Whenever the Borrower desires to prepay any part of the Loans, it shall provide a prepayment notice to the Administrative Agent by 1:00 p.m. at least one (1) Business Day prior to the date of prepayment of the Revolving Credit Loans or Term Loans denominated in Dollars, and at least four (4) Business Days prior to the date of prepayment of any Optional Currency Loans, or no later than 1:00 p.m. on the date of prepayment of Swing Loans, setting forth the following information:

- (w) the date, which shall be a Business Day, on which the proposed prepayment is to be made;
- (x) a statement indicating the application of the prepayment between the Revolving Credit Loans, Term Loans and Swing Loans;
- (y) a statement indicating the application of the prepayment between Loans to which the Base Rate Option applies and Loans and Optional Currencies to which the Euro-Rate Option applies; and
- (z) the total principal amount of such prepayment, which shall not be less than (i) the lesser of the Revolving Facility Usage and \$500,000 for any Revolving Credit Loans, (ii) \$100,000 for any Swing Loan and (iii) \$500,000 for any Term Loan.

All prepayment notices shall be irrevocable; provided that a notice of prepayment in full delivered by the Borrower in conjunction with a notice of termination of the Revolving Credit Commitments in full delivered pursuant to Section 2.4.1 [Termination or Reduction of Revolving Credit Commitments] and payment of all of the Loans then outstanding may state that such notice is conditioned upon the effectiveness of other credit facilities or debt or equity issuances or other event, in which case such notice may be revoked by the Borrower (by notice to the Administrative Agent prior to the specified effective date) if such condition is not satisfied. The principal amount of the Loans for which a prepayment notice is given, together with interest on such principal amount, shall be due and payable on the date specified in such prepayment notice as the date on which the proposed prepayment is to be made. All Term Loan prepayments permitted pursuant to this Section 5.6.1 [Right to Prepay] shall be applied to the unpaid installments of principal of the Term Loans as determined by the Borrower in its discretion and designated in the prepayment notice, provided that if the prepayment notice does not make such designation, the Term Loan prepayment shall be applied pro rata across the remaining installments of the Term Loans (including the payment due on the Term Loan Maturity Date).

Except as provided in Section 4.4.4 [Administrative Agent's and Lender's Rights], if the Borrower prepays a Loan but fails to specify the applicable Borrowing Tranche which the Borrower is prepaying, the prepayment shall be applied (i) first to Revolving Credit Loans and then to Term Loans; and (ii) after giving effect to the allocations in clause (i) above and in the preceding sentence, first to the Revolving Credit Loans and Term Loans to which the Base Rate Option applies, then to Revolving Credit Loans which are not Optional Currency Loans and the Term Loans to which the Euro-Rate Option applies, then to Optional Currency Loans, then to Swing Loans. Any prepayment hereunder shall be subject to the Borrower's Obligation to indemnify the Lenders under Section 5.10 [Indemnity]. Prepayments shall be made in the currency in which such Loan was made unless otherwise directed by the Administrative Agent.

5.6.2 Replacement of a Lender. In the event any Lender (i) gives notice under Section 4.4 [Rate Unascertainable, Etc.], (ii) requests compensation under Section 5.8 [Increased Costs], or requires the Borrower to pay any Indemnified Taxes or additional amount to any Lender or any Official Body for the account of any Lender pursuant to Section 5.9 [Taxes], (iii) is a Defaulting Lender, (iv) becomes subject to the control of an Official Body (other than normal and customary supervision), or (v) is a Non-Consenting Lender referred to in Section 11.1 [Modifications, Amendments or Waivers], then in any such event the Borrower may, at its sole expense, upon notice to such Lender and the Administrative Agent, require such Lender to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in, and consents required by, Section 11.8 [Successors and Assigns]), all of its interests, rights (other than existing rights to payments pursuant to Sections 5.8 [Increased Costs] or 5.9 [Taxes]) and obligations under this Agreement and the related Loan Documents to an assignee that shall assume such obligations (which assignee may be another Lender, if a Lender accepts such assignment), provided that:

(i) the Borrower shall have paid to the Administrative Agent the assignment fee specified in Section 11.8 [Successors and Assigns];

(ii) such Lender shall have received payment of an amount equal to the outstanding principal of its Loans and Participation Advances, accrued interest thereon, accrued fees and all other amounts payable to it hereunder and under the other Loan Documents (including any amounts under Section 5.10 [Indemnity]) from the assignee (to the extent of such outstanding principal and accrued interest and fees) or the Borrower (in the case of all other amounts);

(iii) in the case of any such assignment resulting from a claim for compensation under Section 5.8.1 [Increased Costs Generally] or payments required to be made pursuant to Section 5.9 [Taxes], such assignment will result in a reduction in such compensation or payments thereafter; and

(iv) such assignment does not conflict with applicable Law.

A Lender shall not be required to make any such assignment or delegation if, prior thereto, as a result of a waiver by such Lender or otherwise, the circumstances entitling the Borrower to require such assignment and delegation cease to apply.

70

5.6.3 Designation of a Different Lending Office. If any Lender requests compensation under Section 5.8 [Increased Costs], or the Borrower is or will be required to pay any Indemnified Taxes or additional amounts to any Lender or any Official Body for the account of any Lender pursuant to Section 5.9 [Taxes], then such Lender shall (at the request of the Borrower) use reasonable efforts to designate a different lending office for funding or booking its Loans hereunder or to assign its rights and obligations hereunder to another of its offices, branches or affiliates, if, in the reasonable judgment of such Lender, such designation or assignment (i) would eliminate or reduce amounts payable pursuant to Section 5.8 [Increased Costs] or Section 5.9 [Taxes], as the case may be, in the future, and (ii) would not subject such Lender to any material unreimbursed cost or expense and would not otherwise be materially disadvantageous to such Lender. The Borrower hereby agrees to pay all reasonable costs and expenses incurred by any Lender in connection with any such designation or assignment

5.7 Mandatory Prepayments.

5.7.1 Sale of Assets. In the event of any direct or indirect sale or other disposition of any of the assets (including lines of business, product lines, divisions or other business units) of the Borrower or any Subsidiary (other than sales or dispositions referred to in clause (i)-(viii) of Section 8.2.7 [Dispositions of Assets or Subsidiaries]) (each, an "Asset Sale") the Net Proceeds of which in the aggregate with all prior Asset Sales made since the date of this Agreement (but only those Asset Sales the Net Proceeds of which were not applied as a prepayment as hereinafter provided in this Section 5.7.1) is greater than \$10,000,000, the Borrower shall within five (5) Business Days following such sale or other disposition make a mandatory prepayment of principal on the Loans equal to one hundred percent (100%) of the Net Proceeds of such sale or other disposition (but only to the extent in excess of such \$10,000,000), together with accrued interest on such principal amount; provided that, if the Borrower or its Subsidiaries intend to cause the Net Proceeds from such sale (or a portion thereof specified in such certificate) to be applied within 180 days after receipt of such Net Proceeds to acquire assets to be used or useful in the business of the Borrower or its Subsidiaries, and no Event of Default or Potential Default has occurred and is continuing, then no prepayment shall be required pursuant to this paragraph in respect of the Net Proceeds from such event (or the portion of such Net Proceeds intended by the Borrower or its Subsidiaries to be reinvested) except to the extent of any such Net Proceeds that have not been so applied by the end of such 180-day period, at which time a prepayment shall be required in an amount equal to the Net Proceeds that have not been so applied; provided, further, that to the extent any such Net Proceeds shall be received in respect of assets owned by a Loan Party, such Net Proceeds may be reinvested only in assets owned by a Loan Party.

5.7.2 Issuance of Debt; Issuance of Equity Interests; No Specified Distribution. (i) Within five (5) Business Days following the incurrence of any Indebtedness for borrowed money by any Loan Party or any Subsidiary thereof (except for the incurrence of Indebtedness expressly permitted under Section 8.2.1 [Indebtedness]), the Borrower shall make a mandatory prepayment of principal on the Loans equal to one hundred percent (100%) of the Net Proceeds of such incurrence, together with accrued interest on such principal amount.

(ii) Within five (5) Business Days following the sale or issuance of any Equity Interests in an IPO, the Borrower shall make a mandatory prepayment of principal on

71

the Loans equal to one hundred percent (100%) of the Net Proceeds of such sale or issuance incurrence, together with accrued interest on such principal amount.

(iii) If (i) the Specified Distribution is not made within ninety (90) days after the Closing Date, then on such ninetieth (90th) day, or (ii) the Borrower determines with finality that the Specified Distribution will not be made, then on or prior to ninety (90) days after the Closing Date, the Borrower shall make a mandatory prepayment of the Term Loans in an aggregate amount not less than \$120,000,000 (a “**Mandatory TL Prepayment (Unused Proceeds)**”) together with accrued interest on such principal amount.

5.7.3 Material Recovery Event. In the event of any casualty or other insured damage to, or any taking under power of eminent domain or by condemnation or similar proceedings of, any asset of the Borrower or any of its Subsidiaries resulting in aggregate Net Proceeds of \$2,500,000 or more, the Borrower shall within five (5) Business Days following the receipt of proceeds of any casualty or other insurance proceeds or condemnation or similar awards make a prepayment of principal on the Loans equal to 100% of such Net Proceeds, together with accrued interest on such principal amount; provided that, the Borrower may reinvest such Net Proceeds pursuant to the criteria set forth above with respect to reinvestment in Section 5.7.1 above.

5.7.4 Currency Fluctuations. If on any Computation Date the Revolving Facility Usage is equal to or greater than the Revolving Credit Commitments as a result of a change in exchange rates between one (1) or more Optional Currencies and Dollars, then the Administrative Agent shall notify the Borrower of the same. The Borrower shall pay or prepay (subject to Borrower’s indemnity obligations under Sections 5.8 [Increased Costs] and 5.10 [Indemnity]) within one (1) Business Day after receiving such notice such that the Revolving Facility Usage shall not exceed the aggregate Revolving Credit Commitments after giving effect to such payments or prepayments.

5.7.5 Application of Payments. All prepayments required pursuant to Section 5.7.1 [Sale of Assets], Section 5.7.2 [Issuance of Debt; Issuance of Equity Interests] or Section 5.7.3 [Material Recovery Event] shall be applied (i) first, to the payment of the principal amount of the Term Loans by application to the unpaid installments of principal pro rata across the remaining installments of the Term Loans (including the payment due on the Term Loan Maturity Date) until the Term Loans have been paid in full, (ii) second, after the Term Loans have been paid in full, to the Swing Loans until paid in full and (iii) third, after the Swing Loans have been paid in full, to the Revolving Credit Loans until paid in full. Payments applied to the Swing Loans and the Revolving Credit Loans shall not reduce the Revolving Credit Commitment.

5.7.6 Application Among Interest Rate Options. All prepayments required pursuant to this Section 5.7 shall first be applied among the Interest Rate Options to the principal amount of the Loans subject to the Base Rate Option, then to Loans denominated in Dollars and subject to a Euro-Rate Option, then to the Optional Currency Loans. In accordance with Section 5.10 [Indemnity], the Borrower shall indemnify the Lenders for any loss or expense, excluding loss of margin, incurred with respect to any such prepayments applied against Loans subject to a Euro-Rate Option on any day other than the last day of the applicable Interest Period.

5.8 Increased Costs.

5.8.1 Increased Costs Generally. If any Change in Law shall:

- (i) impose, modify or deem applicable any reserve, special deposit, compulsory loan, insurance charge or similar requirement against assets of, deposits with or for the account of, or credit extended or participated in by, any Lender (except any reserve requirement, which is addressed separately in this Section 5.8) or the Issuing Lender;
- (ii) subject any Recipient to any Taxes (other than (A) Indemnified Taxes, (B) Taxes described in clauses (ii) through (iv) of the definition of Excluded Taxes and (C) Connection Income Taxes) on its loans, loan principal, letters of credit, commitments, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto; or
- (iii) impose on any Lender, the Issuing Lender or the Relevant Interbank Market any other condition, cost or expense (other than Taxes) affecting this Agreement or Loans made by such Lender or any Letter of Credit or participation therein;

and the result of any of the foregoing shall be to increase the cost to such Lender or such other Recipient of making, converting to, continuing or maintaining any Loan or of maintaining its obligation to make any such Loan, or to increase the cost to such Lender, the Issuing Lender or such other Recipient of participating in, issuing or maintaining any Letter of Credit (or of maintaining its obligation to participate in or to issue any Letter of Credit), or to reduce the amount of any sum received or receivable by such Lender, the Issuing Lender or other Recipient hereunder (whether of principal, interest or any other amount) then, upon request of such Lender with an explanation thereof, the Issuing Lender or other Recipient, the Borrower will pay to such Lender, the Issuing Lender or other Recipient, as the case may be, such additional amount or amounts as will compensate such Lender or the Issuing Lender, as the case may be, for such additional costs incurred or reduction suffered.

5.8.2 Capital Requirements. If any Lender or the Issuing Lender determines that any Change in Law affecting such Lender or the Issuing Lender or any lending office of such Lender or such Lender's or the Issuing Lender's holding company, if any, regarding capital or liquidity requirements has or would have the effect of reducing the rate of return on such Lender's or the Issuing Lender's capital or on the capital of such Lender's or the Issuing Lender's holding company, if any, as a consequence of this Agreement, the Commitments of such Lender or the Loans made by, or participations in Letters of Credit or Swing Loans held by, such Lender, or the Letters of Credit issued by the Issuing Lender, to a level below that which such Lender or the Issuing Lender or such Lender's or the Issuing Lender's holding company could have achieved but for such Change in Law (taking into consideration such Lender's or the Issuing Lender's policies and the policies of such Lender's or the Issuing Lender's holding company with respect to capital adequacy), then from time to time the Borrower will pay to such Lender or the Issuing Lender, as the case may be, such additional amount or amounts as will compensate such Lender or the Issuing Lender or such Lender's or the Issuing Lender's holding company for any such reduction suffered.

5.8.3 Certificates for Reimbursement; Repayment of Outstanding Loans; Borrowing of New Loans. A certificate of a Lender or the Issuing Lender setting forth the amount or amounts necessary to compensate such Lender or the Issuing Lender or its holding company, as the case may be, as specified in Sections 5.8.1 [Increased Costs Generally] or 5.8.2 [Capital Requirements] and setting forth with reasonable detail the calculation of such amounts and delivered to the Borrower shall be conclusive absent manifest error. The Borrower shall pay such Lender or the Issuing Lender, as the case may be, the amount shown as due on any such certificate within ten (10) days after receipt thereof.

5.8.4 Delay in Requests. Failure or delay on the part of any Lender or the Issuing Lender to demand compensation pursuant to this Section shall not constitute a waiver of such Lender's or the Issuing Lender's right to demand such compensation, provided that the Borrower shall not be required to compensate a Lender or the Issuing Lender pursuant to this Section for any increased costs incurred or reductions suffered more than one hundred and eighty (180) days prior to the date that such Lender or the Issuing Lender, as the case may be, notifies the Borrower of the Change in Law giving rise to such increased costs or reductions and of such Lender's or the Issuing Lender's intention to claim compensation therefor (except that, if the Change in Law giving rise to such increased costs or reductions is retroactive, then the one hundred and eighty (180) day period referred to above shall be extended to include the period of retroactive effect thereof).

5.8.5 Additional Reserve Requirements. The Borrower shall pay to each Lender (i) as long as such Lender shall be required to maintain reserves with respect to liabilities or assets consisting of or including eurocurrency funds or deposits, additional interest on the unpaid principal amount of each Loan under the Euro-Rate Option equal to the actual costs of such reserves allocated to such Loan by such Lender (as determined by such Lender in good faith, which determination shall be conclusive absent manifest error), and (ii) as long as such Lender shall be required to comply with any reserve ratio requirement under Regulation D or under any similar, successor or analogous requirement of the Board of Governors of the Federal Reserve System (or any successor) or any other central banking or financial regulatory authority imposed in respect of the maintenance of the Commitments or the funding of the Loans under the Euro-Rate Option, such additional costs (expressed as a percentage per annum and rounded upwards, if necessary, to the nearest five decimal places) equal to the actual costs allocated to such Commitment or Loan by such Lender (as determined by such Lender in good faith, which determination shall be conclusive absent manifest error), which in each case shall be due and payable on each date on which interest is payable on such Loan; provided that in each case the Borrower shall have received at least ten days' prior notice (with a copy to the Administrative Agent) of such additional interest or costs from such Lender. If a Lender fails to give notice ten (10) days prior to the relevant Payment Date, such additional interest or costs shall be due and payable ten (10) days from receipt of such notice.

5.9 Taxes.

5.9.1 Issuing Lender. For purposes of this Section 5.9, the term "Lender" includes the Issuing Lender and the term "applicable Law" includes FATCA.

5.9.2 Payments Free of Taxes. Any and all payments by or on account of any obligation of any Loan Party under any Loan Document shall be made without deduction or withholding for any Taxes, except as required by applicable Law. If any applicable Law (as determined in the good faith discretion of an applicable Withholding Agent) requires the deduction or withholding of any Tax from any such payment by a Withholding Agent, then the applicable Withholding Agent shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant Official Body in accordance with applicable Law and, if such Tax is an Indemnified Tax, then the sum payable by the applicable Loan Party shall be increased as necessary so that after such deduction or withholding has been made (including such deductions and withholdings applicable to additional sums payable under this Section 5.9 [Taxes]) the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding been made.

5.9.3 Payment of Other Taxes by the Loan Parties. The Loan Parties shall timely pay to the relevant Official Body in accordance with applicable Law, or at the option of the Administrative Agent timely reimburse it for the payment of, any Other Taxes.

5.9.4 Indemnification by the Loan Parties. The Loan Parties shall jointly and severally indemnify each Recipient, within ten (10) days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section 5.9 [Taxes]) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Official Body. A certificate as to the amount of such payment or liability delivered to the Borrower by a Lender (with a copy to the Administrative Agent), or by the Administrative Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

5.9.5 Indemnification by the Lenders. Each Lender shall severally indemnify the Administrative Agent, within ten (10) days after demand therefor, for (i) any Indemnified Taxes attributable to such Lender (but only to the extent that any Loan Party has not already indemnified the Administrative Agent for such Indemnified Taxes and without limiting the obligation of any of the Loan Parties to do so), (ii) any Taxes attributable to such Lender's failure to comply with the provisions of Section 11.8.4 [Participations] relating to the maintenance of a Participant Register, and (iii) any Excluded Taxes attributable to such Lender, in each case, that are payable or paid by the Administrative Agent in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Official Body. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender under any Loan Document or otherwise payable by the Administrative Agent to the Lender from any other source against any amount due to the Administrative Agent under this Section 5.9.5 [Indemnification by the Lenders].

5.9.6 Evidence of Payments. As soon as practicable after any payment of Taxes by any Loan Party to an Official Body pursuant to this Section 5.9 [Taxes], such Loan

Party shall deliver to the Administrative Agent the original or a certified copy of a receipt issued by such Official Body evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Administrative Agent.

5.9.7 Status of Lenders.

(i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to the Borrower and the Administrative Agent, at the time or times reasonably requested by the Borrower or the Administrative Agent, such properly completed and executed documentation reasonably requested by the Borrower or the Administrative Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by the Borrower or the Administrative Agent, shall deliver such other documentation prescribed by applicable Law or reasonably requested by the Borrower or the Administrative Agent as will enable the Borrower or the Administrative Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in Section 5.9.7(ii)(A), (ii)(B) and (ii)(D) below) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing, in the event that the Borrower is a U.S. Borrower,

(A) any Lender that is a U.S. Person shall deliver to the Borrower and the Administrative Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed originals of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), whichever of the following is applicable:

(i) in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, executed originals of IRS Form W-8BEN or W-BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "interest" article of such tax treaty and (y) with respect to any other applicable payments under any Loan Document, IRS Form W-8BEN or W-BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

(ii) executed originals of IRS Form W-8ECI;

(iii) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit 5.9.7(A) to the effect that such Foreign Lender is not (A) a “bank” within the meaning of Section 881(c)(3)(A) of the Code, (B) a “10 percent shareholder” of the Borrower within the meaning of Section 881(c)(3)(B) of the Code, or (C) a “controlled foreign corporation” described in Section 881(c)(3)(C) of the Code (a “**U.S. Tax Compliance Certificate**”) and (y) executed originals of IRS Form W-8BEN or W-BEN-E; or

(iv) to the extent a Foreign Lender is not the beneficial owner, executed originals of IRS Form W-8IMY, accompanied by IRS Form W-8ECL, IRS Form W-8BEN or W-BEN-E, a U.S. Tax Compliance Certificate substantially in the form of Exhibit 5.9.7(B) or Exhibit 5.9.7(C), IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; provided that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit 5.9.7(D) on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed originals of any other form prescribed by applicable Law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable Law to permit the Borrower or the Administrative Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to the Borrower and the Administrative Agent at the time or times prescribed by law and at such time or times reasonably requested by the Borrower or the Administrative Agent such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by the Borrower or the Administrative Agent as may be necessary for the Borrower and the Administrative Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender’s obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this clause (D), “FATCA” shall include any amendments made to FATCA after the date of this Agreement.

Each Lender agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify the Borrower and the Administrative Agent in writing of its legal inability to do so.

5.9.8 Treatment of Certain Refunds. If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section 5.9 [Taxes] (including by the payment of additional amounts pursuant to this Section 5.9 [Taxes]), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section 5.9 [Taxes] with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant Official Body with respect to such refund). Such indemnifying party, upon the request of such indemnified party incurred in connection with obtaining such refund, shall repay to such indemnified party the amount paid over pursuant to this Section 5.9.8 [Treatment of Certain Refunds] (plus any penalties, interest or other charges imposed by the relevant Official Body) in the event that such indemnified party is required to repay such refund to such Official Body. Notwithstanding anything to the contrary in this Section 5.9.8 [Treatment of Certain Refunds]), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this Section 5.9.8 [Treatment of Certain Refunds] the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This paragraph shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

5.9.9 Survival. Each party's obligations under this Section 5.9 [Taxes] shall survive the resignation of the Administrative Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Commitments and the repayment, satisfaction or discharge of all Obligations.

5.10 Indemnity. In addition to the compensation or payments required by Section 5.8 [Increased Costs] or Section 5.9 [Taxes], the Borrower shall indemnify each Lender against all liabilities, losses or expenses (excluding loss of margin, but including any foreign exchange losses and any loss or expense arising from the liquidation or redeployment of funds obtained by it to maintain such Loan, from fees payable to terminate the deposits from which such funds were obtained or from the performance of any foreign exchange contract) which such Lender sustains or incurs as a consequence of any:

(i) payment, prepayment, conversion or renewal of any Loan to which a Euro-Rate Option applies on a day other than the last day of the corresponding Interest Period (whether or not such payment or prepayment is mandatory, voluntary or automatic and whether or not such payment or prepayment is then due), or any voluntary prepayment without the required notice,

(ii) attempt by the Borrower to revoke (expressly, by later inconsistent notices or otherwise) in whole or part any Loan Requests under Section 2.5 [Revolving Credit Loan Requests; Swing Loan Requests] or Section 4.2 [Interest Periods] or notice relating to prepayments under Section 5.6 [Voluntary Prepayments], or the failure of the Borrower to borrow, convert or continue any Loan under the Euro-Rate Option on the date specified in any notice delivered pursuant hereto (whether or not such notice may be revoked in accordance with the terms hereof),

(iii) any failure of the Borrower to prepay any Loan under the LIBOR Rate Option in accordance with the terms hereof (whether or not such notice may be revoked in accordance with the terms hereof); or

(iv) assignment of such Lender's Loans to which a Euro-Rate Option applies pursuant to Section 5.6.2 [Replacement of a Lender] on a day other than the last day of the Interest Period therefor.

If any Lender sustains or incurs any such loss or expense, it shall from time to time notify the Borrower of the amount determined in good faith by such Lender (which determination may include such assumptions, allocations of costs and expenses and averaging or attribution methods as such Lender shall deem reasonable) to be necessary to indemnify such Lender for such loss or expense. Such notice shall set forth in reasonable detail the basis for such determination. Such amount shall be due and payable by the Borrower to such Lender ten (10) Business Days after such notice is given.

5.11 Settlement Date Procedures. In order to minimize the transfer of funds between the Lenders and the Administrative Agent, the Borrower may borrow, repay and reborrow Swing Loans and PNC may make Swing Loans as provided in Section 2.1.2 [Swing Loan Commitments] hereof during the period between Settlement Dates. The Administrative Agent shall notify each Lender of its Ratable Share of the total of the Revolving Credit Loans and the Swing Loans (each a "Required Share"). On such Settlement Date, each Lender shall pay to the Administrative Agent the amount equal to the difference between its Required Share and its Revolving Credit Loans, and the Administrative Agent shall pay to each Lender its Ratable Share of all payments made by the Borrower to the Administrative Agent with respect to the Revolving Credit Loans. The Administrative Agent may also effect settlement in accordance with the foregoing sentence on the proposed Borrowing Dates for Revolving Credit Loans and on any mandatory prepayment date as provided for herein and may at its option effect settlement on any other Business Day. Nothing contained in this Section 5.11 shall relieve the Lenders of their obligations to fund Revolving Credit Loans on dates other than a Settlement Date pursuant to Section 2.1.2 [Swing Loan Commitment].

5.12 Currency Conversion Procedures for Judgments. If for the purposes of obtaining judgment in any court it is necessary to convert a sum due hereunder in any currency (the "Original Currency") into another currency (the "Other Currency"), the parties hereby agree, to the fullest extent permitted by Law, that the rate of exchange used shall be that at which in accordance with normal lending procedures the Administrative Agent could purchase the Original Currency with the Other Currency after any premium and costs of exchange on the Business Day preceding that on which final judgment is given.

5.13 Indemnity in Certain Events. The obligation of Borrower in respect of any sum due from Borrower to any Lender hereunder shall, notwithstanding any judgment in an Other Currency, whether pursuant to a judgment or otherwise, be discharged only to the extent that, on the Business Day following receipt by any Lender of any sum adjudged to be so due in such Other Currency, such Lender may in accordance with normal lending procedures purchase the Original Currency with such Other Currency. If the amount of the Original Currency so purchased is less than the sum originally due to such Lender in the Original Currency, the Borrower agrees, as a separate obligation and notwithstanding any such judgment or payment, to indemnify such Lender against such loss.

6. REPRESENTATIONS AND WARRANTIES

6.1 Representations and Warranties. The Loan Parties, jointly and severally, represent and warrant to the Administrative Agent and each of the Lenders as follows:

6.1.1 Organization and Qualification; Power and Authority; Compliance With Laws; Title to Properties; Event of Default. Each Loan Party and each Subsidiary of each Loan Party (i) is a corporation, partnership or limited liability company duly organized, validly existing and in good standing under the laws of its jurisdiction of organization, (ii) has the lawful power to own or lease its properties and to engage in the business it presently conducts or proposes to conduct, (iii) is duly licensed or qualified and in good standing in all other jurisdictions where the property owned or leased by it or the nature of the business transacted by it or both makes such licensing or qualification necessary except, in the case of licensing or qualification in jurisdictions other than the state of formation, where failure to be so licensed or qualified could not reasonably be expected to result in a Material Adverse Change, (iv) has full power to enter into, execute, deliver and carry out this Agreement and the other Loan Documents to which it is a party, to incur the Indebtedness contemplated by the Loan Documents and to perform its Obligations under the Loan Documents to which it is a party, and all such actions have been duly authorized by all necessary proceedings on its part, (v) is in compliance in all material respects with all applicable Laws (other than Environmental Laws which are specifically addressed in Section 6.1.14 [Environmental Matters]) in all jurisdictions in which any Loan Party or Subsidiary of any Loan Party is presently or will be doing business except where the failure to do so could not reasonably be expected to constitute a Material Adverse Change, and (vi) has good and marketable title to or valid leasehold interest in all material properties, assets and other rights which it purports to own or lease or which are reflected as owned or leased on its books and records, free and clear of all Liens and encumbrances except Permitted Liens. No Event of Default or Potential Default exists or is continuing.

6.1.2 Subsidiaries and Owners; Investment Companies. As of the Closing Date, Schedule 6.1.2 states (i) the name of each of the Borrower's Subsidiaries, its jurisdiction of organization and the amount, percentage and type of equity interests in such Subsidiary (the "**Subsidiary Equity Interests**"), (ii) the name of each holder of an equity interest in the Borrower, the amount, percentage and type of such equity interest (the "**Borrower Equity Interests**"), and (iii) any options, warrants or other rights outstanding to purchase any such equity interests referred to in clause (i) or (ii) (collectively the "**Equity Interests**"). For the sake of clarity, stock appreciation rights do not constitute Equity Interests or Borrower Equity Interests. The Borrower and each Subsidiary of the Borrower has good and marketable title to

80

all of the Subsidiary Equity Interests it purports to own, free and clear in each case of any Lien (other than Liens in favor of the Administrative Agent) and all such Subsidiary Equity Interests have been validly issued, fully paid and nonassessable. None of the Loan Parties or Subsidiaries of any Loan Party is an "investment company" registered or required to be registered under the Investment Company Act of 1940 or under the "control" of an "investment company" registered or required to be registered under the Investment Company Act of 1940 as such terms are defined in the Investment Company Act of 1940 and shall not become such an "investment company" or under such "control."

6.1.3 Validity and Binding Effect. This Agreement and each of the other Loan Documents (i) has been duly and validly executed and delivered by each Loan Party, and (ii) constitutes, or will constitute, legal, valid and binding obligations of each Loan Party which is or will be a party thereto, enforceable against such Loan Party in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency or other similar laws affecting the enforcement of creditors' rights generally and by general principles of equity relating to enforceability.

6.1.4 No Conflict; Material Agreements; Consents. Neither the execution and delivery of this Agreement or the other Loan Documents by any Loan Party nor the consummation of the transactions herein or therein contemplated or compliance with the terms and provisions hereof or thereof by any of them will conflict with, constitute a default under or result in any breach of (i) the terms and conditions of the certificate of incorporation, bylaws, certificate of limited partnership, partnership agreement, certificate of formation, limited liability company agreement or other organizational documents of any Loan Party or (ii) any Law or any material agreement or instrument or order, writ, judgment, injunction or decree to which any Loan Party or any of its Subsidiaries is a party or by which it or any of its Subsidiaries is bound or to which it is subject, or result in the creation or enforcement of any Lien, charge or encumbrance whatsoever upon any property (now or hereafter acquired) of any Loan Party or any of its Subsidiaries (other than Liens granted under the Loan Documents). There is no default under such material agreement (referred to above), except to the extent that any such default could not reasonably be expected to result in a Material Adverse Change, and none of the Loan Parties or their Subsidiaries is bound by any contractual obligation, or subject to any restriction in any organization document, or any requirement of Law which could reasonably be expected to result in a Material Adverse Change. No consent, approval, exemption, order or authorization of, or a registration or filing with, any Official Body or any other Person is required by any Law or any material agreement in connection with the execution, delivery and carrying out of this Agreement and the other Loan Documents other than those which have been obtained.

6.1.5 Litigation. There are no actions, suits, proceedings or investigations pending or, to the knowledge of any Loan Party, threatened against such Loan Party or any Subsidiary of such Loan Party at law or in equity before any Official Body which individually or in the aggregate could reasonably be expected to result in any Material Adverse Change. None of the Loan Parties or any Subsidiaries of any Loan Party is in violation of any order, writ, injunction or any decree of any Official Body which could reasonably be expected to result in any Material Adverse Change.

81

(i) Historical Statements. The Borrower has delivered to the Administrative Agent copies of its audited consolidated year-end financial statements for and as of the end of the two (2) fiscal years ended December 31, 2017 and December 31, 2018. In addition, the Borrower has delivered to the Administrative Agent copies of its unaudited consolidated financial statements for the 2019 fiscal year and as of the end of the fiscal quarter ended December 31, 2019 (all such statements being collectively referred to as the “**Statements**”). The Statements were compiled from the books and records maintained by the Borrower’s management, are correct and complete in all material aspects and fairly represent, in all material respects, the consolidated financial condition of the Borrower and its Subsidiaries as of the respective dates thereof and the results of operations for the fiscal periods then ended and have been prepared in accordance with GAAP consistently applied, subject (in the case of the December 31, 2019 unaudited statements) to normal year-end audit adjustments (which adjustments would appear with the year-end audited statements) and the absence of footnotes.

(ii) Accuracy of Financial Statements. Neither the Borrower nor any Subsidiary of the Borrower has any liabilities, contingent or otherwise, or forward or long-term commitments that are not disclosed in the Statements or in the notes thereto to the extent required to be disclosed in accordance with GAAP, and except as disclosed therein there are no unrealized or anticipated losses from any commitments of the Borrower or any Subsidiary of the Borrower which may cause a Material Adverse Change. Since December 31, 2019, no Material Adverse Change has occurred.

6.1.7 Margin Stock. None of the Loan Parties or any Subsidiaries of any Loan Party engages or intends to engage principally, or as one of its important activities, in the business of extending credit for the purpose, immediately, incidentally or ultimately, of purchasing or carrying margin stock (within the meaning of Regulation U, T or X as promulgated by the Board of Governors of the Federal Reserve System). No part of the proceeds of any Loan has been or will be used, immediately, incidentally or ultimately, to purchase or carry any margin stock or to extend credit to others for the purpose of purchasing or carrying any margin stock or which is inconsistent with the provisions of the regulations of the Board of Governors of the Federal Reserve System. None of the Loan Parties or any Subsidiary of any Loan Party holds or intends to hold margin stock in such amounts that more than 25% of the reasonable value of the assets of any Loan Party or Subsidiary of any Loan Party are or will be represented by margin stock.

6.1.8 Full Disclosure. Neither this Agreement nor any other Loan Document, nor any certificate, statement, agreement or other documents furnished to the Administrative Agent or any Lender in connection herewith or therewith, taken as a whole with all of the other information so furnished to the Administrative Agent and the Lenders, contained as of the time made or delivered any untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements contained herein and therein, in light of the circumstances under which they were made, not misleading as of the date given (it being recognized by the Administrative Agent and the Lenders that any budgets and projections provided by the Loan Parties are based on good faith estimates and assumptions believed by the Loan Parties to be reasonable as of the date of the applicable budget or projection and that such

budgets and projections are subject to uncertainties and contingencies which may be beyond the control of the Loan Parties and that actual results during the period or periods covered by any such budgets and projections may differ from projected results). As of the Closing Date, there is no fact known to any Loan Party that has resulted in a Material Adverse Change which has not been set forth in this Agreement or in the certificates, statements, agreements or other documents furnished in writing to the Administrative Agent and the Lenders prior to or at the date hereof in connection with the transactions contemplated hereby.

6.1.9 Taxes. All federal tax returns and all material state, local and other tax returns required to have been filed with respect to each Loan Party and each Subsidiary of each Loan Party have been filed, and payment or adequate provision has been made for the payment of all taxes, fees, assessments and other governmental charges which have or may become due pursuant to said returns or to assessments received, except to the extent that such taxes, fees, assessments and other charges are being contested in good faith by appropriate proceedings diligently conducted and for which such reserves or other appropriate provisions, if any, as shall be required by GAAP shall have been made.

6.1.10 Patents, Trademarks, Copyrights, Licenses, Etc. Each Loan Party and each Subsidiary of each Loan Party owns or possesses all the material patents, trademarks, service marks, trade names, copyrights, licenses, registrations, franchises, permits and rights necessary to own and operate its properties and to carry on its business as presently conducted and planned to be conducted by such Loan Party or Subsidiary, without known possible, alleged or actual conflict with the rights of others which could reasonably be expected to result in a material liability to any Loan Party or Subsidiary thereof or result in a Material Adverse Change.

6.1.11 Liens in the Collateral. The Liens in the Collateral granted to the Administrative Agent for the benefit of the Lenders pursuant to the Collateral Documents constitute and will continue to constitute Prior Security Interests. All filing fees and other expenses in connection with the perfection of such Liens have been or will be paid by the Borrower.

6.1.12 Insurance. The properties of each Loan Party and each of its Subsidiaries are insured pursuant to policies and other bonds which are valid and in full force and effect and which provide adequate coverage from reputable and financially sound insurers in amounts sufficient to insure the assets and risks of each such Loan Party and Subsidiary in accordance with prudent business practice in the industry of such Loan Parties and Subsidiaries.

6.1.13 ERISA Compliance.

(i) Each Pension Plan is in compliance in all respects with the applicable provisions of ERISA, the Code and other federal or state Laws except for each noncompliance which could not be reasonably expected to result in a liability to the Borrower and its Subsidiaries in excess of \$500,000 in the aggregate. Each Pension Plan that is intended to qualify under Section 401(a) of the Code has received from the IRS a favorable determination or opinion letter, which has not by its terms expired, that such Pension Plan is so qualified, or such Pension Plan is entitled to rely on an IRS advisory or opinion letter with respect to an IRS-approved master and prototype or volume submitter plan, or a timely application for such a

determination or opinion letter is currently being processed by the IRS with respect thereto; and, to the best knowledge of Borrower, nothing has occurred which would reasonably be expected to prevent, or cause the loss of, such qualification. Borrower and each member of the ERISA Group have made all required contributions to each Pension Plan subject to Sections 412 or 430 of the Code, and no application for a funding waiver or an extension of any amortization period pursuant to Sections 412 or 430 of the Code has been made with respect to any Pension Plan. Neither the Borrower nor any member of the ERISA Group has within the prior five years ceased to sponsor, maintain or make contributions to any Plan or Multiemployer Plan.

(ii) (a) No ERISA Event has occurred or is reasonably expected to occur that individually or in the aggregate could reasonably be expected to result in a liability to the Borrower and its Subsidiaries in excess of \$500,000 in the aggregate; (b) no Pension Plan has any unfunded pension liability (i.e., excess of benefit liabilities over the current value of that Pension Plan's assets, determined pursuant to the assumptions used for funding the Pension Plan for the applicable plan year in accordance with Section 430 of the Code) in an amount in excess of \$500,000 in the aggregate; (c) neither the Borrower nor any member of the ERISA Group has incurred, or reasonably expects to incur, any liability in excess of \$500,000 in the aggregate under Title IV of ERISA with respect to any Pension Plan (other than premiums due and not delinquent under Section 4007 of ERISA); (d) neither the Borrower nor any member of the ERISA Group has incurred, or reasonably expects to incur, any liability in excess of \$500,000 in the aggregate (and no event has occurred which, with the giving of notice under Section 4219 of ERISA, would result in such liability) under Section 4201 of ERISA, with respect to a Multiemployer Plan; (e) neither the Borrower nor any member of the ERISA Group has received notice pursuant to Section 4242(a)(1)(B) of ERISA that a Multiemployer Plan is in reorganization and that additional contributions are due to the Multiemployer Plan pursuant to Section 4243 of ERISA; and (f) neither the Borrower nor any member of the ERISA Group has engaged in a transaction that could reasonably be expected to be subject to Sections 4069 or 4212(c) of ERISA.

6.1.14 Environmental Matters. Each Loan Party is and, to the knowledge of each respective Loan Party, each of its Subsidiaries is and has been in compliance with applicable Environmental Laws, except (i) as disclosed on Schedule 6.1.14, provided that such matters so disclosed could not in the aggregate result in a Material Adverse Change and (ii) for such non-scheduled noncompliance that could not reasonably be expected to result in a liability to the Borrower and its Subsidiaries in excess of \$500,000 in the aggregate.

6.1.15 Solvency. On the Closing Date and after giving effect to the initial Loans hereunder, the Loan Parties taken as a whole are Solvent.

6.1.16 Anti-Terrorism Laws. (i) No Covered Entity or any of its directors or officers or, to the knowledge of such Covered Entity, employees, or (ii) to the knowledge of the Borrower, any agent of the Borrower or any Subsidiary that will act in any capacity in connection with or benefit from the Facilities established hereby, is a Sanctioned Person. No Covered Entity, either in its own right or through any third party, (a) has any of its assets in a Sanctioned Country or in the possession, custody or control of a Sanctioned Person in violation of any Anti-Terrorism Law, (b) does business in or with, or derives any of its income from investments in or transactions with, any Sanctioned Country or Sanctioned Person in violation of

any Anti-Terrorism Law; or (c) engages in any dealings or transactions prohibited by any Anti-Terrorism Law.

6.1.17 Anti-Corruption. Without limiting the provisions of Section 6.1.16 [Anti-Terrorism Laws], the Borrower, any director, officer, agent, employee or other person acting on behalf of the Loan Parties have instituted and maintain policies and procedures designed to promote and achieve continued compliance with the FCPA and any other applicable anti-corruption law.

6.1.18 Certificate of Beneficial Ownership. The Certificate of Beneficial Ownership executed and delivered to the Administrative Agent and the Lenders for the Borrower on or prior to the Closing Date, as updated from time to time in accordance with this Agreement, is accurate, complete and correct as of such date and as of the date any such update is delivered. Each Loan Party acknowledges and agrees that the Certificate of Beneficial Ownership is one of the Loan Documents.

7. CONDITIONS OF LENDING AND ISSUANCE OF LETTERS OF CREDIT

The obligation of each Lender to make Loans and of the Issuing Lender to issue Letters of Credit hereunder is subject to the performance by each of the Loan Parties of its Obligations to be performed hereunder at or prior to the making of any such Loans or issuance of such Letters of Credit and to the satisfaction of the following further conditions:

7.1 First Loans and Letters of Credit

7.1.1 Deliveries. On the Closing Date, the Administrative Agent shall have received each of the following in form and substance satisfactory to the Administrative Agent:

(i) A certificate of each of the Loan Parties signed by an Authorized Officer, dated the Closing Date stating that (x) all representations and warranties of the Loan Parties set forth in this Agreement are true and correct in all material respects (or in all respects with regard to representations and warranties qualified by materiality), (y) no Event of Default or Potential Default exists, and (z) no Material Adverse Change has occurred since December 31, 2019;

(ii) A certificate dated the Closing Date and signed by the Secretary or an Assistant Secretary of each of the Loan Parties, certifying as appropriate as to: (a) all action taken by each Loan Party in connection with this Agreement and the other Loan Documents; (b) the names of the Authorized Officers authorized to sign the Loan Documents and their true signatures; and (c) copies of its organizational documents as in effect on the Closing Date certified (if obtainable by the Closing Date) by the appropriate state official where such documents are filed in a state office together with certificates from the appropriate state officials as to the continued existence and good standing of each Loan Party in each state where organized or qualified to do business;

(iii) This Agreement and each of the other Loan Documents signed by an Authorized Officer of each Loan Party party thereto and all appropriate financing statements and appropriate stock powers and certificates evidencing the pledged Collateral;

(iv) A written opinion of Stradley Ronan Stevens & Young, LLP, as counsel for the Loan Parties, dated the Closing Date, in form and substance reasonably satisfactory to the Administrative Agent and its counsel;

(v) Evidence that adequate insurance required to be maintained under this Agreement is in full force and effect, with additional insured and lender loss payable special endorsements attached thereto in form and substance satisfactory to the Administrative Agent and its counsel naming the Administrative Agent as additional insured and lender loss payee;

(vi) A duly completed Compliance Certificate as of the last day of the fiscal quarter of Borrower most recently ended prior to the Closing Date for which financial statements are available, signed by an Authorized Officer of the Borrower, demonstrating on a pro forma basis (a) compliance with the financial covenants herein (assuming for purposes of the Net Leverage Ratio that the Loans borrowed on the Closing Date were borrowed on the last day of such fiscal quarter);

(vii) Unaudited financial statements of the Borrower for the period ended December 31, 2019, consisting of a consolidated balance sheet as of the end of such fiscal quarter and related consolidated statements of income, stockholders' equity and cash flows for the fiscal quarter then ended and the fiscal year through that date, all in reasonable detail and certified (subject to normal year-end audit adjustments) by the Chief Executive Officer, President or Chief Financial Officer of the Borrower as having been prepared in accordance with GAAP, consistently applied, and setting forth in comparative form the respective financial statements for the corresponding date and period in the previous fiscal year;

(viii) Receipt of and satisfaction by the Lenders with the annual budget of the Borrower for fiscal year 2020, together with all assumptions used in preparing such budget;

(ix) All material consents required to effectuate the transactions contemplated hereby, if any;

(x) Evidence that the Existing Credit Agreement has been terminated, and all outstanding obligations thereunder have been paid and all Liens, if any, securing such obligations have been released;

(xi) Lien, tax and judgment searches in acceptable scope and with results reasonably acceptable to the Administrative Agent;

(xii) An executed Certificate of Beneficial Ownership and such other documentation and other information requested in connection with applicable "know-your-customer" and anti-money laundering rules and regulations, including the USA Patriot Act; and

(xiii) Such other documents in connection with such transactions as the Administrative Agent or its counsel may reasonably request.

7.1.2 Payment of Fees. The Borrower shall have paid all fees and expenses payable on or before the Closing Date as required by this Agreement, the Administrative Agent's Letter or any other Loan Document.

7.2 Each Loan or Letter of Credit. At the time of making any Loans or issuing, extending or increasing any Letters of Credit and after giving effect to the proposed extensions of credit: (i) the representations and warranties of the Loan Parties shall then be true and correct (a) in the case of representations and warranties qualified by materiality, in all respects and (b) otherwise, in all material respects, in each case on and as of such date as if made on and as of such date (except to the extent that such representations and warranties relate to an earlier date in which case such representations and warranties that expressly relate to an earlier date are true and correct, in the case of such representations and warranties qualified by materiality, in all respects, and otherwise in all material respects, as of such earlier date), (ii) no Event of Default or Potential Default shall have occurred and be continuing, (iii) the making of the Loans or issuance, extension or increase of such Letter of Credit shall not contravene any Law applicable to any Loan Party or Subsidiary of any Loan Party or any of the Lenders, (iv) the Borrower shall have delivered to the Administrative Agent a duly executed and completed Loan Request or to the Issuing Lender an application for a Letter of Credit, as the case may be, and (v) in the case of any Loan or Letter of Credit to be denominated in an Optional Currency, there shall not have occurred any change in national or international financial, political or economic conditions or currency exchange rates or exchange controls which in the reasonable opinion of the Administrative Agent, the Required Lenders (in the case of any Loans to be denominated in an Optional Currency) or the Issuing Lender (in the case of any Letter of Credit to be denominated in an Optional Currency) would make it impracticable for such Loan or Letter of Credit to be denominated in the relevant Optional Currency.

8. COVENANTS

The Loan Parties, jointly and severally, covenant and agree that until Payment In Full, the Loan Parties shall comply at all times with the following covenants:

8.1 Affirmative Covenants.

8.1.1 Preservation of Existence, Etc. Each Loan Party shall, and shall cause each of its Subsidiaries to, maintain its legal existence as a corporation, limited partnership or limited liability company and its license or qualification and good standing in each jurisdiction in which its ownership or lease of property or the nature of its business makes such license or qualification necessary, except as otherwise expressly permitted in Section 8.2.6 [Liquidations, Mergers, Etc.] and except, in the case of licensing or qualification in jurisdictions other than the state of organization, where failure to be so licensed or qualified could not reasonably be expected to result in a Material Adverse Change.

8.1.2 Payment of Liabilities, Including Taxes, Etc. Each Loan Party shall, and shall cause each of its Subsidiaries to, duly pay and discharge all liabilities to which it is subject, promptly as and when the same shall become due and payable, except to the extent that such liabilities are being contested in good faith and by appropriate and lawful proceedings diligently conducted and for which such reserve or other appropriate provisions, if any, as shall be required

by GAAP shall have been made, but only to the extent that failure to discharge any such liabilities would not result in any additional liability that would reasonably be expected to result in a Material Adverse Change; provided that the Loan Parties and their Subsidiaries will pay all such liabilities forthwith upon the commencement of proceedings to foreclose any Lien that may have attached as security therefor. Each Loan Party shall, and shall cause each of its Subsidiaries to duly pay and discharge all material taxes, assessments and governmental charges upon it or any of its properties, assets, income or profits, prior to the date on which penalties attach thereto, except to the extent that such taxes, assessments or charges, are being contested in good faith and by appropriate and lawful proceedings diligently conducted and for which such reserve or other appropriate provisions, if any, as shall be required by GAAP shall have been made.

8.1.3 Maintenance of Insurance. Each Loan Party shall, and shall cause each of its Subsidiaries to, insure its properties and assets against loss or damage by fire and such other insurable hazards as such assets are commonly insured (including fire, extended coverage, property damage, workers' compensation, public liability and business interruption insurance) and against other risks (including errors and omissions) in such amounts as similar properties and assets are insured by prudent companies in similar circumstances carrying on similar businesses, and with reputable and financially sound insurers, including self-insurance to the extent customary. The Loan Parties shall comply with the covenants and provide the endorsements set forth on Schedule 8.1.3 relating to property and related insurance policies covering the Collateral.

8.1.4 Maintenance of Properties and Leases. Each Loan Party shall, and shall cause each of its Subsidiaries to, maintain in good repair, working order and condition (ordinary wear and tear excepted) in accordance with the general practice of other businesses of similar character and size, all property material to the conduct of its business.

8.1.5 Visitation Rights. Each Loan Party shall, and shall cause each of its Subsidiaries to, permit any of the officers or authorized employees or representatives of the Administrative Agent or any of the Lenders to visit and inspect during normal business hours (or at any time while a Potential Default or Event of Default exists) any of its properties and to examine and make excerpts from its books and records and discuss its business affairs, finances and accounts with its officers, all in such detail and at such times and as often as any of the Lenders may reasonably request, provided that each Lender shall provide the Borrower and the Administrative Agent with reasonable notice prior to any visit or inspection, provided, further, that the Borrower shall not be obligated to reimburse any Lender for any such visit and, so long as no Event of Default shall have occurred and be continuing, shall only be obligated to reimburse the Administrative Agent for one such visit in any calendar year. Without limiting the generality or comprehensiveness of the foregoing, the Loan Parties specifically agree that following the occurrence and during the continuance of an Event of Default, the Administrative Agent or its designees may conduct field audits of the Loan Parties' assets, operations, financial condition, books and records (including accounts receivable and inventory and the books and records related thereto), the cost of which shall be reimbursed to the Administrative Agent or such designees, as the case may be, by the Loan Parties.

8.1.6 Keeping of Records and Books of Account. The Borrower shall, and shall cause each Subsidiary of the Borrower to, maintain and keep proper books of record and

account which enable the Borrower and its Subsidiaries to issue financial statements in accordance with GAAP and as otherwise required by applicable Laws of any Official Body having jurisdiction over the Borrower or any Subsidiary of the Borrower, and in which full, true and correct entries shall be made in all material respects of all its dealings and business and financial affairs.

8.1.7 Compliance with Laws; Use of Proceeds. Each Loan Party shall, and shall cause each of its Subsidiaries to, comply with all applicable Laws, including all Environmental Laws, in all respects; provided that it shall not be deemed to be a violation of this Section 8.1.7 if any failure to comply with any Law would not result in fines, penalties, remediation costs, other similar liabilities or injunctive relief which in the aggregate could reasonably be expected to result in a Material Adverse Change. The Loan Parties will use the Letters of Credit and the proceeds of the Loans only in accordance with Section 2.8 [Use of Proceeds — Revolving Credit Facility] and Section 3.3 [Use of Proceeds — Term Loan Facility] and as permitted by applicable Law.

8.1.8 Further Assurances. Each Loan Party shall, from time to time, at its expense, faithfully preserve and protect the Administrative Agent's Lien on and Prior Security Interest in the Collateral, whether now owned or hereafter acquired, as a continuing first priority perfected Lien, subject only to Permitted Liens, and shall do such other acts and things as the Administrative Agent in its reasonable discretion may deem necessary or advisable from time to time in order to preserve, perfect and protect the Liens granted under the Loan Documents and to exercise and enforce its rights and remedies thereunder with respect to the Collateral.

8.1.9 Anti-Terrorism Laws; International Trade Law Compliance. (a) No Covered Entity will become a Sanctioned Person, (b) no Covered Entity, either in its own right or through any third party, will (A) have any of its assets in a Sanctioned Country or in the possession, custody or control of a Sanctioned Person in violation of any Anti-Terrorism Law; (B) do business in or with, or derive any of its income from investments in or transactions with, any Sanctioned Country or Sanctioned Person in violation of any Anti-Terrorism Law; (C) engage in any dealings or transactions prohibited by any Anti-Terrorism Law or (D) use the Loans or any of the Letters of Credit to fund any operations in, finance any investments or activities in, or, make any payments to, a Sanctioned Country or Sanctioned Person in violation of any Anti-Terrorism Law (including as any such Anti-Terrorism Law may be applicable to any party hereto), (c) the funds used to repay the Secured Obligations will not be derived from any unlawful activity, (d) each Covered Entity shall comply with all Anti-Terrorism Laws, and (e) the Borrower shall promptly notify the Administrative Agent in writing upon the occurrence of a Reportable Compliance Event.

8.1.10 Keepwell. Each Qualified ECP Loan Party jointly and severally (together with each other Qualified ECP Loan Party) hereby absolutely unconditionally and irrevocably (a) guarantees the prompt payment and performance of all Swap Obligations owing by each Non-Qualifying Party (it being understood and agreed that this guarantee is a guaranty of payment and not of collection), and (b) undertakes to provide such funds or other support as may be needed from time to time by any Non-Qualifying Party to honor all of such Non-Qualifying Party's obligations under this Agreement or any other Loan Document in respect of Swap Obligations (provided, however, that each Qualified ECP Loan Party shall only be liable

under this Section 8.1.10 for the maximum amount of such liability that can be hereby incurred without rendering its obligations under this Section 8.1.10, or otherwise under this Agreement or any other Loan Document, voidable under applicable law, including applicable law relating to fraudulent conveyance or fraudulent transfer, and not for any greater amount). The obligations of each Qualified ECP Loan Party under this Section 8.1.10 shall remain in full force and effect until payment in full of the Obligations and termination of this Agreement and the other Loan Documents. Each Qualified ECP Loan Party intends that this Section 8.1.10 constitute, and this Section 8.1.10 shall be deemed to constitute, a guarantee of the obligations of, and a “keepwell, support, or other agreement” for the benefit of each other Loan Party for all purposes of Section 1a(18)(A)(v)(II) of the CEA.

8.1.11 Control Agreements. As soon as commercially practicable after written request therefor from the Administrative Agent, but in any event within thirty (30) days (or such longer period as the Administrative Agent may permit in its sole discretion) of such request, Borrower shall use commercially reasonable efforts to deliver to the Administrative Agent (i) such executed deposit account control agreements as shall be requested by the Administrative Agent and (ii) a landlord’s waiver for the location of Borrower’s chief executive office, and for each other United States of America location where Borrower’s books and records are located to the extent requested by the Administrative Agent. Notwithstanding anything herein or in any other Loan Document to the contrary, in no event shall any control agreement be required in respect of any Excluded Deposit Account.

8.1.12 Additional Collateral; Joinder of Subsidiaries. (i) With respect to any Collateral acquired after the Closing Date by any Loan Party (other than (x) any property described in paragraph (ii) below, (y) real property interests and (z) property excluded from the scope of the Guarantee and Collateral Agreement (including Excluded Capital Stock, Excluded Deposit Accounts and property excluded by the proviso to Section 4.01(a) of the Guarantee and Collateral Agreement)) as to which the Administrative Agent, for the benefit of the Lenders, does not have a Prior Security Interest under the Collateral Documents, the Borrower shall and shall cause such Loan Party to do the following within ten (10) Business Days or such longer period as the Administrative Agent may permit after the date of acquisition: (a) execute and deliver to the Administrative Agent such amendments to the Collateral Documents as the Administrative Agent reasonably requests in order to grant a continuing Prior Security Interest to the Administrative Agent for the benefit of the Lenders in such personal property, (b) take all actions reasonably requested by the Administrative Agent and required by the Collateral Documents to grant to the Administrative Agent, for the benefit of the Lenders, a Prior Security Interest in such personal property, including the filing of Uniform Commercial Code financing statements in such jurisdictions as may be required by the Collateral Documents or by Law or as may be reasonably requested by the Administrative Agent and (c) execute and deliver to the Administrative Agent any other documents reasonably requested by the Administrative Agent to document its rights hereunder and under the other Loan Documents, provided that no foreign-law governed security documents shall be required.

(ii) With respect to any Subsidiary (including any Subsidiary acquired or formed after the Closing Date), the Loan Parties agree, and agree to cause such Subsidiary to do the following within thirty (30) days or such longer period as the Administrative Agent may permit after such Person becomes a Subsidiary: (a) execute and deliver to the Administrative

Agent such amendments or joinders to this Agreement, the Guarantee and Collateral Agreement and any other Collateral Documents as the Administrative Agent reasonably deems necessary or advisable to grant to the Administrative Agent, for the benefit of the Lenders, a Prior Security Interest in the Capital Stock in such Subsidiary that is directly owned by any Loan Party provided that the Loan Parties shall not be required to grant a Prior Security Interest in more than 65% of the issued and outstanding voting Capital Stock in any first-tier Foreign Subsidiary or any Foreign Subsidiary Holdco (but for the sake of clarity, such security interest shall include 100% of the issued and outstanding non-voting Capital Stock in any first-tier Foreign Subsidiary or Foreign Subsidiary Holdco), (b) deliver to the Administrative Agent the certificates, if any, representing such Capital Stock, together with undated stock powers, in blank, executed and delivered by a duly authorized officer of the relevant Loan Party, (c) cause such Subsidiary (other than a Foreign Subsidiary or Foreign Subsidiary Holdco) (I) to become a party to this Agreement, the Guarantee and Collateral Agreement and any other Collateral Documents as a grantor and Guarantor and (II) to take such actions reasonably necessary and required by the Collateral Documents or requested by the Administrative Agent to grant to the Administrative Agent for the benefit of the Lenders, a Prior Security Interest in the Collateral as described in the Collateral Documents with respect to such Subsidiary, including the filing of Uniform Commercial Code financing statements in such jurisdictions as may be required by the Collateral Documents or by law or as may be reasonably requested by the Administrative Agent, and (d) execute and deliver to the Administrative Agent any other documents reasonably requested by the Administrative Agent to document its rights hereunder and under the other Loan Documents, including such items as are consistent with Section 7 [Conditions of Lending and Issuance of Letters of Credit]. For the avoidance of doubt, notwithstanding any other provision of this Agreement or any other Loan Document nothing in this Section 8.1.12 shall require any Foreign Subsidiary or Foreign Subsidiary Holdco to become an obligor under this Agreement or the other Loan Documents, whether by way of guaranty or otherwise, nor shall it require the pledge of any Equity Interests of Foreign Subsidiaries or Foreign Subsidiary HoldCos other than the pledge by the Loan Parties of the Equity Interests they own directly (but not indirectly) in Foreign Subsidiaries or Foreign Subsidiary HoldCos that represent no more than 65% of the issued and outstanding voting Capital Stock in any such first-tier Foreign Subsidiary or Foreign Subsidiary Holdco and 100% of the issued and outstanding non-voting Capital Stock in any such first-tier Foreign Subsidiary or Foreign Subsidiary Holdco.

This Section shall not require the creation or perfection of pledges of or security interests in, or the obtaining of legal opinions or other deliverables with respect to, particular assets of the Loan Parties (including Capital Stock in any Foreign Subsidiary), or the provision of Guarantees by any Subsidiary, if, and for so long as, the Administrative Agent, in consultation with the Borrower, determines that the cost of creating or perfecting such pledges or security interests in such assets, or obtaining such legal opinions or other deliverables in respect of such assets, or providing such Guarantees (taking into account any adverse tax consequences to the Borrower and its Affiliates (including the imposition of withholding or other material taxes)), shall be excessive in view of the benefits to be obtained by the Lenders therefrom. The Administrative Agent may grant extensions of time for the creation and perfection of security interests in or the obtaining of legal opinions or other deliverables with respect to particular assets or the provision of any Guaranty by any Subsidiary (including extensions beyond the Closing Date or in connection with assets acquired, or Subsidiaries formed or acquired, after the Closing Date) where it determines that such action cannot be accomplished without undue effort or expense by

the time or times at which it would otherwise be required to be accomplished by this Agreement or the Collateral Documents.

8.1.13 Certificate of Beneficial Ownership and Other Additional Information. The Loan Parties shall provide to the Administrative Agent and the Lenders: (i) confirmation of the accuracy of the information set forth in the most recent Certificate of Beneficial Ownership provided to the Administrative Agent and Lenders; (ii) a new Certificate of Beneficial Ownership, in form and substance acceptable to the Administrative Agent and each Lender, when the individual(s) to be identified as a Beneficial Owner have changed; and (iii) such other information and documentation as may reasonably be requested by the Administrative Agent or any Lender from time to time for purposes of compliance by the Administrative Agent or such Lender with applicable laws (including without limitation the USA Patriot Act and other “know your customer” and anti-money laundering rules and regulations), and any policy or procedure implemented by the Administrative Agent or such Lender to comply therewith.

8.1.14 Certified Organizational Documents. To the extent not delivered on or prior to the Closing Date to the Administrative Agent, the Borrower shall use reasonable efforts to deliver to the Administrative Agent as soon as practicable copies of its organizational documents as in effect on the Closing Date certified by the appropriate state official where such documents are filed together with a certificate from the appropriate state officials as to the continued existence and good standing of the Borrower in the state where it is organized.

8.1.15 Financial Projections. To the extent not delivered on or prior to the Closing Date to the Administrative Agent, within forty-five (45) days after the Closing Date (or such longer period as the Administrative Agent may agree in its sole discretion), the Borrower shall deliver to the Administrative Agent financial projections (including pro forma statements of operations and cash flow) for the Borrower and its Subsidiaries for fiscal years 2020 through 2023, together with all assumptions used in preparing such projections.

8.2 Negative Covenants.

8.2.1 Indebtedness. Each of the Loan Parties shall not, and shall not permit any of its Subsidiaries to, at any time create, incur, assume or suffer to exist any Indebtedness, except:

(i) Indebtedness under the Loan Documents;

(ii) Existing Indebtedness as set forth on Schedule 8.2.1 (including any extensions, renewals or replacements thereof; provided there is no increase in the amount thereof (other than by the amount of any premiums and accrued and unpaid interest with respect to the Indebtedness being refinanced and reasonable fees and expenses relating to such extension, renewal or replacement financing), or other significant change in the terms thereof unless otherwise specified on Schedule 8.2.1);

(iii) Indebtedness incurred with respect to Purchase Money Security Interests (including capital leases) in an aggregate principal amount at any time outstanding not to exceed \$10,000,000 (excluding for purposes of such cap, any such Indebtedness with respect to Purchase Money Security Interests listed on Schedule 8.2.1);

(iv) Indebtedness of a Loan Party to another Loan Party;

(v) inter-company Indebtedness to and among Foreign Subsidiaries or a Loan Party and a Foreign Subsidiary, in each case to fund working capital requirements of a Foreign Subsidiary in the ordinary course of business consistent with past practices;

(vi) Any (a) Lender Provided Interest Rate Hedge, (b) Lender Provided Foreign Currency Hedge, (c) other Interest Rate Hedge or Foreign Currency Hedge or (d) Indebtedness under any Other Lender Provided Financial Services Product; provided however, the Loan Parties and their Subsidiaries shall enter into an Interest Rate Hedge or Foreign Currency Hedge only for hedging (rather than speculative) purposes and the documentation for any Interest Rate Hedge shall conform to ISDA standards and, to the extent the provider of any Interest Rate Hedge is provided by a Person other than a Lender or Affiliate thereof, any inter-creditor issues shall be reasonably acceptable to the Administrative Agent;

(vii) Indebtedness of the Loan Parties and their Subsidiaries in an aggregate principal amount not to exceed \$25,000,000 at any time outstanding;

(viii) Indebtedness owing to any depository bank in respect of overdrafts and related liabilities arising from treasury, depository and cash management services or in connection with any automated clearing house transfers of funds;

(ix) Indebtedness consisting of unpaid insurance premiums owing to insurance companies and insurance brokers incurred in connection with the financing of insurance premiums in the ordinary course of business;

(x) Indebtedness owed to (including obligations in respect of letters of credit or bank Guarantees or similar instruments for the benefit of) any Person providing workers' compensation, health, disability or other employee benefits (whether to current or former employees) or property, casualty or liability insurance or self-insurance in respect of such items, or other Indebtedness with respect to reimbursement-type obligations regarding workers' compensation claims, health, disability or other employee benefits (whether current or former) or property, casualty or liability insurance; provided that upon the incurrence of any Indebtedness with respect to reimbursement obligations regarding workers' compensation claims, such obligations are reimbursed not later than 45 days following such incurrence;

(xi) Indebtedness representing deferred compensation to employees of a Borrower or any Subsidiary incurred in the ordinary course of business; and

(xii) Indebtedness of Foreign Subsidiaries in an aggregate principal amount not to exceed \$5,000,000 at any time outstanding.

8.2.2 Liens; Lien Covenants. Each of the Loan Parties shall not, and shall not permit any of its Subsidiaries to, at any time create, incur, assume or suffer to exist any Lien on any of its property or assets, tangible or intangible, now owned or hereafter acquired, or agree or become liable to do so, except Permitted Liens.

8.2.3 Guaranties. Each of the Loan Parties shall not, and shall not permit any of its Subsidiaries to, at any time, directly or indirectly, become or be liable in respect of any Guaranty of Indebtedness of another Person, except for (i) Guaranties of Indebtedness of the Loan Parties permitted hereunder or (ii) Guaranties of Indebtedness of a Foreign Subsidiary permitted hereunder if such Guaranty is provided solely by a Foreign Subsidiary (other than, in each case, in respect of Indebtedness under clause (ii) of Section 8.2.1 [Indebtedness], if such Indebtedness was not guaranteed on the Closing Date).

8.2.4 Loans and Investments. Each of the Loan Parties shall not, and shall not permit any of its Subsidiaries to, at any time make or suffer to remain outstanding any loan or advance to, or purchase, acquire or own any stock, bonds, notes or securities of, or any partnership interest (whether general or limited) or limited liability company interest in, or any other investment or interest in, or make any capital contribution to, any other Person, or agree, become or remain liable to do any of the foregoing, except:

- (i) trade credit extended on usual and customary terms in the ordinary course of business;
- (ii) advances to employees to meet expenses incurred by such employees in the ordinary course of business;
- (iii) Permitted Investments and Permitted Acquisitions;
- (iv) loans and advances to and investments in other Loan Parties;
- (v) loans and advances to and investments in Foreign Subsidiaries in the ordinary course of business;
- (vi) investments listed on Schedule 8.2.4, hereto (but not any additions thereto, including any capital contributions, made after the Closing Date);
- (vii) loans and advances to holders of the Capital Stock of the Borrower in an aggregate amount not to exceed at any time outstanding \$3,000,000, including for purposes of such \$3,000,000 cap, any loans or advances to such holders listed on Schedule 8.2.4;
- (viii) Investments received in connection with the bankruptcy or reorganization of, or settlement of delinquent accounts and disputes with, customers and suppliers, in each case in the ordinary course of business;
- (ix) endorsements of negotiable instruments for deposit or collection in the ordinary course of business;
- (x) Investments made in Joint Ventures in an aggregate amount not to exceed \$10,000,000 at any one time outstanding;
- (xi) obligations under any currency swap agreement, interest rate swap, cap, collar or floor agreement or other interest rate management device that is entered into

for hedging (rather than speculative) purposes, provided that the documentation for any Interest Rate Hedge shall conform to ISDA standards;

(xii) any Investment as required by, or made pursuant to, the terms of the Brazil Acquisition Agreement;

(xiii) Investments constituting the receipt by the Borrower or any Subsidiary of non-cash consideration for any sale of assets permitted under Section 8.2.6 [Liquidations, Mergers, Consolidations, Acquisitions]; and

(xiv) other loans, advances and investments not otherwise provided in clauses (i) through (xiii) above in an aggregate amount not to exceed \$15,000,000 outstanding at any time (after giving effect to any repayment of a loan or advance, or any return of capital or payment of dividends or other distributions on investments).

8.2.5 Dividends and Related Distributions. Each of the Loan Parties shall not, and shall not permit any of its Subsidiaries to, make or pay, or agree to become or remain liable to make or pay, any dividend or other distribution of any nature (whether in cash, property, securities or otherwise) on account of or in respect of its shares of Capital Stock, on account of the purchase, redemption, retirement or acquisition of its shares of Capital Stock (or warrants, options or rights therefor) except (i) dividends or other distributions payable to a Loan Party (or, in the case of a Foreign Subsidiary, a non-wholly owned Subsidiary or Joint Venture, to a Foreign Subsidiary or Loan Party), (ii) the Specified Distribution, (iii) Tax Distributions in connection with any period the Borrower is or was a corporation with Subchapter S status for tax purposes or is or was otherwise taxable as a partnership, (iv) any distribution or redemption in respect of Borrower Equity Interests pursuant to the terms of the Stock Option Agreements and (v) (x) after an IPO has been consummated, additional dividends or distributions made by the Borrower in an aggregate amount not to exceed \$2,000,000 during the term of this Agreement or (y) if an IPO has not been consummated and the Borrower has made the Mandatory TL Prepayment (Unused Proceeds), additional dividends or distributions made by the Borrower, provided that, in the case of this clause (y) only, (A) no Event of Default or Potential Default exists at both the time of declaration and payment of such dividend or distribution and (B) after giving effect to such payment, the Borrower's Liquidity shall not be less than \$15,000,000.

8.2.6 Liquidations, Mergers, Consolidations, Acquisitions. Each of the Loan Parties shall not, and shall not permit any of its Subsidiaries to, dissolve, liquidate or wind-up its affairs, or become a party to any merger or consolidation, or acquire by purchase, lease or otherwise all or substantially all of the Capital Stock of any other Person or all or substantially all of the assets of another Person or constituting a business unit, division, product line or line of business of another Person; provided that:

(i) so long as no Event of Default shall exist or arise after giving effect thereto (a) any Loan Party may consolidate or merge into another Loan Party which is wholly-owned by one or more of the other Loan Parties or may transfer its assets to a Loan Party and thereafter be dissolved, (b) any Foreign Subsidiary may consolidate or merge into (x) a Loan Party so long as such Loan Party is the surviving Person in such consolidation or merger or (y) another Foreign Subsidiary; provided that, if such consolidation or merger involves the

Borrower, the Borrower shall survive such merger or consolidation, and (c) a Foreign Subsidiary may transfer its assets to a Loan Party or other Foreign Subsidiary and thereafter be dissolved;

(ii) any Loan Party may acquire (I) all or substantially all of the Capital Stock of another Person or (II) all or substantially all the assets of another Person or all or substantially all of the assets constituting a business unit, division, product line or line of business of another Person (each “**Permitted Acquisition**”), provided that each of the following requirements is met:

(a) in the case of any purchase or other acquisition of Capital Stock in a Person, such Person will either (x) be merged or consolidated into a Loan Party with such Loan Party being the surviving entity or (y) be a wholly-owned Subsidiary (including as a result of a merger or consolidation between any Subsidiary and such Person) or in the case of any purchase or other acquisition of other assets, such assets will be owned by a Subsidiary of the Borrower;

(b) the Borrower shall, and shall cause each Subsidiary to, comply with Section 8.1.12[Additional Collateral; Joinder of Subsidiaries] and Section 8.2.9 [Subsidiaries and Partnerships] on or before thirty (30) days after the consummation of such Permitted Acquisition (or, if the Administrative Agent consents, such longer period thereafter);

(c) the board of directors or other equivalent governing body of such Person shall have approved such Permitted Acquisition and such Permitted Acquisition was not preceded by or consummated pursuant to, an unsolicited tender offer or proxy contest initiated by or on behalf of the Borrower or any Subsidiary;

(d) the business acquired, or the business conducted by the Person whose ownership interests are being acquired, as applicable, shall be substantially the same as or similar to one or more line or lines of business conducted by the Loan Parties and their Subsidiaries and there shall not be a breach of 8.2.10[Continuation of or Change in Business] after giving effect to such acquisition;

(e) no Potential Default or Event of Default shall exist immediately prior to and after giving effect to such Permitted Acquisition;

(f) the Borrower shall demonstrate that the Loan Parties shall have, after giving effect to any Indebtedness associated with such Permitted Acquisition, a pro forma Net Leverage Ratio that is not greater than 0.25 less than the Net Leverage Ratio required for such period under 8.2.15 [Maximum Net Leverage Ratio];

(g) the Borrower shall demonstrate that the Loan Parties shall have, after giving effect to such Permitted Acquisition and any Loans associated therewith, Liquidity of not less than Fifteen Million Dollars (\$15,000,000);

(h) the Borrower shall deliver to the Administrative Agent at least five (5) Business Days before the consummation of such Permitted Acquisition (or such later date as the Administrative Agent may agree to) all relevant financial information with respect to the Person or assets being acquired provided to the Loan Party by the Person being

acquired or the Person selling such assets. The Borrower shall deliver to the Administrative Agent at least five (5) Business Days (or such shorter period as such be agreed by the Administrative Agent) before such Permitted Acquisition copies of any material agreements entered into or proposed to be entered into by the Loan Parties or their Subsidiaries in connection with such Permitted Acquisition and all other information related to such Permitted Acquisition as reasonably requested by the Administrative Agent; and

(i) the Borrower shall deliver to the Lenders such other information and documentation as may reasonably be requested by the Administrative Agent or any Lender for purposes of compliance by the Administrative Agent or such Lender with applicable laws (including without limitation the USA Patriot Act and other "know your customer" and anti-money laundering rules and regulations), and any policy or procedure implemented by the Administrative Agent or such Lender to comply therewith.

8.2.7 Dispositions of Assets or Subsidiaries. Each of the Loan Parties shall not, and shall not permit any of its Subsidiaries to, sell, convey, assign, lease, abandon or otherwise transfer or dispose of, voluntarily or involuntarily, any of its properties or assets, tangible or intangible (including sale, assignment, discount or other disposition of accounts, contract rights, chattel paper, equipment or general intangibles with or without recourse or of Capital Stock of a Subsidiary of such Loan Party), except:

(i) transactions involving the sale of inventory in the ordinary course of business;

(ii) any sale, transfer, license or lease of assets in the ordinary course of business which are no longer necessary or required in the conduct of such Loan Party's or such Subsidiary's business;

(iii) any sale, transfer, license or lease of assets by any wholly owned Subsidiary of such Loan Party to another Loan Party;

(iv) any sale, transfer, license or lease of assets by any Foreign Subsidiary to another Foreign Subsidiary;

(v) any sale, transfer, license or lease of assets in the ordinary course of business which are replaced by substitute assets acquired, licensed or leased within 180 days of such sale, transfer, license or lease of assets; provided such substitute assets are subject to the Lenders' Prior Security Interest if the assets being sold, transferred, licensed or leased were assets of a Loan Party and subject to the Lenders' Prior Security Interest;

(vi) sales of Permitted Investments (other than Interest Rate Hedges or Foreign Currency Hedges) in the ordinary course of business;

(vii) non-exclusive licenses of intellectual property in the ordinary course of business and licenses of intellectual property to Foreign Subsidiaries of the Borrower consistent with past practice;

(viii) any sale, transfer, license or lease of assets for which the fair market value thereof is less than \$500,000 for any individual transaction or series of transactions; or

(ix) any sale, transfer, license or lease of assets, other than those specifically excepted pursuant to clauses (i) through (viii) above, which results in Net Proceeds in an amount of less than \$25,000,000 in the aggregate with all other sales, transfers, licenses or leases permitted under this clause (ix) occurring from and after the Closing Date, so long as the Net Proceeds are applied as a mandatory prepayment of the Term Loans in accordance with and to the extent required by the provisions of Section 5.7.1 [Sale of Assets].

8.2.8 Affiliate Transactions. Each of the Loan Parties shall not, and shall not permit any of its Subsidiaries to, enter into or carry out any transaction with any Affiliate of any Loan Party (including purchasing property or services from or selling property or services to any Affiliate of any Loan Party or other Person) unless such transaction is not otherwise prohibited by this Agreement, is entered into upon fair and reasonable arm's-length terms and conditions which upon request are fully disclosed to the Administrative Agent and are in accordance with all applicable Law; provided, that nothing contained in this Section 8.2.8 shall prevent (i) any transaction solely between or among Loan Parties not involving any Affiliate of a Loan Party that is not a Loan Party, (ii) any transaction solely between or among Foreign Subsidiaries, (iii) transactions between or among wholly-owned Subsidiaries for the purchase or sale of goods, products, parts and services entered into in the ordinary course of business in a manner consistent with past practice, (iv) any Indebtedness permitted under Section 8.2.1(iv) or (v) [Indebtedness], any Guaranty permitted under Section 8.2.3 [Guaranties], any investment permitted under Section 8.2.4(ii), (iv), (v) or (vii) [Loans and Investments], any distribution, redemption or other payment permitted under Section 8.2.5 [Dividends and Related Distributions], any merger or consolidation permitted under clause (i) of Section 8.2.6 [Liquidations, Mergers, Consolidations, Acquisitions], or any transaction permitted under Section 8.2.12 [Issuance of Equity Interests], (v) payment of salary and bonus in the ordinary course of business to officers of the Loan Parties and their Subsidiaries, (vi) payment of reasonable compensation and expense reimbursements to directors in connection with their services as directors in the ordinary course of business, (vii) any transaction contemplated by the Brazil Acquisition Agreement, (viii) after the occurrence of an IPO, the issuance of Capital Stock of the Borrower to the management of the Borrower or any Subsidiary pursuant to other employment arrangements of the Borrower or any Subsidiary, (ix) fees and compensation paid and benefits provided to, and customary indemnity and reimbursement provided on behalf of, officers, directors, employees, agents or consultants of the Loan Parties or any of their Subsidiaries in the ordinary course of business, and (x) any other individual transaction or series of transactions that involve an amount not to exceed \$250,000.

8.2.9 Subsidiaries and Partnerships. Each of the Loan Parties shall not, and shall not permit any of its Subsidiaries to own or create directly or indirectly any Subsidiaries other than (i) any Subsidiary which has joined this Agreement as Guarantor on the Closing Date or is a Foreign Subsidiary as of the Closing Date, (ii) any Domestic Subsidiary formed or acquired after the Closing Date which joins this Agreement as a Guarantor pursuant to, and the Borrower otherwise complies with, Section 8.1.12 [Additional Collateral; Joinder of Subsidiaries], (iii) any Foreign Subsidiary or Foreign Subsidiary Holdco formed or acquired after the Closing Date so long as the Capital Stock of any first-tier Foreign Subsidiaries or Foreign

Subsidiary Holdco is pledged pursuant to Section 8.1.12 [Additional Collateral; Joinder of Subsidiaries, or (iv) any Subsidiary that is a Joint Venture for which the arrangements with respect thereto are not prohibited hereunder.

8.2.10 Continuation of or Change in Business. Each of the Loan Parties shall not, and shall not permit any of its Subsidiaries to, engage in any business other than such business which are substantially as conducted and operated by such Loan Party or Subsidiary as of the Closing Date or any business activity that is a reasonable extension, development or expansion thereof or ancillary thereto.

8.2.11 Fiscal Year. Other than in connection with the IPO, the Borrower shall not, and shall not permit any Subsidiary of the Borrower to, change its fiscal year from the twelve-month period beginning January 1 and ending December 31.

8.2.12 Issuance of Stock. Each of the Loan Parties shall not, and shall not permit any of its Subsidiaries to, issue any additional shares of its Capital Stock or any options, warrants or other rights in respect thereof; provided that the foregoing shall not prohibit issuance by the Borrower of additional shares in the Borrower or options therefor (including in connection with an IPO, common stock split transactions or in accordance with the Stock Option Agreements) so long as such issuance does not result in a Change of Control.

8.2.13 Changes in Organizational Documents. Each of the Loan Parties shall not, and shall not permit any of its Subsidiaries to, (i) other than in connection with the IPO, amend its certificate of incorporation (including any provisions or resolutions relating to Capital Stock), by-laws, certificate of limited partnership, partnership agreement, certificate of formation, limited liability company agreement or other organizational documents in a manner that would reasonably be expected to be materially adverse to the Lenders or (ii) change its official name or its jurisdiction of incorporation or organization without providing at least ten (10) calendar days' prior written notice to the Administrative Agent (or such shorter period as the Administrative Agent shall agree in its sole discretion) and, in the event such change would be adverse to the Lenders as determined by the Administrative Agent in its reasonable discretion, obtaining the prior written consent of the Required Lenders.

8.2.14 Minimum Fixed Charge Coverage Ratio/Minimum Interest Coverage Ratio.

(i) Minimum Fixed Charge Coverage Rate. Until both an IPO has been consummated and no Term Loans remain outstanding, the Loan Parties shall not permit the Fixed Charge Coverage Ratio, calculated as of the end of each fiscal quarter, to be less than (a) for any fiscal quarter ending on or before the occurrence of a Mandatory TL Prepayment (Unused Proceeds), 1.15 to 1.0, and (b) for any fiscal quarter ending after the occurrence of a Mandatory TL Prepayment (Unused Proceeds), 1.35 to 1.00, provided that, for purposes of this clause (b), the Fixed Charge Coverage Ratio shall be calculated by giving effect to the prepayment with respect to the Mandatory TL Prepayment (Unused Proceeds) as if such prepayment was made on the Closing Date.

(ii) Minimum Interest Coverage Ratio. From and after the date that both an IPO has been consummated and no Term Loans remain outstanding, the Loan Parties shall not permit the Interest Coverage Ratio, calculated as of the end of each fiscal quarter, to be less than 3.50 to 1.0.

8.2.15 Maximum Net Leverage Ratio. The Loan Parties shall not permit the Net Leverage Ratio, calculated as of the end of each fiscal quarter, to exceed (i) for any fiscal quarter ending on or before the occurrence of a Mandatory TL Prepayment (Unused Proceeds), the ratio set forth below for the periods specified below:

<u>Fiscal Quarter End</u>	<u>Ratio</u>
March 31, 2020 through December 31, 2020	3.50 to 1.00
March 31, 2021 through June 30, 2021	3.25 to 1.00
September 30, 2021 or thereafter	3.00 to 1.00

and (ii) for any fiscal quarter ending after the occurrence of a Mandatory TL Prepayment (Unused Proceeds), 3.00 to 1.00.

8.2.16 Limitation on Negative Pledges. Each of the Loan Parties shall not, and shall not permit any Subsidiary to, enter into or suffer to exist or become effective any agreement that prohibits or limits the ability of any Loan Party or any of its Subsidiaries to create, incur, assume or suffer to exist any Lien upon any of its property or revenues, whether now owned or hereafter acquired, to secure the Secured Obligations, other than (i) this Agreement and the other Loan Documents, (ii) pursuant to an agreement in connection with a sale of assets (including Capital Stock in Subsidiaries) permitted by Section 8.2.7 [Disposition of Assets or Subsidiaries] and any such prohibitions or limitations apply only to the property subject to such sale (and, in the case of a sale of the Capital Stock in a Subsidiary, the property of such Subsidiary), (iii) pursuant to a contract, license or lease entered into pursuant to the reasonable business requirements of such Loan Party or Subsidiary which includes customary provisions prohibiting or restricting assignment or the granting of Liens on the rights contained therein, (iv) any agreements governing any Purchase Money Security Interests otherwise permitted hereby (in which case, any prohibition or limitation shall only be effective against the assets financed thereby), (v) customary provisions restricting assignment of any licensing agreement (in which a Loan Party or its Subsidiaries are the licensee) with respect to a contract entered into by a Loan Party or its Subsidiaries in the ordinary course of business, (vi) customary provisions restricting subletting, sublicensing or assignment of any intellectual property license or any lease governing any leasehold interests of a Loan Party and its Subsidiaries, (vii) customary provisions in joint venture agreements and other similar agreements not prohibited under this Agreement, and (viii) restrictions in debt agreements solely on the assets of any Foreign Subsidiary with respect to Indebtedness incurred by such Foreign Subsidiary.

8.2.17 Limitation on Restrictions on Subsidiary Distributions. Each Loan Party shall not, and shall not permit any of its Subsidiaries to, enter into or suffer to exist or become

100

effective any consensual encumbrance or restriction on the ability of any Subsidiary of any Loan Party to (i) pay dividends or make any other distributions in respect of any Capital Stock of such Subsidiary held by, or pay any Indebtedness owed to, any Loan Party or any Subsidiary of any Loan Party, (ii) make loans or advances to any Loan Party or any Subsidiary of any Loan Party or (iii) transfer any of its assets to any Loan Party or any Subsidiary of any Loan Party, except for such encumbrances or restrictions existing under or by reason of (a) any restrictions existing under the Loan Documents, (b) any restrictions with respect to any Loan Party or any Subsidiary thereof imposed pursuant to an agreement which has been entered into in connection with a Lien permitted by clause (viii) of the definition of Permitted Liens or a sale of assets permitted by Section 8.2.7 [Disposition of Assets or Subsidiaries] and any such prohibitions or limitations apply only to the property encumbered by such Lien or subject to such sale, (c) restrictions with respect to any Subsidiary contained in any agreement for the sale of such Subsidiary or its assets permitted by Section 8.2.7 [Disposition of Assets or Subsidiaries], (d) customary provisions contained in a contract, license or lease prohibiting or restricting the assignment, subleasing or sublicensing thereof and, with respect to clause (iii) of this Section 8.2.17, other prohibitions on assignment expressly permitted by Section 8.2.16 [Limitation on Negative Pledge], (e) customary provisions contained in joint venture agreements and other similar agreements applicable to Joint Ventures not prohibited by this Agreement, and (f) restrictions in debt agreements solely on the assets of any Foreign Subsidiary with respect to Indebtedness incurred by such Foreign Subsidiary.

8.2.18 Anti-Corruption. Each of the Loan Parties shall not permit (and shall cause each of its Subsidiaries and its or their respective directors, officers, employees and agents not to permit) any part of the proceeds of the Loans to be used, directly or indirectly, in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any Person in violation of the FCPA or any other applicable anti-corruption law or applicable Anti-Terrorism Laws. The Borrower and its Subsidiaries will maintain in effect policies and procedures designed to promote compliance by the Borrower, its Subsidiaries, and their respective directors, officers, employees and agents with the FCPA and any other applicable anti-corruption laws or applicable Anti-Terrorism Laws.

8.2.19 Division/Series Transaction. The Loan Parties shall not permit, without the written consent of the Administrative Agent in its sole discretion, any Division/Series Transaction.

8.2.20 Restriction on Transfer of Intellectual Property. Each of the Loan Parties shall not transfer any copyright (including copyright applications), copyright license, patent (including patent applications), patent license, trademark (including trademark applications) or trademark license or any other intellectual property to any Subsidiary that is not a Loan Party or to any Joint Venture during the term of this Agreement other than any non-exclusive license in the ordinary course of business so long as the Loan Parties retain all rights required for or material to the operation of their businesses, unless consented to in writing by the Administrative Agent in its sole discretion.

8.3 Reporting Requirements. The Loan Parties will furnish or cause to be furnished to the Administrative Agent and each of the Lenders:

101

8.3.1 Quarterly Financial Statements. Within forty-five (45) calendar days after the end of each of the first three fiscal quarters in each fiscal year, financial statements of the Borrower, consisting of a consolidated balance sheet as of the end of such fiscal quarter and related consolidated statements of income, stockholders' equity and cash flows for the fiscal quarter then ended and the fiscal year through that date, all in reasonable detail and certified (subject to normal year-end audit adjustments) by an Authorized Officer of the Borrower as having been prepared in accordance with GAAP, consistently applied, and setting forth in comparative form the respective financial statements for the corresponding date and period in the previous fiscal year.

8.3.2 Annual Financial Statements. Within one hundred twenty (120) days after the end of each fiscal year of the Borrower, audited financial statements of the Borrower consisting of a consolidated balance sheet as of the end of such fiscal year, and related consolidated statements of income, stockholders' equity and cash flows for the fiscal year then ended, all in reasonable detail and setting forth in comparative form the financial statements as of the end of and for the preceding fiscal year, and certified by independent certified public accountants reasonably satisfactory to the Administrative Agent (provided that the Administrative Agent agrees that Crowe LLP is satisfactory to the Administrative Agent). The certificate or report of accountants shall be free of qualifications (other than any consistency qualification that may result from a change in the method used to prepare the financial statements as to which such accountants concur and any qualification pertaining to impending debt maturities of any Indebtedness occurring within twelve (12) months of such audit) and shall not indicate the occurrence or existence of any event, condition or contingency which would materially impair the prospect of payment or performance of any covenant, agreement or duty of any Loan Party under any of the Loan Documents.

8.3.3 Certificate of the Borrower. Concurrently with the financial statements of the Borrower furnished to the Administrative Agent and to the Lenders pursuant to Sections 8.3.1 [Quarterly Financial Statements] and 8.3.2 [Annual Financial Statements], a certificate (each a "**Compliance Certificate**") of the Borrower signed by an Authorized Officer of the Borrower, in the form of Exhibit 8.3.3.

8.3.4 Notices.

8.3.4.1 Default. Promptly after any officer of any Loan Party has learned of the occurrence of an Event of Default or Potential Default, a certificate signed by an Authorized Officer setting forth the details of such Event of Default or Potential Default and the action which such Loan Party proposes to take with respect thereto.

8.3.4.2 Litigation. Promptly after the commencement thereof, notice of all actions, suits, proceedings or investigations before or by any Official Body or any other Person against any Loan Party or Subsidiary of any Loan Party which challenges any Lien on Collateral or that in any manner questions the validity of any Loan Document, involves a claim or series of claims that could reasonably be expected to result in liability in excess of \$5,000,000 (not fully covered by insurance from a reputable insurance company that has not denied coverage) or which could reasonably be expected to constitute a Material Adverse Change *provided*, however, no later than the date that financial statements are required to be

delivered pursuant to Sections 8.3.1 [Quarterly Financial Statements] and 8.3.2 [Annual Financial Statements], the Borrower shall advise the Administrative Agent of any claim or series of claims in excess of \$5,000,000 (not fully covered by insurance from a reputable insurance company that has not denied coverage).

8.3.4.3 Organizational Documents. Within the time limits set forth in Section 8.2.13 [Changes in Organizational Documents], any amendment to the organizational documents of any Loan Party.

8.3.4.4 Erroneous Financial Information. Promptly in the event that the Borrower or its accountants conclude or advise that any previously issued financial statement, audit report or interim review should no longer be relied upon (excluding ordinary course year-end adjustments) or that disclosure should be made or action should be taken to prevent future reliance, notice in writing setting forth the details thereof and the action which the Borrower proposes to take with respect thereto.

8.3.4.5 ERISA Event. Promptly after the occurrence of any ERISA Event, notice in writing setting forth the details thereof and the action which the Borrower proposes to take with respect thereto.

8.3.4.6 Other Reports. Promptly upon their becoming available to the Borrower:

(i) Annual Budget. The annual budget of the Borrower, to be supplied not later than one hundred twenty (120) days [after the commencement of the fiscal year to which any of the foregoing may be applicable],

(ii) [Reserved].

(iii) Other Information. Such other reports and information as the Administrative Agent may from time to time reasonably request.

8.3.4.1 SEC Filings. After the occurrence of an IPO, and not prior to, promptly after the same become publicly available, copies of all periodic and other reports, proxy statements and other materials filed by the Borrower or any Subsidiary with the SEC or with any national securities exchange, or distributed by the Borrower to its shareholders generally, as the case may be.

9. DEFAULT

9.1 Events of Default. An Event of Default shall mean the occurrence or existence of any one or more of the following events or conditions (whatever the reason therefor and whether voluntary, involuntary or effected by operation of Law):

9.1.1 Payments Under Loan Documents. The Borrower shall fail to pay (i) any principal of any Loan (including scheduled installments, mandatory prepayments or the payment due at maturity), Reimbursement Obligation or Letter of Credit Obligation on the date such principal or other amount becomes due in accordance with the terms hereof or thereof or

(ii) any interest on any Loan, Reimbursement Obligation or Letter of Credit Obligation or any other amount owing hereunder or under the other Loan Documents within three (3) Business Days after any such interest or other amount becomes due in accordance with the terms hereof or thereof;

9.1.2 Breach of Warranty. Any representation or warranty made at any time by any of the Loan Parties herein or by any of the Loan Parties in any other Loan Document, or in any certificate, other instrument or statement furnished pursuant to the provisions hereof or thereof, shall prove to have been false or misleading in any material respect (or, in the case of any such representation or warranty qualified as to the materiality, in any respect) as of the time it was made or furnished;

9.1.3 Anti-Terrorism Laws. Any representation or warranty contained in Section 6.1.16 [Anti-Terrorism Laws] is or becomes false or misleading at any time;

9.1.4 Breach of Negative Covenants, Visitation Rights or Anti-Terrorism Laws. Any of the Loan Parties shall default in the observance or performance of any covenant contained in Section 8.1.5 [Visitation Rights], Section 8.1.9 [Anti-Terrorism Laws; International Trade Law Compliance] or Section 8.2 [Negative Covenants];

9.1.5 Breach of Other Covenants. Any of the Loan Parties shall default in the observance or performance of (i) any covenant contained in Section 8.3.1 [Quarterly Financial Statements], 8.3.2 [Annual Financial Statements], 8.3.3 [Certificate of the Borrowers], or 8.3.4.6(i) [Annual Budget], and such default shall continue unremedied for a period of five (5) Business Days after the date when due or (ii) any covenant, condition or provision hereof or of any other Loan Document (other than those specified in Sections 9.1.1, 9.1.2, 9.1.3, 9.1.4 and 9.1.5(i)) and such default shall continue unremedied for a period of thirty (30) days;

9.1.6 Defaults in Other Agreements or Indebtedness. A default or event of default shall occur at any time under the terms of any other agreement involving borrowed money or the extension of credit or any other Indebtedness under which any Loan Party or Subsidiary of any Loan Party may be obligated as a borrower or guarantor in excess of \$10,000,000 in the aggregate, and such breach, default or event of default consists of the failure to pay (beyond any period of grace permitted with respect thereto, whether waived or not) any Indebtedness when due (whether at stated maturity, by acceleration or otherwise) or if such breach or default permits or causes the acceleration of any Indebtedness (whether or not such right shall have been waived) or the termination of any commitment to lend;

9.1.7 Final Judgments or Orders. One or more final judgments or orders for the payment of money in excess of \$10,000,000 in the aggregate (exclusive of (i) any such judgment covered by insurance (other than under a self-insurance program) provided by a financially sound insurer to the extent a claim therefor has been made in writing and liability therefor has not been denied by such insurer, and (ii) any customary deductible payable in connection therewith), shall be rendered against any Loan Party or any Subsidiary thereof or any combination thereof by a court having jurisdiction in the premises, which judgment is not discharged, vacated, bonded or stayed pending appeal within a period of thirty (30) days from the date of entry;

9.1.8 Loan Document Unenforceable. Any of the Loan Documents shall cease to be legal, valid and binding agreements enforceable against the party executing the same or such party's successors and assigns (as permitted under the Loan Documents) in accordance with the respective terms thereof or shall in any way be terminated (except in accordance with its terms) or become or be declared ineffective or inoperative or shall in any way be challenged or contested by a Loan Party or Subsidiary or Affiliate thereof or cease to give or provide the respective Liens, security interests, rights, titles, interests, remedies, powers or privileges intended to be created thereby;

9.1.9 Uninsured Losses; Proceedings Against Assets. There shall occur any material uninsured damage to or loss, theft or destruction of any of the Collateral in excess of \$10,000,000 in the aggregate or Collateral in excess of \$10,000,000 in the aggregate, seized, levied upon or subjected to a writ or distress warrant; or such come within the possession of any receiver, trustee, custodian or assignee for the benefit of creditors and the same is not cured within thirty (30) days thereafter;

9.1.10 Events Relating to Pension Plans and Multiemployer Plans. An ERISA Event occurs with respect to a Pension Plan which has resulted or could reasonably be expected to result in liability of the Borrower or any member of the ERISA Group under Title IV of ERISA to the Pension Plan or the PBGC in an aggregate amount in excess of \$1,000,000, or the Borrower or any member of the ERISA Group fails to pay when due, after the expiration of any applicable grace period, any installment payment with respect to its withdrawal liability under Section 4201 of ERISA under a Multiemployer Plan, where the aggregate amount of unamortized withdrawal liability is in excess of \$1,000,000;

9.1.11 Change of Control. A Change of Control shall occur; or

9.1.12 Relief Proceedings. A Relief Proceeding shall have been instituted against any Loan Party or Subsidiary of a Loan Party and such Relief Proceeding shall remain undismissed or unstayed and in effect for a period of sixty (60) consecutive days or such court shall enter a decree or order granting any of the relief sought in such Relief Proceeding, (ii) any Loan Party or Subsidiary of a Loan Party institutes, or takes any action in furtherance of, a Relief Proceeding, or (iii) the Loan Parties or the Loan Parties and their Subsidiaries cease to be Solvent or any of them admits in writing its inability to pay its debts as they mature.

9.2 Consequences of Event of Default.

9.2.1 Events of Default Other Than Bankruptcy, Insolvency or Reorganization Proceedings. If an Event of Default specified under Sections 9.1.1 through 9.1.11 shall occur and be continuing, the Lenders and the Administrative Agent shall be under no further obligation to make Loans and the Issuing Lender shall be under no obligation to issue Letters of Credit and the Administrative Agent may, with the consent of the Required Lenders, and upon the request of the Required Lenders shall, (i) by written notice to the Borrower, declare the commitments of each Lender to make Loans and any obligation of the Issuing Lender to issue, amend or extend Letters of Credit to be terminated, whereupon such commitments and obligation shall be terminated, (ii) by written notice to the Borrower, declare the unpaid principal amount of the Notes then outstanding and all interest accrued thereon, any unpaid fees and all

other Indebtedness of the Borrower to the Lenders hereunder and thereunder to be forthwith due and payable, and the same shall thereupon become and be immediately due and payable to the Administrative Agent for the benefit of each Lender without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived, and (iii) require the Borrower to, and the Borrower shall thereupon, deposit in a non-interest-bearing account with the Administrative Agent, as cash collateral for its Obligations under the Loan Documents, an amount in Dollars equal to the Dollar Equivalent maximum amount currently or at any time thereafter available to be drawn on all outstanding Letters of Credit, and the Borrower hereby pledges to the Administrative Agent and the Lenders, and grants to the Administrative Agent and the Lenders a security interest in, all such cash as security for such Obligations; and

9.2.2 Bankruptcy, Insolvency or Reorganization Proceedings. If an Event of Default specified under Section 9.1.12 [Relief Proceedings] shall occur, the Lenders shall be under no further obligations to make Loans hereunder and the Issuing Lender shall be under no obligation to issue Letters of Credit and the unpaid principal amount of the Loans then outstanding and all interest accrued thereon, any unpaid fees and all other Indebtedness of the Borrower to the Lenders hereunder and thereunder shall be immediately due and payable, without presentment, demand, protest or notice of any kind, all of which are hereby expressly waived; and

9.2.3 Set-off. If an Event of Default shall have occurred and be continuing, each Lender, the Issuing Lender, and each of their respective Affiliates and any participant of such Lender or Affiliate which has agreed in writing to be bound by the provisions of Section 5.3 [Sharing of Payments by Lenders] is hereby authorized at any time and from time to time, to the fullest extent permitted by applicable Law, to set off and apply any and all deposits (general or special, time or demand, provisional or final, in whatever currency) at any time held and other obligations (in whatever currency) at any time owing by such Lender, the Issuing Lender or any such Affiliate or participant to or for the credit or the account of any Loan Party against any and all of the Obligations of such Loan Party now or hereafter existing under this Agreement or any other Loan Document to such Lender, the Issuing Lender, Affiliate or participant, irrespective of whether or not such Lender, Issuing Lender, Affiliate or participant shall have made any demand under this Agreement or any other Loan Document and although such Obligations of the Borrower or such Loan Party may be contingent or unmaturing or are owed to a branch or office of such Lender or the Issuing Lender different from the branch or office holding such deposit or obligated on such Indebtedness, provided that in the event that any Defaulting Lender shall exercise any such right of setoff, (x) all amounts so set off shall be paid over immediately to the Administrative Agent for further application in accordance with the provisions of Section 2.10 [Defaulting Lenders] and, pending such payment, shall be segregated by such Defaulting Lender from its other funds and deemed held in trust for the benefit of the Administrative Agent, the Issuing Lender and the Lenders, and (y) such Defaulting Lender shall provide promptly to the Administrative Agent a statement describing in reasonable detail the Obligations owing to such Defaulting Lender as to which it exercised such right of setoff. The rights of each Lender, the Issuing Lender and their respective Affiliates and participants under this Section are in addition to other rights and remedies (including other rights of setoff) that such Lender, the Issuing Lender or their respective Affiliates and participants may have. Each Lender and the Issuing Lender agrees to notify the Borrower and the Administrative Agent promptly after any such

setoff and application; provided that the failure to give such notice shall not affect the validity of such setoff and application; and

9.2.4 Application of Proceeds. From and after the date on which the Administrative Agent has taken any action pursuant to this Section 9.2 and until Payment in Full, any and all proceeds received by the Administrative Agent from any sale or other disposition of the Collateral, or any part thereof, or the exercise of any other remedy by the Administrative Agent, shall be applied as follows:

(i) First, to payment of that portion of the Secured Obligations constituting fees, indemnities, expenses and other amounts, including attorney fees, payable to the Administrative Agent in its capacity as such, the Issuing Lender in its capacity as such and the Swing Loan Lender in its capacity as such, ratably among the Administrative Agent, the Issuing Lender and Swing Loan Lender in proportion to the respective amounts described in this clause First payable to them;

(ii) Second, to payment of that portion of the Secured Obligations constituting fees, indemnities and other amounts (other than principal and interest) payable to the Lenders under the Loan Documents, including attorney fees, ratably among the Lenders in proportion to the respective amounts described in this clause Second payable to them;

(iii) Third, to payment of that portion of the Secured Obligations constituting accrued and unpaid interest on the Loans and Reimbursement Obligations, ratably among the Lenders in proportion to the respective amounts described in this clause Third payable to them;

(iv) Fourth, to payment of that portion of the Secured Obligations constituting unpaid principal of the Loans, Reimbursement Obligations and payment obligations then owing under Lender Provided Interest Rate Hedges, Lender Provided Foreign Currency Hedges, and Other Lender Provided Financial Service Products, ratably among the Lenders, the Issuing Lender, and the Lenders or Affiliates of Lenders which provide Lender Provided Interest Rate Hedges, Lender Provided Foreign Currency Hedges, and Other Lender Provided Financial Service Products, in proportion to the respective amounts described in this clause Fourth held by them;

(v) Fifth, to the Administrative Agent for the account of the Issuing Lender, to cash collateralize any undrawn amounts under outstanding Letters of Credit; and

(vi) Last, the balance, if any, after all of the Secured Obligations have been Paid in Full, to the Loan Parties or as required by Law.

Amounts used to cash collateralize the aggregate undrawn amount of Letters of Credit pursuant to clause Fifth above shall be applied to satisfy drawings under such Letters of Credit as they occur. If any amount remains on deposit as cash collateral after all Letters of Credit have either been fully drawn or expired, such remaining amount shall be applied to the other Obligations, if any, in the order specified above.

Notwithstanding anything to the contrary in this Section 9.2.4, no Swap Obligations of any Non-Qualifying Party shall be paid with amounts received from such Non-Qualifying Party under the Guarantee and Collateral Agreement (including sums received as a result of the exercise of remedies with respect to such Guarantee and Collateral Agreement) or from the proceeds of such Non-Qualifying Party's Collateral if such Swap Obligations would constitute Excluded Hedge Liabilities; provided, however, that to the extent possible appropriate adjustments shall be made with respect to payments and/or the proceeds of Collateral from other Loan Parties that are Eligible Contract Participants with respect to such Swap Obligations to preserve the allocation to the Secured Obligations otherwise set forth above in this Section 9.2.4.

10. THE ADMINISTRATIVE AGENT

10.1 Appointment and Authority. Each of the Lenders and the Issuing Lender hereby irrevocably appoints PNC to act on its behalf as the Administrative Agent hereunder and under the other Loan Documents and authorizes the Administrative Agent to take such actions on its behalf and to exercise such powers as are delegated to the Administrative Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto. The provisions of this Section 10 are solely for the benefit of the Administrative Agent, the Lenders and the Issuing Lender, and neither the Borrower nor any other Loan Party shall have rights as a third party beneficiary of any of such provisions. It is understood and agreed that the use of the term "agent" herein or in any other Loan Documents (or any other similar term) with reference to the Administrative Agent is not intended to connote any fiduciary or other implied (or express) obligations arising under agency doctrine of any applicable law. Instead such term is used as a matter of market custom, and is intended to create or reflect only an administrative relationship between contracting parties.

10.2 Rights as a Lender. The Person serving as the Administrative Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not the Administrative Agent and the term "Lender" or "Lenders" shall, unless otherwise expressly indicated or unless the context otherwise requires, include the Person serving as the Administrative Agent hereunder in its individual capacity. Such Person and its Affiliates may accept deposits from, lend money to, act as the financial advisor or in any other advisory capacity for and generally engage in any kind of business with the Borrower or any Subsidiary or other Affiliate thereof as if such Person were not the Administrative Agent hereunder and without any duty to account therefor to the Lenders.

10.3 Exculpatory Provisions. The Administrative Agent shall not have any duties or obligations except those expressly set forth herein and in the other Loan Documents and its duties shall be administrative in nature. Without limiting the generality of the foregoing, the Administrative Agent:

has occurred and is continuing; (a) shall not be subject to any fiduciary or other implied duties, regardless of whether a Potential Default or Event of Default

and powers expressly (b) shall not have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights

contemplated hereby or by the other Loan Documents that the Administrative Agent is required to exercise as directed in writing by the Required Lenders (or such other number or percentage of the Lenders as shall be expressly provided for herein or in the other Loan Documents); provided that the Administrative Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose the Administrative Agent to liability or that is contrary to any Loan Document or applicable Law, including for the avoidance of doubt any action that may be in violation of the automatic stay under any bankruptcy, insolvency or other relief proceeding referred to in Section 9.1.12 [Relief Proceedings] or that may affect a forfeiture, modification or termination of property of a Defaulting Lender in violation of any such proceeding or applicable law; and

(c) shall not, except as expressly set forth herein and in the other Loan Documents, have any duty to disclose, and shall not be liable for the failure to disclose, any information relating to the Borrower or any of its Affiliates that is communicated to or obtained by the Person serving as the Administrative Agent or any of its Affiliates in any capacity.

The Administrative Agent shall not be liable for any action taken or not taken by it (i) with the consent or at the request of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary, or as the Administrative Agent shall believe in good faith shall be necessary, under the circumstances as provided in Sections 11.1 [Modifications, Amendments or Waivers] and 9.2 [Consequences of Event of Default]) or (ii) in the absence of its own gross negligence or willful misconduct. The Administrative Agent shall be deemed not to have knowledge of any Potential Default or Event of Default unless and until notice describing such Potential Default or Event of Default is given to the Administrative Agent by the Borrower, a Lender or the Issuing Lender.

The Administrative Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any Potential Default or Event of Default, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other Loan Document or any other agreement, instrument or document or (v) the satisfaction of any condition set forth in Section 7 [Conditions of Lending and Issuance of Letters of Credit] or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to the Administrative Agent.

10.4 Reliance by Administrative Agent. The Administrative Agent shall be entitled to rely upon, and shall not incur any liability for relying upon, any notice, request, certificate, consent, statement, instrument, document or other writing (including any electronic message, Internet or intranet website posting or other distribution) believed by it to be genuine and to have been signed, sent or otherwise authenticated by the proper Person. The Administrative Agent also may rely upon any statement made to it orally or by telephone and believed by it to have been made by the proper Person, and shall not incur any liability for relying thereon. In determining compliance with any condition hereunder to the making of a Loan, or the issuance

of a Letter of Credit, that by its terms must be fulfilled to the satisfaction of a Lender or the Issuing Lender, the Administrative Agent may presume that such condition is satisfactory to such Lender or the Issuing Lender unless the Administrative Agent shall have received notice to the contrary from such Lender or the Issuing Lender prior to the making of such Loan or the issuance of such Letter of Credit. The Administrative Agent may consult with legal counsel (who may be counsel for a Loan Party), independent accountants and other experts selected by it, and shall not be liable for any action taken or not taken by it in accordance with the advice of any such counsel, accountants or experts.

10.5 Delegation of Duties. The Administrative Agent may perform any and all of its duties and exercise its rights and powers hereunder or under any other Loan Document by or through any one or more sub-agents appointed by the Administrative Agent. The Administrative Agent and any such sub-agent may perform any and all of its duties and exercise its rights and powers by or through their respective Related Parties. The exculpatory provisions of this Section 10 shall apply to any such sub-agent and to the Related Parties of the Administrative Agent and any such sub-agent, and shall apply to their respective activities in connection with the syndication of the credit facilities provided for herein as well as activities as Administrative Agent.

10.6 Resignation of Administrative Agent. The Administrative Agent may at any time give notice of its resignation to the Lenders, the Issuing Lender and the Borrower. Upon receipt of any such notice of resignation, the Required Lenders shall have the right, with approval from the Borrower (so long as no Event of Default has occurred and is continuing), to appoint a successor, such approval not to be unreasonably withheld or delayed. If no such successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within thirty (30) days after the retiring Administrative Agent gives notice of its resignation, then the retiring Administrative Agent may on behalf of the Lenders and the Issuing Lender, appoint a successor Administrative Agent; provided that if the Administrative Agent shall notify the Borrower and the Lenders that no qualifying Person has accepted such appointment, then such resignation shall nonetheless become effective in accordance with such notice and (i) the retiring Administrative Agent shall be discharged from its duties and obligations hereunder and under the other Loan Documents (except that in the case of any collateral security held by the Administrative Agent on behalf of the Lenders or the Issuing Lender under any of the Loan Documents, the retiring Administrative Agent shall continue to hold such collateral security until such time as a successor Administrative Agent is appointed) and (ii) all payments, communications and determinations provided to be made by, to or through the Administrative Agent shall instead be made by or to each Lender and the Issuing Lender directly, until such time as the Required Lenders appoint a successor Administrative Agent as provided for above in this Section 10.6. Upon the acceptance of a successor's appointment as Administrative Agent hereunder, such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring (or retired) Administrative Agent, and the retiring Administrative Agent shall be discharged from all of its duties and obligations hereunder or under the other Loan Documents (if not already discharged therefrom as provided above in this Section). The fees payable by the Borrower to a successor Administrative Agent shall be the same as those payable to its predecessor unless otherwise agreed between the Borrower and such successor. After the retiring Administrative Agent's resignation hereunder and under the other Loan Documents, the provisions of this Section 10 and Section 11.3 [Expenses; Indemnity;

110

Damage Waiver] shall continue in effect for the benefit of such retiring Administrative Agent, its sub-agents and their respective Related Parties in respect of any actions taken or omitted to be taken by any of them while the retiring Administrative Agent was acting as Administrative Agent.

If PNC resigns as Administrative Agent under this Section 10.6, PNC shall also resign as the Issuing Lender. Upon the appointment of a successor Administrative Agent hereunder, such successor shall (i) succeed to all of the rights, powers, privileges and duties of PNC as the retiring Issuing Lender and Administrative Agent and PNC shall be discharged from all of its respective duties and obligations as Issuing Lender and Administrative Agent under the Loan Documents other than with respect to outstanding Letters of Credit issued by PNC, and (ii) issue letters of credit in substitution for the Letters of Credit issued by PNC, if any, outstanding at the time of such succession or make other arrangement satisfactory to PNC to effectively assume the obligations of PNC with respect to such Letters of Credit.

10.7 Non-Reliance on Administrative Agent and Other Lenders. Each Lender and the Issuing Lender acknowledges that it has, independently and without reliance upon the Administrative Agent or any other Lender or any of their Related Parties and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement. Each Lender and the Issuing Lender also acknowledges that it will, independently and without reliance upon the Administrative Agent or any other Lender or any of their Related Parties and based on such documents and information as it shall from time to time deem appropriate, continue to make its own decisions in taking or not taking action under or based upon this Agreement, any other Loan Document or any related agreement or any document furnished hereunder or thereunder.

10.8 No Other Duties, etc. Anything herein to the contrary notwithstanding, neither the Lead Arranger nor the Bookrunner listed on the cover page hereof shall have any powers, duties or responsibilities under this Agreement or any of the other Loan Documents, except in its capacity, as applicable, as the Administrative Agent, a Lender or the Issuing Lender hereunder.

10.9 Administrative Agent's Fee. The Borrower shall pay to the Administrative Agent a nonrefundable fee (the "**Administrative Agent's Fee**") under the terms of a letter (the "**Administrative Agent's Letter**") between the Borrower and Administrative Agent, as amended from time to time.

10.10 Authorization to Release Collateral and Guarantors. The Lenders and Issuing Lenders authorize the Administrative Agent to release (i) any Collateral consisting of assets or equity interests sold or otherwise disposed of in a sale or other disposition or transfer permitted under Section 8.2.7 [Dispositions of Assets or Subsidiaries] or Section 8.2.6 [Liquidations, Mergers, Consolidations, Acquisitions], and (ii) any Guarantor from its obligations under the Guarantee and Collateral Agreement and any other Loan Document if the ownership interests in such Guarantor are sold or otherwise disposed of or transferred to persons other than Loan Parties or Subsidiaries of the Loan Parties in a transaction permitted under Section 8.2.7 [Dispositions of Assets or Subsidiaries] or Section 8.2.6 [Liquidations, Mergers, Consolidations, Acquisitions].

111

10.11 No Reliance on Administrative Agent's Customer Identification Program. Each Lender acknowledges and agrees that neither such Lender, nor any of its Affiliates, participants or assignees, may rely on the Administrative Agent to carry out such Lender's, Affiliate's, participant's or assignee's customer identification program, or other obligations required or imposed under or pursuant to the USA Patriot Act or the regulations thereunder, including the regulations contained in 31 CFR 103.121 (as hereafter amended or replaced, the "**CIP Regulations**"), or any other Anti-Terrorism Law, including any programs involving any of the following items relating to or in connection with any of the Loan Parties, their Affiliates or their agents, the Loan Documents or the transactions hereunder or contemplated hereby: (i) any identity verification procedures, (ii) any recordkeeping, (iii) comparisons with government lists, (iv) customer notices or (v) other procedures required under the CIP Regulations or such other Laws.

10.12 Administrative Agent May File Proofs of Claim. In case of the pendency of any Relief Proceeding or any other judicial proceeding relative to any Loan Party, the Administrative Agent (irrespective of whether the principal of any Loan or Letter of Credit Obligation shall then be due and payable as herein expressed or by declaration or otherwise and irrespective of whether the Administrative Agent shall have made any demand on any Loan Party) shall be entitled and empowered (but not obligated) by intervention in such proceeding or otherwise:

(i) to file and prove a claim for the whole amount of the principal and interest owing and unpaid in respect of the Loans, Letter of Credit Obligations and all other Secured Obligations that are owing and unpaid and to file such other documents as may be necessary or advisable in order to have the claims of the Lenders, the Issuing Lender and the Administrative Agent (including any claim for the reasonable compensation, expenses, disbursements and advances of the Lenders, the Issuing Lender and the Administrative Agent and their respective agents and counsel and all other amounts due the Lenders, the Issuing Lender and the Administrative Agent under Sections 2.9.2 [Letter of Credit Fees] and 11.3 [Expenses; Indemnity; Damage Waiver]) allowed in such judicial proceeding; and

(ii) to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same;

and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Lender and the Issuing Lender to make such payments to the Administrative Agent and, in the event that the Administrative Agent shall consent to the making of such payments directly to the Lenders and the Issuing Lender, to pay to the Administrative Agent any amount due for the reasonable compensation, expenses, disbursements and advances of the Administrative Agent and its agents and counsel, and any other amounts due the Administrative Agent under Section 11.3 [Expenses; Indemnity; Damage Waiver].

10.13 Lender Provided Interest Rate Hedges, Lender Provided Foreign Currency Hedges and Other Lender Provided Financial Service Products. Except as otherwise expressly specified herein, no Lender or Affiliate thereof, in its capacity as a provider of Lender Provided

Interest Rate Hedges, Lender Provided Foreign Currency Hedges and Other Lender Provided Financial Service Products, that obtains the benefits of Section 9.2.4 [Application of Proceeds], the Guarantee and Collateral Agreement or any Collateral by virtue of the provisions hereof or of the Guarantee and Collateral Agreement or any other Loan Document shall have any right to notice of any action or to consent to, direct or object to any action hereunder or under any other Loan Document or otherwise in respect of the Collateral (including the release or impairment of any Collateral) other than in its capacity as a Lender and, in such case, only to the extent expressly provided in the Loan Documents. Notwithstanding any other provision of this Article 10 to the contrary, the Administrative Agent shall not be required to verify the payment of, or that other satisfactory arrangements have been made with respect to, Secured Obligations arising under Lender Provided Interest Rate Hedges, Lender Provided Foreign Currency Hedges and/or Other Lender Provided Financial Service Products unless the Administrative Agent has received written notice of such Secured Obligations, together with such supporting documentation as the Administrative Agent may request, from the applicable Lender or Affiliate thereto, as the case may be.

11. MISCELLANEOUS

11.1 Modifications, Amendments or Waivers. With the written consent of the Required Lenders (except as expressly provided in Section 3A.1(vii) [Incremental Commitments] with respect to an Incremental Facility Amendment and Section 4.6 [Successor LIBOR Rate Index] in connection with a Benchmark Transition Event or an Early Opt-In Event, as defined in such Section), the Administrative Agent, acting on behalf of all the Lenders, and the Borrower, on behalf of the Loan Parties, may from time to time enter into written agreements amending or changing any provision of this Agreement or any other Loan Document or the rights of the Lenders or the Loan Parties hereunder or thereunder, or may grant written waivers or consents hereunder or thereunder. Any such agreement, waiver or consent made with such written consent shall be effective to bind all the Lenders and the Loan Parties; provided, that no such agreement, waiver or consent may be made which will:

11.1.1 Increase of Commitment. Increase the amount of the Revolving Credit Commitment or Term Loan Commitment of any Lender hereunder without the consent of such Lender;

11.1.2 Extension of Payment; Reduction of Principal, Interest or Fees; Modification of Terms of Payment. Whether or not any Loans are outstanding, extend the Revolving Credit Expiration Date or Term Loan Maturity Date or the time for payment of principal or interest of any Loan (excluding the due date of any mandatory prepayment of a Loan), the Commitment Fee or any other fee payable to any Lender, or reduce the principal amount of or the rate of interest borne by any Loan (it being understood and agreed that the waiver of any default rate of interest shall only require the consent of the Required Lenders) or reduce the Commitment Fee or any other fee payable to any Lender, without the consent of each Lender directly affected thereby (provided that any amendment or modification of defined terms used in the financial covenants of this Agreement shall not constitute a reduction in the stated rate of interest or fees for purposes of this Section 11.1.2); or reduce the Commitment Fee or any other fee payable to any Lender, without the consent of each Lender directly affected thereby;

11.1.3 Release of Collateral or Guarantor; Subordination of Collateral. (i) Release all or substantially all of the Collateral, (ii) subordinate the Liens on all or substantially all of the Collateral to Liens in favor of any other Person or Persons or (iii) release all or substantially all of the Guarantors from their respective obligations under the Collateral Documents, in each case under this Section 11.1.3 without the consent of all Lenders (other than Defaulting Lenders); or

11.1.4 Miscellaneous. Amend the definition of “Optional Currency” or Section 2.11.2(iii) [Requests for Additional Optional Currencies], Section 5.2 [Pro Rata Treatment of Lenders], Section 10.3 [Exculpatory Provisions] or Section 5.3 [Sharing of Payments by Lenders] or this Section 11.1, alter any provision regarding the pro rata treatment of the Lenders or requiring all Lenders to authorize the taking of any action or reduce any percentage specified in the definition of Required Lenders, in each case without the consent of all of the Lenders; provided, nothing in this Section 11.1.4 shall prevent an amendment which may extend the date of payment for some but not all of the Loans or extend the Commitments of some but not all of the Lenders or increase the commitments of some but not all Lenders or add additional facilities and/or add additional Lenders, in each case with the consent of the Administrative Agent, the Required Lenders and each Lender directly affected thereby but without all Lenders;

provided that no agreement, waiver or consent which would modify the interests, rights or obligations of the Administrative Agent, the Issuing Lender, or the Swing Loan Lender may be made without the written consent of the Administrative Agent, the Issuing Lender or the Swing Loan Lender, as applicable, and provided, further that, if in connection with any proposed waiver, amendment or modification referred to in Sections 11.1.1 through 11.1.4 above, the consent of the Required Lenders is obtained but the consent of one or more of such other Lenders whose consent is required is not obtained (each a “**Non-Consenting Lender**”), then the Borrower shall have the right to replace any such Non-Consenting Lender with one or more replacement Lenders pursuant to Section 5.6.2 [Replacement of a Lender].

Notwithstanding anything to the contrary herein, no Defaulting Lender shall have any right to approve or disapprove any amendment, waiver or consent hereunder (and any amendment, waiver or consent which by its terms requires the consent of all Lenders or each affected Lender may be effected with the consent of the applicable Lenders other than Defaulting Lenders), except that (x) the Commitment of any Defaulting Lender may not be increased or extended without the consent of such Lender, and (y) any waiver, amendment or modification requiring the consent of all Lenders or each affected Lender that by its terms affects any Defaulting Lender disproportionately adversely relative to other affected Lenders shall require the consent of such Defaulting Lender.

In addition, notwithstanding the foregoing, (a) with the consent of the Borrower, the Administrative Agent may amend, modify or supplement any Loan Document without the consent of any Lender or the Required Lenders in order to correct or cure any ambiguity, inconsistency or defect or correct any typographical or ministerial error in any Loan Document (provided that any such amendment, modification or supplement shall not be materially adverse to the interests of the Lenders taken as a whole), and (b) without the consent of any Lender or any Loan Party, within a reasonable time after any assignment by any Lender of some or all of its Commitments, the Administrative Agent shall, and is hereby authorized and directed to,

revise Schedule 1.1(B) to reflect such change and shall distribute such revised Schedule to each of the Lenders and the Borrower, whereupon such revised Schedule 1.1(B) shall replace the old Schedule 1.1(B), and become part of this Agreement.

11.2 No Implied Waivers; Cumulative Remedies. No course of dealing and no delay or failure of the Administrative Agent or any Lender in exercising any right, power, remedy or privilege under this Agreement or any other Loan Document shall affect any other or future exercise thereof or operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any further exercise thereof or of any other right, power, remedy or privilege. The rights and remedies of the Administrative Agent and the Lenders under this Agreement and any other Loan Documents are cumulative and not exclusive of any rights or remedies which they would otherwise have.

11.3 Expenses; Indemnity; Damage Waiver.

11.3.1 Costs and Expenses. The Borrower shall pay (i) all reasonable, out-of-pocket expenses incurred by the Administrative Agent and its Affiliates (including the reasonable and documented fees, charges and disbursements of counsel for the Administrative Agent), in connection with the syndication of the credit facilities provided for herein, the preparation, negotiation, execution, delivery and administration of this Agreement and the other Loan Documents or any amendments, modifications or waivers of the provisions hereof or thereof (whether or not the transactions contemplated hereby or thereby shall be consummated), (ii) all out-of-pocket expenses incurred by the Issuing Lender in connection with the issuance, amendment, renewal or extension of any Letter of Credit or any demand for payment thereunder, (iii) all out-of-pocket expenses incurred by the Administrative Agent, any Lender or the Issuing Lender (including the reasonable fees, charges and disbursements of any counsel for the Administrative Agent, any Lender or the Issuing Lender), in connection with the enforcement or protection of its rights (A) in connection with this Agreement and the other Loan Documents, including its rights under this Section, or (B) in connection with the Loans made or Letters of Credit issued hereunder, including all such out-of-pocket expenses incurred during any workout, restructuring or negotiations in respect of such Loans or Letters of Credit; provided that the Borrower's obligations to pay or reimburse for legal fees and expenses pursuant to this clause (iii) shall be limited to the reasonable and documented legal fees and expenses of a single law firm as counsel for the Administrative Agent and one additional law firm as counsel for all other such parties, taken together, plus, if reasonably necessary, one special counsel for each relevant specialty and one local counsel per jurisdiction (which may include a single law firm as special, local or foreign counsel acting in multiple jurisdictions), except that in the case where any such Person determines in good faith that a conflict of interest does or may exist in connection with such legal representation and such Person advises the Borrower of such actual or potential conflict of interest and engages its own separate counsel, the reasonable and documented legal fees and expenses of such separate counsel shall also be paid or reimbursed.

11.3.2 Indemnification by the Borrower. The Borrower shall indemnify the Administrative Agent (and any sub-agent thereof), each Lender and the Issuing Lender, and each Related Party of any of the foregoing Persons (each such Person being called an "**Indemnitee**") against, and hold each Indemnitee harmless from, any and all losses, claims, damages, liabilities and related expenses (including the fees, charges and disbursements of any counsel for any

Indemnitee, provided that the Borrower's obligation to pay or reimburse an Indemnitee for the reasonable fees, charges and disbursements of counsel under this Section 11.3.2 shall be limited to the reasonable and documented fees, charges and disbursements of a single law firm chosen by the Administrative Agent as counsel for all such Indemnitees, taken together, plus, if reasonably necessary, one special counsel for each relevant specialty and one local counsel per jurisdiction (which may include a single law firm as special, local or foreign counsel acting in multiple jurisdictions), except that in the case where an Indemnitee determines in good faith that a conflict of interest does or may exist in connection with such legal representation and such Indemnitee advises the Borrower of such actual or potential conflict of interest and engages its own separate counsel, the reasonable and documented fees, charges and disbursements of each such separate counsel shall also be paid or reimbursed), and shall indemnify and hold harmless each Indemnitee from all fees and time charges and disbursements for attorneys, incurred by any Indemnitee or asserted against any Indemnitee by any third party or by the Borrower or any other Loan Party arising out of, in connection with, or as a result of (i) the execution or delivery of this Agreement, any other Loan Document or any agreement or instrument contemplated hereby or thereby, the performance or nonperformance by the parties hereto of their respective obligations hereunder or thereunder or the consummation of the transactions contemplated hereby or thereby, (ii) any Loan or Letter of Credit or the use or proposed use of the proceeds therefrom (including any refusal by the Issuing Lender to honor a demand for payment under a Letter of Credit if the documents presented in connection with such demand do not strictly comply with the terms of such Letter of Credit), (iii) breach of representations, warranties or covenants of the Borrower or any other Loan Party under the Loan Documents, or (iv) any actual or prospective claim, litigation, investigation or proceeding relating to any of the foregoing, including any such items or losses relating to or arising under Environmental Laws or pertaining to environmental matters, whether based on contract, tort or any other theory, whether brought by a third party or by the Borrower or any other Loan Party, and regardless of whether any Indemnitee is a party thereto; provided that such indemnity shall not, as to any Indemnitee, be available to the extent that such losses, claims, damages, liabilities or related expenses (x) are determined by a court of competent jurisdiction by final and nonappealable judgment to have resulted from the gross negligence or willful misconduct of such Indemnitee, (y) result from a claim brought by the Borrower or any other Loan Party against an Indemnitee for breach in bad faith of such Indemnitee's obligations hereunder or under any other Loan Document, if the Borrower or such Loan Party has obtained a final and nonappealable judgment in its favor on such claim as determined by a court of competent jurisdiction or (z) arises solely from disputes solely between or among Indemnitees (except that in the event of a dispute involving the Administrative Agent, the Issuing Lender or the Swing Loan Lender (in each case, acting in its capacity as such), the Administrative Agent, the Issuing Lender or the Swing Loan Lender, as applicable, shall be entitled (subject to the other limitations and exceptions set forth in this Section 11.3.2) to the benefit of such indemnification) not relating to, in connection with or involving acts or omissions by the Borrower, any of its Subsidiaries, any of their respective Affiliates or any other Person or entity. This Section 11.3.2 [Indemnification by the Borrower] shall not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

11.3.3 Reimbursement by Lenders. To the extent that the Borrower for any reason fails to indefeasibly pay any amount required under Sections 11.3.1 [Costs and Expenses] or 11.3.2 [Indemnification by the Borrower] to be paid by it to the Administrative Agent (or any

sub-agent thereof), the Issuing Lender or any Related Party of any of the foregoing, each Lender severally agrees to pay to the Administrative Agent (or any such sub-agent), the Issuing Lender or such Related Party, as the case may be, such Lender's Ratable Share (determined as of the time that the applicable unreimbursed expense or indemnity payment is sought) of such unpaid amount, provided that the unreimbursed expense or indemnified loss, claim, damage, liability or related expense, as the case may be, was incurred by or asserted against the Administrative Agent (or any such sub-agent) or the Issuing Lender in its capacity as such, or against any Related Party of any of the foregoing acting for the Administrative Agent (or any such sub-agent) or Issuing Lender in connection with such capacity.

11.3.4 Waiver of Consequential Damages, Etc. To the fullest extent permitted by applicable Law, the Borrower and the other Loan Parties shall not assert, and each Loan Party hereby waives, any claim against any Indemnitee, on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) arising out of, in connection with, or as a result of, this Agreement, any other Loan Document or any agreement or instrument contemplated hereby, the transactions contemplated hereby or thereby, any Loan or Letter of Credit or the use of the proceeds thereof. No Indemnitee referred to in Section 11.3.2 [Indemnification by Borrower] shall be liable for any damages arising from the use by unintended recipients of any information or other materials distributed by it through telecommunications, electronic or other information transmission systems in connection with this Agreement or the other Loan Documents or the transactions contemplated hereby or thereby;

11.3.5 Payments. All amounts due under this Section shall be payable not later than ten (10) days after demand therefor.

11.3.6 Survival. Each party's obligations under this Section 11.3 shall survive the termination of the Loan Documents and payment of the obligations hereunder.

11.4 Holidays. Whenever payment of a Loan to be made or taken hereunder shall be due on a day which is not a Business Day such payment shall be due on the next Business Day (except as provided in Section 4.2 [Interest Periods]) and such extension of time shall be included in computing interest and fees, except that the Loans shall be due on the Business Day preceding the Revolving Credit Expiration Date or Term Loan Maturity Date, as applicable, if such date is not a Business Day. Whenever any payment or action to be made or taken hereunder (other than payment of the Loans) shall be stated to be due on a day which is not a Business Day, such payment or action shall be made or taken on the next following Business Day, and such extension of time shall not be included in computing interest or fees, if any, in connection with such payment or action.

11.5 Notices; Effectiveness; Electronic Communication.

11.5.1 Notices Generally. Except in the case of notices and other communications expressly permitted to be given by telephone (and except as provided in Section 11.5.2 [Electronic Communications]), all notices and other communications provided for herein shall be in writing and shall be delivered by hand or overnight courier service, mailed by certified or registered mail or sent by telecopier (i) if to a Lender, to it at its address set forth in

its administrative questionnaire, or (ii) if to any other Person, to it at its address set forth on Schedule 1.1(B).

Notices sent by hand or overnight courier service, or mailed by certified or registered mail, shall be deemed to have been given when received; notices sent by telecopier shall be deemed to have been given when sent (except that, if not given during normal business hours for the recipient, shall be deemed to have been given at the opening of business on the next Business Day for the recipient). Notices delivered through electronic communications to the extent provided in Section 11.5.2 [Electronic Communications], shall be effective as provided in such Section.

11.5.2 Electronic Communications. (i) Notices and other communications to the Lenders and the Issuing Lender hereunder may be delivered or furnished by electronic communication (including e-mail and Internet or intranet websites) pursuant to procedures approved by the Administrative Agent; provided that the foregoing shall not apply to notices to any Lender or the Issuing Lender if such Lender or the Issuing Lender, as applicable, has notified the Administrative Agent that it is incapable of receiving notices under such Article by electronic communication. The Administrative Agent or the Borrower may, in its discretion, agree to accept notices and other communications to it hereunder by electronic communications pursuant to procedures approved by it; provided that approval of such procedures may be limited to particular notices or communications. Unless the Administrative Agent otherwise prescribes, (i) notices and other communications sent to an e-mail address shall be deemed received upon the sender's receipt of an acknowledgement from the intended recipient (such as by the "return receipt requested" function, as available, return e-mail or other written acknowledgement); provided that if such notice or other communication is not sent during the normal business hours of the recipient, such notice or communication shall be deemed to have been sent at the opening of business on the next Business Day for the recipient, and (ii) notices or communications posted to an Internet or intranet website shall be deemed received upon the deemed receipt by the intended recipient at its e-mail address as described in the foregoing clause (i) of notification that such notice or communication is available and identifying the website address therefor.

(ii) The Administrative Agent may, but shall not be obligated to, make any Communication by posting such communication on Debt Domain, IntraLinks, SyndTrak or a similar electronic transmission system (the "**Platform**"). The Platform is provided "as is" and "as available". None of the Borrower, the Administrative Agent nor any of their respective Related Parties warrants, or shall be deemed to warrant, the adequacy of the Platform, and the Borrower and the Administrative Agent expressly disclaim liability for errors or omissions in the Communications. No warranty of any kind, express, implied or statutory, including any warranty of merchantability, fitness for a particular purpose, non-infringement of third-party rights or freedom from viruses or other code defects, is made, or shall be deemed to be made, by the Borrower, the Administrative Agent or any of their respective Related Parties in connection with the communications or the Platform. In no event shall the Borrower or the Subsidiaries, the Administrative Agent or any of their respective Related Parties have any liability to the Borrower, any Lender or any other Person for damages of any kind, including direct or indirect, special, incidental or consequential damages, losses or expenses (whether in tort, contract or otherwise), arising out of the Borrower's or the Administrative Agent's transmission of communications through the Platform; provided that nothing in this clause (ii)

shall limit the Borrower's indemnity and reimbursement obligations set forth in Section 11.3 [Expenses, Indemnity, Damage Waiver], including such indemnity and reimbursement obligations with respect to any damages, including direct or indirect, special, incidental or consequential damages, losses or expenses arising out of, in connection with or as a result of any claim, litigation, investigation or proceeding brought against any Indemnitee by any third party. Neither the Borrower nor the Administrative Agent is responsible for approving or vetting the representatives or contacts of any Lender that are added to the Platform.

11.5.3 Change of Address, Etc. Any party hereto may change its address, e-mail address or telecopier number for notices and other communications hereunder by notice to the other parties hereto.

11.5.4 Certificates of Officers. Any certificate required to be delivered hereunder or under other Loan Documents by an officer of a Loan Party shall be delivered by such officer in its capacity as an officer of a Loan Party and not in such officer's individual capacity.

11.6 Severability. The provisions of this Agreement are intended to be severable. If any provision of this Agreement shall be held invalid or unenforceable in whole or in part in any jurisdiction, such provision shall, as to such jurisdiction, be ineffective to the extent of such invalidity or unenforceability without in any manner affecting the validity or enforceability thereof in any other jurisdiction or the remaining provisions hereof in any jurisdiction.

11.7 Duration; Survival. All representations and warranties of the Loan Parties contained herein or made in connection herewith shall survive the execution and delivery of this Agreement, the completion of the transactions hereunder and Payment In Full. All covenants and agreements of the Borrower contained herein relating to the payment of principal, interest, premiums, additional compensation or expenses and indemnification, including those set forth in the Notes, Section 5 [Payments] and Section 11.3 [Expenses; Indemnity; Damage Waiver], shall survive Payment In Full. All other covenants and agreements of the Loan Parties shall continue in full force and effect from and after the date hereof and until Payment In Full.

11.8 Successors and Assigns.

11.8.1 Successors and Assigns Generally. The provisions of this Agreement shall be binding upon, and inure to the benefit of, the parties hereto and their respective successors and assigns permitted hereby, except that neither the Borrower nor any other Loan Party may assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of the Administrative Agent and each Lender and no Lender may assign or otherwise transfer any of its rights or obligations hereunder except (i) to an assignee in accordance with the provisions of Section 11.8.2 [Assignments by Lenders], (ii) by way of participation in accordance with the provisions of Section 11.8.4 [Participations], or (iii) by way of pledge or assignment of a security interest subject to the restrictions of Section 11.8.5 [Certain Pledges; Successors and Assigns Generally] (and any other attempted assignment or transfer by any party hereto shall be null and void). Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby, Participants to the extent provided in Section 11.8.4

[Participations] and, to the extent expressly contemplated hereby, the Related Parties of each of the Administrative Agent and the Lenders) any legal or equitable right, remedy or claim under or by reason of this Agreement.

11.8.2 Assignments by Lenders. Any Lender may at any time assign to one or more assignees all or a portion of its rights and obligations under this Agreement (including all or a portion of its Commitment and the Loans at the time owing to it); provided that any such assignment shall be subject to the following conditions:

(i) Minimum Amounts.

(A) in the case of an assignment of the entire remaining amount of the assigning Lender's Commitment and the Loans at the time owing to it or in the case of an assignment to a Lender, an Affiliate of a Lender or an Approved Fund, no minimum amount need be assigned; and

(B) in any case not described in clause (i)(A) of this Section 11.8.2, the aggregate amount of the Commitment (which for this purpose includes Loans outstanding thereunder) or, if the applicable Commitment is not then in effect, the principal outstanding balance of the Loans of the assigning Lender subject to each such assignment (determined as of the date the Assignment and Assumption Agreement with respect to such assignment is delivered to the Administrative Agent or, if "Trade Date" is specified in the Assignment and Assumption Agreement, as of the Trade Date) shall not be less than \$5,000,000 in the case of any assignment in respect of the Revolving Credit Commitment of the assigning Lender, or \$1,000,000 in the case of the Term Loan of such assigning Lender, unless each of the Administrative Agent and, so long as no Event of Default has occurred and is continuing, the Borrower otherwise consents (each such consent not to be unreasonably withheld or delayed).

(ii) Proportionate Amounts. Each partial assignment shall be made as an assignment of a proportionate part of all the assigning Lender's rights and obligations under this Agreement with respect to the Loan or the Commitment assigned. For the avoidance of doubt, a Lender may assign Loans and Commitments under one Facility without assigning a pro rata share of the Loans and Commitments under another Facility.

(iii) Required Consents. No consent shall be required for any assignment except for the consent of the Administrative Agent (which shall not be unreasonably withheld or delayed) and:

(A) the consent of the Borrower (such consent not to be unreasonably withheld or delayed) shall be required unless (x) an Event of Default has occurred and is continuing at the time of such assignment or (y) such assignment is to a Lender, an Affiliate of a Lender or an Approved Fund; provided that the Borrower shall be deemed to have consented to any such assignment unless it shall object thereto by written notice to the Administrative Agent within ten (10) Business Days after having received notice thereof; provided that, notwithstanding anything herein to the contrary, no consent of the Borrower shall be required for the assignment of any portion of the Term Loans, but any Lender assigning any portion of the Term Loans shall have consulted with the Borrower prior to doing so; and

120

(B) the consent of the Issuing Lender (such consent not to be unreasonably withheld or delayed) shall be required for any assignment that increases the obligation of the assignee to participate in exposure under one or more Letters of Credit (whether or not then outstanding).

(iv) Assignment and Assumption Agreement. The parties to each assignment shall execute and deliver to the Administrative Agent an Assignment and Assumption Agreement, together with a processing and recordation fee of \$3,500 and the assignee, if it is not a Lender, shall deliver to the Administrative Agent an administrative questionnaire provided by the Administrative Agent.

(v) No Assignment to Borrower or Competitor. No such assignment shall be made to the Borrower, any of the Borrower's Affiliates or Subsidiaries or any Person that the assignor has actual knowledge is a direct competitor of any Loan Party.

(vi) No Assignment to Natural Persons. No such assignment shall be made to a natural person.

(vii) MNPI. From and after an IPO occurs, any assignee at the time it becomes a Lender hereunder shall designate one or more credit contacts to whom all syndicate-level information (which may contain MNPI) will be made available and who may receive such information in accordance with the assignee's compliance procedures and applicable law, including United States (Federal or State) and foreign securities laws.

Subject to acceptance and recording thereof by the Administrative Agent pursuant to Section 11.8.3 [Register], from and after the effective date specified in each Assignment and Assumption Agreement, the assignee thereunder shall be a party to this Agreement and, to the extent of the interest assigned by such Assignment and Assumption Agreement, have the rights and obligations of a Lender under this Agreement, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment and Assumption Agreement, be released from its obligations under this Agreement (and, in the case of an Assignment and Assumption Agreement covering all of the assigning Lender's rights and obligations under this Agreement, such Lender shall cease to be a party hereto) but shall continue to be entitled to the benefits of Sections 4.4 [Rate Unascertainable; Etc.], 5.8 [Increased Costs], and 11.3 [Expenses, Indemnity; Damage Waiver] with respect to facts and circumstances occurring prior to the effective date of such assignment. Any assignment or transfer by a Lender of rights or obligations under this Agreement that does not comply with this Section 11.8.2 shall be treated for purposes of this Agreement as a sale by such Lender of a participation in such rights and obligations in accordance with Section 11.8.4 [Participations].

11.8.3 Register. The Administrative Agent, acting solely for this purpose as an agent of the Borrower, shall maintain a record of the names and addresses of the Lenders, and the Commitments of, and principal amounts (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from time to time. Such register shall be conclusive, and the Borrower, the Administrative Agent and the Lenders may treat each Person whose name is in such register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement, notwithstanding notice to the contrary. Such register shall be available for

121

inspection by the Borrower and any Lender, at any reasonable time and from time to time upon reasonable prior notice.

11.8.4 Participations. Any Lender may at any time, without the consent of, or notice to, the Borrower or the Administrative Agent, sell participations to any Person (other than a natural person or the Borrower or any of the Borrower's Affiliates or Subsidiaries) (each, a "**Participant**") in all or a portion of such Lender's rights and/or obligations under this Agreement (including all or a portion of its Commitment and/or the Loans owing to it); provided that (i) such Lender's obligations under this Agreement shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations and (iii) the Borrower, the Administrative Agent, the Lenders, and the Issuing Lender shall continue to deal solely and directly with such Lender in connection with such Lender's rights and obligations under this Agreement.

Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; provided that such agreement or instrument may provide that such Lender will not, without the consent of the Participant, agree (other than as is already provided for herein) to any amendment, modification or waiver with respect to Sections 11.1.1 [Increase of Commitment], 11.1.2 [Extension of Payment, Etc.], or 11.1.3 [Release of Collateral or Guarantor] that affects such Participant. The Borrower agrees that each Participant shall be entitled to the benefits of Sections 4.4 [Rate Unascertainable, Etc.], 5.8 [Increased Costs], 5.10 [Indemnity] and 5.9 [Taxes] (subject to the requirements and limitations therein, including the requirements under Section 5.9.7 [Status of Lenders] (it being understood that the documentation required under Section 5.9.7 [Status of Lenders] shall be delivered to the participating Lender)) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to Section 11.8.2 [Assignments by Lenders]; provided that such Participant (A) agrees to be subject to the provisions of Section 5.6.2 [Replacement of a Lender] and Section 5.6.3 [Designation of a Different Lending Office] as if it were an assignee under Section 11.8.2 [Assignments by Lenders]; and (B) shall not be entitled to receive any greater payment under Sections 5.8 [Increased Costs] or 5.9 [Taxes], with respect to any participation, than its participating Lender would have been entitled to receive, except to the extent such entitlement to receive a greater payment results from a Change in Law that occurs after the Participant acquired the applicable participation. Each Lender that sells a participation agrees, at the Borrower's request and expense, to use reasonable efforts to cooperate with the Borrower to effectuate the provisions of Section 5.6.2 [Replacement of a Lender] and Section 5.6.3 [Designation of Different Lending Office] with respect to any Participant of such Lender. To the extent permitted by law, each Participant also shall be entitled to the benefits of Section 9.2.3 [Set-off] as though it were a Lender; provided that such Participant agrees to be subject to Section 5.3 [Sharing of Payments by Lenders] as though it were a Lender. Each Lender that sells a participation shall, acting solely for this purpose as an agent of the Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant's interest in the Loans or other obligations under the Loan Documents (the "Participant Register"); provided that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant's interest in any commitments, loans, letters of credit or its other

obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, the Administrative Agent (in its capacity as Administrative Agent) shall have no responsibility for maintaining a Participant Register.

11.8.5 Certain Pledges; Successors and Assigns Generally. Any Lender may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement to secure obligations of such Lender, including any pledge or assignment to secure obligations to a Federal Reserve Bank; provided that no such pledge or assignment shall release such Lender from any of its obligations hereunder or substitute any such pledgee or assignee for such Lender as a party hereto.

11.9 Confidentiality.

11.9.1 General. Each of the Administrative Agent, the Lenders and the Issuing Lender agrees to maintain the confidentiality of the Information, except that Information may be disclosed (i) to its Affiliates and to its and its Affiliates' respective partners, directors, officers, employees, agents, advisors and other representatives (it being understood that the Persons to whom such disclosure is made will be informed of the confidential nature of such Information and instructed to keep such Information confidential), (ii) to the extent requested by any regulatory authority purporting to have jurisdiction over it (including any self-regulatory authority, such as the National Association of Insurance Commissioners), (iii) to the extent required by applicable Laws or regulations or by any subpoena or similar legal process (in which case such Person, to the extent permitted by law and except as disclosure is otherwise permitted under this Section, shall promptly notify the Borrower in advance thereof), (iv) to any other party hereto, (v) in connection with the exercise of any remedies hereunder or under any other Loan Document or any action or proceeding relating to this Agreement or any other Loan Document or the enforcement of rights hereunder or thereunder, (vi) subject to an agreement containing provisions substantially the same as those of this Section (which shall be deemed to include those required to be made in order to obtain access to information posted on IntraLinks, SyndTrak or any other Platform), to (A) any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights or obligations under this Agreement or (B) any actual or prospective counterparty (or its advisors) to any swap or derivative transaction relating to the Borrower and its obligations, (vii) with the consent of the Borrower, or (viii) to the extent such Information (Y) becomes publicly available other than as a result of a breach of this Section or (Z) becomes available to the Administrative Agent, any Lender, the Issuing Lender or any of their respective Affiliates on a nonconfidential basis from a source other than the Borrower or the other Loan Parties. In addition, the Administrative Agent may disclose to Gold Sheets usual and customary information necessary to ensure league table credit in connection with this Agreement, but neither the Administrative Agent nor any Lender shall provide information about this Agreement or the Loan Parties for tombstones or other advertising purposes. Any Person required to maintain the confidentiality of Information as provided in this Section shall be considered to have complied with its obligation to do so if such Person has exercised the same

degree of care to maintain the confidentiality of such Information as such Person would accord to its own confidential information.

11.9.2 Sharing Information With Affiliates of the Lenders. Each Loan Party acknowledges that from time to time financial advisory, investment banking and other services may be offered or provided to the Borrower or one or more of its Affiliates (in connection with this Agreement or otherwise) by any Lender or by one or more Subsidiaries or Affiliates of such Lender and each of the Loan Parties hereby authorizes each Lender to share any information delivered to any Lender by any Loan Party and its Subsidiaries pursuant to this Agreement to any such Subsidiary or Affiliate subject to the provisions of Section 11.9.1 [General].

11.10 Counterparts; Integration; Effectiveness.

11.10.1 Counterparts; Integration; Effectiveness. This Agreement may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. This Agreement and the other Loan Documents, and any separate letter agreements with respect to fees payable to the Administrative Agent, constitute the entire contract among the parties relating to the subject matter hereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof including any prior confidentiality agreements and commitments. Except as provided in Section 7 [Conditions Of Lending And Issuance Of Letters Of Credit], this Agreement shall become effective when it shall have been executed by the Administrative Agent and when the Administrative Agent shall have received counterparts hereof that, when taken together, bear the signatures of each of the other parties hereto. Delivery of an executed counterpart of a signature page of this Agreement by telecopy or e-mail shall be effective as delivery of a manually executed counterpart of this Agreement.

11.11 CHOICE OF LAW; SUBMISSION TO JURISDICTION; WAIVER OF VENUE; SERVICE OF PROCESS; WAIVER OF JURY TRIAL; ADDITIONAL WAIVERS.

11.11.1 Governing Law. This Agreement shall be deemed to be a contract under the Laws of the Commonwealth of Pennsylvania without regard to its conflict of laws principles. Each standby Letter of Credit issued under this Agreement shall be subject either to the rules of the Uniform Customs and Practice for Documentary Credits, as most recently published by the International Chamber of Commerce (the "ICC") at the time of issuance ("UCP") or the rules of the International Standby Practices (ICC Publication Number 590) ("ISP98"), as determined by the Issuing Lender, and each trade Letter of Credit shall be subject to UCP, and in each case to the extent not inconsistent therewith, the Laws of the Commonwealth of Pennsylvania without regard to its conflict of laws principles.

11.11.2 SUBMISSION TO JURISDICTION. THE BORROWER AND EACH OTHER LOAN PARTY IRREVOCABLY AND UNCONDITIONALLY SUBMITS, FOR ITSELF AND ITS PROPERTY, TO THE NONEXCLUSIVE JURISDICTION OF THE COURTS OF THE COMMONWEALTH OF PENNSYLVANIA SITTING IN PHILADELPHIA COUNTY AND OF THE UNITED STATES DISTRICT COURT OF THE EASTERN DISTRICT OF PENNSYLVANIA AND ANY APPELLATE COURT FROM ANY

THEREOF, IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT, OR FOR RECOGNITION OR ENFORCEMENT OF ANY JUDGMENT, AND EACH OF THE PARTIES HERETO IRREVOCABLY AND UNCONDITIONALLY AGREES THAT ALL CLAIMS IN RESPECT OF ANY SUCH ACTION OR PROCEEDING MAY BE HEARD AND DETERMINED IN SUCH PENNSYLVANIA STATE COURT OR, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, IN SUCH FEDERAL COURT. EACH OF THE PARTIES HERETO AGREES THAT A FINAL JUDGMENT IN ANY SUCH ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW. NOTHING IN THIS AGREEMENT OR IN ANY OTHER LOAN DOCUMENT SHALL AFFECT ANY RIGHT THAT THE ADMINISTRATIVE AGENT, ANY LENDER OR THE ISSUING LENDER MAY OTHERWISE HAVE TO BRING ANY ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT AGAINST THE BORROWER OR ANY OTHER LOAN PARTY OR ITS PROPERTIES IN THE COURTS OF ANY JURISDICTION.

11.11.3 WAIVER OF VENUE. THE BORROWER AND EACH OTHER LOAN PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT IN ANY COURT REFERRED TO IN THIS SECTION 11.11. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING IN ANY SUCH COURT AND AGREES NOT ASSERT ANY SUCH DEFENSE.

11.11.4 SERVICE OF PROCESS. EACH PARTY HERETO IRREVOCABLY CONSENTS TO SERVICE OF PROCESS IN THE MANNER PROVIDED FOR NOTICES IN SECTION 11.5 [NOTICES; EFFECTIVENESS; ELECTRONIC COMMUNICATION]. NOTHING IN THIS AGREEMENT WILL AFFECT THE RIGHT OF ANY PARTY HERETO TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY APPLICABLE LAW.

11.11.5 WAIVER OF JURY TRIAL. EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PERSON HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PERSON WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE OTHER LOAN

11.12 USA Patriot Act Notice. Each Lender that is subject to the USA Patriot Act and the Administrative Agent (for itself and not on behalf of any Lender) hereby notifies Loan Parties that pursuant to the requirements of the USA Patriot Act, it is required to obtain, verify and record information that identifies the Loan Parties, which information includes the name and address of Loan Parties and other information that will allow such Lender or Administrative Agent, as applicable, to identify the Loan Parties in accordance with the USA Patriot Act.

11.13 Acknowledgement and Consent to Bail-In of Affected Financial Institutions. Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any Affected Financial Institution arising under any Loan Document, to the extent such liability is unsecured, may be subject to the write-down and conversion powers of the applicable Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

- (i) the application of any Write-Down and Conversion Powers by the applicable Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an Affected Financial Institution; and
- (ii) the effects of any Bail-in Action on any such liability, including, if applicable:
 - (a) a reduction in full or in part or cancellation of any such liability;
 - (b) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such Affected Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or
 - (c) the variation of the terms of such liability in connection with the exercise of the write-down and conversion powers of the applicable Resolution Authority.

11.14 Acknowledgement Regarding Any Supported QFCs. To the extent that the Loan Documents provide support, through a guarantee or otherwise, for hedge or swap agreements or any other agreement or instrument that is a QFC (such support, “**QFC Credit Support**” and each such QFC a “**Supported QFC**”), the parties acknowledge and agree as follows with respect to the resolution power of the Federal Deposit Insurance Corporation under the Federal Deposit Insurance Act and Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (together with the regulations promulgated thereunder, the “**U.S. Special Resolution Regimes**”) in respect of such Supported QFC and QFC Credit Support (with the provisions below applicable notwithstanding that the Loan Documents and any Supported QFC may in fact be stated to be

governed by the laws of the Commonwealth of Pennsylvania and/or of the United States or any other state of the United States):

(i) In the event a Covered Entity that is party to a Supported QFC (each, a “**Covered Party**”) becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer of such Supported QFC and the benefit of such QFC Credit Support (and any interest and obligation in or under such Supported QFC and such QFC Credit Support, and any rights in property securing such Supported QFC or such QFC Credit Support) from such Covered Party will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if the Supported QFC and such QFC Credit Support (and any such interest, obligation and rights in property) were governed by the laws of the United States or a state of the United States. In the event a Covered Party or a BHC Act Affiliate of a Covered Party becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under the Loan Documents that might otherwise apply to such Supported QFC or any QFC Credit Support that may be exercised against such Covered Party are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if the Supported QFC and the Loan Documents were governed by the laws of the United States or a state of the United States. Without limitation of the foregoing, it is understood and agreed that rights and remedies of the parties with respect to a Defaulting Lender shall in no event affect the rights of any Covered Party with respect to a Supported QFC or any QFC Credit Support.

(ii) As used in this Section 11.15, the following terms have the following meanings:

“BHC Act Affiliate” of a party means an “affiliate” (as such term is defined under, and interpreted in accordance with, 12 U.S.C. 1841(k)) of such party.

“Covered Entity” means any of the following:

- (i) a “covered entity” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b);
- (ii) a “covered bank” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or
- (iii) a “covered FSI” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b).

“Default Right” has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable.

“QFC” has the meaning assigned to the term “qualified financial contract” in, and shall be interpreted in accordance with, 12 U.S.C. 5390(c)(8)(D).

(i) Each Lender (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that at least one of the following is and will be true:

(a) such Lender is not using “plan assets” (within the meaning of Section 3(42) of ERISA or otherwise) of one or more Benefit Plans with respect to such Lender’s entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments or this Agreement,

(b) the transaction exemption set forth in one or more PTEs, such as PTE 84-14 (a class exemption for certain transactions determined by independent qualified professional asset managers), PTE 95-60 (a class exemption for certain transactions involving insurance company general accounts), PTE 90-1 (a class exemption for certain transactions involving insurance company pooled separate accounts), PTE 91-38 (a class exemption for certain transactions involving bank collective investment funds) or PTE 96-23 (a class exemption for certain transactions determined by in-house asset managers), is applicable with respect to such Lender’s entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement,

(c) (I) such Lender is an investment fund managed by a “Qualified Professional Asset Manager” (within the meaning of Part VI of PTE 84-14), (II) such Qualified Professional Asset Manager made the investment decision on behalf of such Lender to enter into, participate in, administer and perform the Loans, the Letters of Credit, the Commitments and this Agreement, (III) the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement satisfies the requirements of sub-sections (b) through (g) of Part I of PTE 84-14 and (IV) to the best knowledge of such Lender, the requirements of subsection (a) of Part I of PTE 84-14 are satisfied with respect to such Lender’s entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement, or

(d) such other representation, warranty and covenant as may be agreed in writing between the Administrative Agent, in its sole discretion, and such Lender.

(ii) In addition, unless either (1) sub-clause (a) in the immediately preceding clause (i) is true with respect to a Lender or (2) a Lender has provided another representation, warranty and covenant in accordance with sub-clause (d) in the immediately preceding clause (i), such Lender further (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that the Administrative Agent is not a fiduciary with respect to the assets of such Lender involved in such Lender’s entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement (including in connection with the reservation or exercise of any rights by the Administrative Agent under this Agreement, any Loan Document or any documents related hereto or thereto).

11.16 Non-Public Information. (i) Notwithstanding anything in this Section, the provisions in this Section 11.16 shall only be effective from and after the occurrence of an IPO.

(ii) Each Lender acknowledges that all information, including requests for waivers and amendments, furnished by the Borrower or the Administrative Agent pursuant to or in connection with, or in the course of administering, this Agreement will be syndicate-level information, which may contain MNPI. Each Lender represents to the Borrower and the Administrative Agent that (a) it has developed compliance procedures regarding the use of MNPI and that it will handle MNPI in accordance with such procedures and applicable law, including Federal, state and foreign securities laws, and (b) it has identified to the Administrative Agent in writing a credit contact who may receive information that may contain MNPI in accordance with its compliance procedures and applicable law, including United States (Federal or state) and foreign securities laws.

(iii) The Borrower and each Lender acknowledge that, if information furnished by or on behalf of the Borrower pursuant to or in connection with this Agreement is being distributed by the Administrative Agent through the Platform, (a) the Administrative Agent may post any information that the Borrower has indicated as containing MNPI solely on that portion of the Platform designated for Private Side Lender Representatives and (b) if the Borrower has not indicated whether any information furnished by it pursuant to or in connection with this Agreement contains MNPI, the Administrative Agent reserves the right to post such information solely on that portion of the Platform designated for Private Side Lender Representatives. The Borrower agrees to clearly designate all information provided to the Administrative Agent by or on behalf of the Borrower that is suitable to be made available to Public Side Lender Representatives, and the Administrative Agent shall be entitled to rely on any such designation by the Borrower without liability or responsibility for the independent verification thereof.

[SIGNATURE PAGES FOLLOW]

129

IN WITNESS WHEREOF, the parties hereto, by their officers thereunto duly authorized, have executed this Agreement as of the day and year first above written.

ATTEST:

VERTEX, INC.

By: /s/ John Schwab

Name: John Schwab

Title: Assistant Treasurer and Chief Financial Officer

VERTEX VAT SOLUTIONS, LLC

By: /s/ Lisa Butler

Name: Lisa Butler

Title: Assistant Treasurer and Chief Accounting Officer

VERTEX DELAWARE, LLC

By: /s/ Lisa Butler

Name: Lisa Butler

Title: Assistant Treasurer and Chief Accounting Officer

PNC BANK, NATIONAL ASSOCIATION,
individually and as Administrative Agent

By: /s/ John M. DiNapoli

Name: John M. DiNapoli

Title: Senior Vice President

SCHEDULE 1.1(A)

PRICING GRID—

VARIABLE PRICING AND FEES BASED ON NET LEVERAGE RATIO

Level	Net Leverage Ratio	Commitment Fee	Letter of Credit Fee	Revolving Credit Base Rate Spread	Term Loan Base Rate Spread	Revolving Credit Euro-Rate Spread	Term Loan Euro-Rate Spread
I	Less than or equal to 0.75 to 1.0	0.15%	1.00%	0.00%	0.00%	1.00%	1.00%
II	Greater than 0.75 to 1.0 but less than or equal to 1.50 to 1.0	0.175%	1.25%	0.25%	0.25%	1.25%	1.25%
III	Greater than 1.50 to 1.0 but less than or equal to 2.25 to 1.0	0.20%	1.50%	0.50%	0.50%	1.50%	1.50%
IV	Greater than 2.25 to 1.0 but less than or equal to 3.00 to 1.0	0.25%	1.75%	0.75%	0.75%	1.75%	1.75%
V	Greater than 3.00 to 1.0	0.30%	2.00%	1.00%	1.00%	2.00%	2.00%

For purposes of determining the Applicable Margin, the Applicable Commitment Fee Rate and the Applicable Letter of Credit Fee Rate:

- (a) The Applicable Margin, the Applicable Commitment Fee Rate and the Applicable Letter of Credit Fee Rate shall start on the Closing Date in Level III.

(b) The Applicable Margin, the Applicable Commitment Fee Rate and the Applicable Letter of Credit Fee Rate shall be recomputed as of the end of each fiscal quarter ending after the Closing Date based on the Net Leverage Ratio as of such quarter end. Any increase or decrease in the Applicable Margin, the Applicable Commitment Fee Rate or the Applicable Letter of Credit Fee Rate computed as of a quarter end shall be effective on the date on which the Compliance Certificate evidencing such computation is due to be delivered under Section 8.3.3 [Certificate of Borrower]; provided that, until the Compliance Certificate for the quarter ending September 30, 2020 is due to be delivered under Section 8.3.3 [Certificate of Borrower], if a Compliance Certificate shall indicate that the Net Leverage Ratio is in Pricing Level I or Level II, then the Pricing Level shall be deemed to be Level III (i.e., the best Pricing Level that the Borrower may be in prior to delivery of the Compliance Certificate for the quarter ending September 30, 2020 shall be Level III). If a Compliance Certificate is not delivered when due in accordance with such Section 8.3.3, then the rates in Level V shall apply as of the first Business Day after the date on which such Compliance Certificate was required to have been delivered and shall remain in effect until the date on which such Compliance Certificate is delivered.

(c) If, as a result of any restatement of or other adjustment to the financial statements of the Borrower or for any other reason, the Borrower or the Lenders determine that (i) the Net Leverage Ratio as calculated by the Borrower as of any applicable date was inaccurate and (ii) a proper calculation of the Net Leverage Ratio would have resulted in higher pricing for such period, the Borrower shall immediately and retroactively be obligated to pay to the Administrative Agent for the account of the applicable Lenders, promptly on demand by the Administrative Agent (or, after the occurrence of an actual or deemed entry of an order for relief with respect to the Borrower under the Bankruptcy Code of the United States, automatically and without further action by the Administrative Agent, any Lender or the Issuing Lender), an amount equal to the excess of the amount of interest and fees that should have been paid for such period over the amount of interest and fees actually paid for such period. This paragraph shall not limit the rights of the Administrative Agent, any Lender or the Issuing Lender, as the case may be, under Section 2.9 [Letter of Credit Subfacility] or Section 4.3 [Interest After Default] or Section 9 [Default]. The Borrower's obligations under this paragraph shall survive the termination of the Commitments and the repayment of all other Obligations hereunder.

SCHEDULE 1.1(B)

COMMITMENTS OF LENDERS AND ADDRESSES FOR NOTICES

Part 1 - Commitments of Lenders and Addresses for Notices to Lenders

<u>Lender</u>	<u>Amount of Commitment for Revolving Credit Loans</u>	<u>Amount of Commitment for Term Loans</u>	<u>Total Commitment</u>	<u>Ratable Share</u>
Name: PNC Bank, National Association	\$ 100,000,000	\$ 175,000,000	\$ 275,000,000	100.00%
Address: 1000 Westlakes Drive, Suite 300, Berwyn, PA 19312- 2409				
Attention: Daniel Takoushian				
Telephone: (610) 725-5754				
Telecopy: (610) 725-5799				
Total	\$ 100,000,000	\$ 175,000,000	\$ 275,000,000	100.00%

SCHEDULE 1.1(B)

COMMITMENTS OF LENDERS AND ADDRESSES FOR NOTICES

Part 2 - Addresses for Notices to Borrower and Guarantors:

ADMINISTRATIVE AGENT

Name: PNC Bank, National Association
 Address: 1000 Westlakes Drive, Suite 300
 Berwyn, PA 19312-2409
 Attention: Daniel Takoushian
 Telephone: (610) 725-5754
 Telecopy: (610) 725-5799

With a Copy To:

Name: Agency Services, PNC Bank, National Association
 Mail Stop: P7-PFSC-04-I
 Address: 500 First Avenue
 Pittsburgh, PA 15219
 Attention: Agency Services
 Telephone: 412 768-0423
 Telecopy: 412 762 8672

BORROWER:

Name: Vertex, Inc.
 Address: 2301 Renaissance Boulevard
 King of Prussia, PA 19406
 Attention: John Schwab, Chief Financial Officer
 Telephone: 610-407-1403
 Telecopy: 610-407-9694

With a Copy To:

Name: Vertex, Inc.
 Address: 2301 Renaissance Boulevard
 King of Prussia, PA 19406
 Attention: Bryan Rowland, General Counsel
 Telephone: 484-595-9553
 Telecopy: 610-407-9694

GUARANTORS:

Name: Vertex VAT Solutions, LLC
Address: 2301 Renaissance Boulevard
King of Prussia, PA 19406
Attention: Bryan Rowland, General Counsel
Telephone: 484-595-9553
Telecopy: 610-407-9694

With a Copy To:

Name: Vertex, Inc.
Address: 2301 Renaissance Boulevard
King of Prussia, PA 19406
Attention: Bryan Rowland, General Counsel
Telephone: 484-595-9553
Telecopy: 610-407-9694

Name: Vertex Delaware, LLC
Address: 2301 Renaissance Boulevard
King of Prussia, PA 19406
Attention: Bryan Rowland, General Counsel
Telephone: 484-595-9553
Telecopy: 610-407-9694

With a Copy To:

Name: Vertex, Inc.
Address: 2301 Renaissance Boulevard
King of Prussia, PA 19406
Attention: Bryan Rowland, General Counsel
Telephone: 484-595-9553
Telecopy: 610-407-9694

[FORM OF]

U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Lenders That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of March 31, 2020 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement"), among Vertex, Inc., the Guarantors party thereto, PNC Bank, National Association, as Administrative Agent, and each lender from time to time party thereto.

Pursuant to the provisions of Section 5.9 [*Taxes*] of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the Loan(s) (as well as any Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) it is not a bank within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code and (iv) it is not a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished the Administrative Agent and the Borrower with a certificate of its non-U.S. Person status on IRS Form W-8BEN or W-BEN-E. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform the Borrower and the Administrative Agent, and (2) the undersigned shall have at all times furnished the Borrower and the Administrative Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[NAME OF LENDER]

By: _____

Name:

Title:

Date: _____, 20[]

[FORM OF]

U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Participants That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of March 31, 2020 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement"), among Vertex, Inc., the Guarantors party thereto, PNC Bank, National Association, as Administrative Agent, and each lender from time to time party thereto.

Pursuant to the provisions of Section 5.9 [*Taxes*] of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the participation in respect of which it is providing this certificate, (ii) it is not a bank within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code, and (iv) it is not a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code].

The undersigned has furnished its participating Lender with a certificate of its non-U.S. Person status on IRS Form W-8BEN or W-BEN-E. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender in writing, and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[NAME OF PARTICIPANT]

By: _____

Name:

Title:

Date: _____, 20[]

[FORM OF]

U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Participants That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of March 31, 2020 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement"), among Vertex, Inc., the Guarantors party thereto, PNC Bank, National Association, as Administrative Agent, and each lender from time to time party thereto.

Pursuant to the provisions of Section 5.9 [*Taxes*] of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the participation in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such participation, (iii) with respect such participation, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or W-BEN-E or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or W-BEN-E from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[NAME OF PARTICIPANT]

By: _____

Name:

Title:

Date: _____, 20[]

[FORM OF]

U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Lenders That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of March 31, 2020 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement"), among Vertex, Inc., the Guarantors party thereto, PNC Bank, National Association, as Administrative Agent, and each lender from time to time party thereto.

Pursuant to the provisions of Section 5.9 [Taxes] of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the Loan(s) (as well as any Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such Loan(s) (as well as any Note(s) evidencing such Loan(s)), (iii) with respect to the extension of credit pursuant to this Credit Agreement or any other Loan Document, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished the Administrative Agent and the Borrower with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or W-BEN-E or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or W-BEN-E from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform the Borrower and the Administrative Agent, and (2) the undersigned shall have at all times furnished the Borrower and the Administrative Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[NAME OF LENDER]

By: _____

Name:

Title:

Date: _____, 20[]

INSURANCE REQUIREMENTS RELATING TO THE COLLATERAL

COVENANTS:

The Loan Parties shall deliver to the Administrative Agent and each of the Lenders (x) on the Closing Date and annually thereafter a certificate of insurance signed by the Loan Parties' independent insurance broker describing and certifying as to the existence of the insurance on the Collateral required to be maintained by this Agreement and the other Loan Documents, together with a copy of the endorsement described in the next sentence attached to such certificate, and (y) at the reasonable request of the Administrative Agent, from time to time a summary schedule indicating all insurance then in force with respect to each of the Loan Parties (provided that, other during the continuance of an Event of Default, the Administrative Agent shall not request such an update more than once in a 12-month period). Such policies of insurance shall, with respect to the Collateral, contain special endorsements which include the provisions set forth below or are otherwise in form acceptable to the Administrative Agent in its reasonable discretion. The applicable Loan Parties shall notify the Administrative Agent promptly of any occurrence causing a material loss or decline in value of the Collateral in excess of \$5,000,000 in the aggregate and the estimated (or actual, if available) amount of such loss or decline. Any monies received by the Administrative Agent constituting insurance proceeds may, at the option of the Administrative Agent, (i) in the case of property insurance proceeds received after the date on which the Administrative Agent has taken action pursuant to Section 9.2 [Consequences of Event of Default], be applied by the Administrative Agent to the payment of the Obligations or the Secured Obligations in accordance with the terms of the Credit Agreement, and (ii) otherwise be disbursed by the Administrative Agent to the applicable Loan Parties, provided that the Loan Parties shall continue to be subject to the terms and conditions of Section 5.7.3 [Material Recovery Events].

ENDORSEMENT:

(i) specify the Administrative Agent as an additional insured and/or lender loss payee, as applicable, as its interests may appear with the understanding that any obligation imposed upon the insured (including the liability to pay premiums) shall be the sole obligation of the applicable Loan Parties and not that of the insured; and

(ii) provide that no cancellation of such policies for any reason (including non-payment of premium) therein shall be effective until at least thirty (30) days (ten (10) days in the case of cancellation for non-payment of premiums) after receipt by the Administrative Agent of written notice of such cancellation to the extent that the relevant insurer is able to provide such language on the relevant policy.

FIRST AMENDMENT TO LOAN DOCUMENTS

FIRST AMENDMENT TO LOAN DOCUMENTS (this "Amendment"), dated as of April 3, 2020, by and among (i) VERTEX, INC. (the "Borrower"), (ii) VERTEX VAT SOLUTIONS, LLC and VERTEX DELAWARE, LLC (collectively, the "Guarantors"; together with the Borrower, individually a "Loan Party" and collectively, the "Loan Parties"), (iii) the Lenders party hereto and (iv) PNC BANK, NATIONAL ASSOCIATION, as administrative agent for the Lenders (in such capacity, the "Administrative Agent"). Capitalized terms used but not defined herein shall have the meanings assigned thereto in the Credit Agreement referred to below.

WITNESSETH:

WHEREAS, the Borrower, the Guarantors, the Lenders party thereto and the Administrative Agent are parties to a Credit Agreement, dated as of March 31, 2020 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement");

WHEREAS, simultaneously herewith, Santander Bank, N.A. will join the Credit Agreement as a Lender pursuant to an Assignment and Assumption Agreement, which shall become effective simultaneously with this Amendment (the "Santander Assignment and Assumption Agreement"); and

WHEREAS, the Borrower and the Lenders have agreed to modify the pricing grid on the terms and conditions hereof.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto, intending to be legally bound, hereby agree as follows:

1. **Credit Agreement Amendment.** On the First Amendment Effective Date (as defined below), the Credit Agreement shall be amended as follows:

(a) Schedule 1.1(A) to the Credit Agreement [Pricing Grid] shall be amended and restated in its entirety to read as set forth on Exhibit A attached hereto.

(b) The next to last sentence of Section 3.2 [Nature of Lenders' Obligations With Respect to Term Loans; Repayment Terms] of the Credit Agreement shall be amended and restated to read in full as follows:

The principal amount of the Term Loans shall be payable by the Borrower in quarterly installments on the first day of each calendar quarter commencing October 1, 2020, each in an amount equal to two and one-half percent of the aggregate amount of the Term Loans made on the Closing Date (i.e., \$4,375,000 per quarter), with a final payment due on the Term Loan Maturity Date equal to the total outstanding principal amount of the Term Loans.

(c) The definition of “Specified Distribution” in Section 1.1 [Certain Definitions] of the Credit Agreement shall be amended by deleting the amount “\$120,000,000” the one time it appears therein and inserting in lieu thereof the amount “\$110,000,000”.

(d) Section 5.7.2(iii) [Issuance of Debt; Issuance of Equity Interests; No Specified Distribution] of the Credit Agreement shall be amended by deleting the amount “\$120,000,000” the one time it appears therein and inserting in lieu thereof the amount “\$110,000,000”.

2. **Representations and Warranties.** In order to induce the Lenders and the Administrative Agent to enter into this Amendment and to amend the Credit Agreement in the manner provided herein, each Loan Party hereby represents and warrants to each Lender and the Administrative Agent that the following statements are true and correct:

(a) There exists no Potential Default or Event of Default under the Credit Agreement after giving effect to this Amendment;

(b) The representations and warranties of each Loan Party set forth in the Loan Documents are true and correct (i) in the case of representations and warranties qualified as to materiality, in all respects and (ii) otherwise, in all material respects, in each case on and as of the date hereof, except in the case of any such representation and warranty that expressly relates to a prior date, in which case such representation and warranty shall be so true and correct in all material respects (or, if qualified as to materiality, in all respects) on and as of such prior date;

(c) The execution and delivery of this Amendment by such Loan Party and the performance by such Loan Party of this Amendment and the other Loan Documents (as amended by this Amendment) (i) has been duly authorized by all necessary corporate or other organizational action on behalf such Loan Party and (ii) will not, except as permitted under the Credit Agreement (as amended by this Amendment), result in or require the creation or imposition of any Lien upon the properties or assets of any Loan Party;

(d) This Amendment and the other Loan Documents (as amended by this Amendment) constitute the legal, valid and binding obligation of each Loan Party party hereto or thereto, enforceable against such Loan Party in accordance with their terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting creditors’ rights generally and to general principles of equity, regardless whether considered in a proceeding in equity or at law; and

(e) No consent, approval, authorization or order of, or filing, registration or qualification with, any court or Official Body or third party is required in connection with the execution, delivery or performance by such Loan Party of this Amendment (except for those which have been obtained on or prior to the date hereof).

3. **Conditions Precedent.** This Amendment shall become effective on the date (such date, the “First Amendment Effective Date”) when each of the following conditions precedent is satisfied:

(a) The Administrative Agent shall have received counterparts of this Amendment duly executed by (i) the Loan Parties, (ii) the Administrative Agent, and (iii) the Lenders;

(b) The Santander Assignment and Assumption Agreement shall have become effective simultaneously with the effectiveness of this Agreement; and

(c) The Administrative Agent shall have received such other documents, resolutions and certificates as the Administrative Agent or its counsel may have requested, all in form and substance satisfactory to the Administrative Agent and its counsel.

4. **Affirmations.** (a) Each of the Loan Parties hereby (i) ratifies and affirms all of the provisions of the Credit Agreement and the other Loan Documents as amended hereby, (ii) agrees that the terms and conditions of the Credit Agreement and the other Loan Documents shall continue in full force and effect as amended hereby and that all of its obligations thereunder are valid and enforceable and shall not be impaired or limited by the execution or effectiveness of this Amendment or any other documents or instruments executed in connection herewith and (iii) acknowledges and agrees that it has no defense, set-off, counterclaim or challenge against the payment of any sums currently owing under the Credit Agreement and the other Loan Documents or the enforcement of any of the terms or conditions thereof and agrees to be bound thereby and perform thereunder.

(b) Without limiting the above, each of the Loan Parties hereby acknowledges and confirms that (i) the Collateral granted under the Loan Documents continues to secure the Secured Obligations (as defined in the Guarantee and Collateral Agreement) and (ii) the terms of the Guarantee and Collateral Agreement are hereby reaffirmed and shall remain in full force and effect.

5. **Limited Effect.** Except as expressly modified hereby, the Credit Agreement, the Guarantee and Collateral Agreement and the other Loan Documents shall continue to be, and shall remain, unaltered and in full force and effect in accordance with their terms.

6. **Integration.** This Amendment constitutes the sole agreement of the parties with respect to the transactions contemplated hereby and shall supersede all oral negotiations and the terms of prior writings with respect thereto. From and after the First Amendment Effective Date, all references in the Credit Agreement, and each of the other Loan Documents to the Credit Agreement shall be deemed to be references to the Credit Agreement, as modified hereby. This Amendment shall constitute a Loan Document for all purposes under the Credit Agreement and each of the other Loan Documents.

7. **Severability.** Any provision of this Amendment which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

8. Miscellaneous.

(a) GOVERNING LAW. THIS AMENDMENT SHALL BE GOVERNED BY, AND INTERPRETED AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA WITHOUT GIVING EFFECT TO THE CHOICE OF LAW PROVISIONS THEREOF.

(b) Successor and Assigns. This Amendment shall inure to the benefit of, and be binding upon, the parties hereto and their respective successors and assigns.

(c) Counterparts. This Amendment may be executed in one or more counterparts, each of which counterparts when executed and delivered shall be deemed to be an original, and all of which shall constitute one and the same instrument. Delivery of an executed counterpart of a signature page to this Amendment by facsimile or other electronic transmission will be effective as delivery of a manually executed counterpart hereof.

(d) Headings. The headings of any paragraph of this Amendment are for convenience only and shall not be used to interpret any provision hereof.

(e) Modifications. No modification hereof or any agreement referred to herein shall be binding or enforceable unless in writing and signed on behalf of the party against whom enforcement is sought.

[SIGNATURES FOLLOW]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered by their proper and duly authorized officers as of the day and year first above written.

VERTEX, INC.

By: /s/ John Schwab

Name: John Schwab

Title: Assistant Treasurer and Chief Financial Officer

VERTEX VAT SOLUTIONS, LLC

By: Vertex Inc., its Sole Member

By: /s/ Lisa Butler

Name: Lisa Butler

Title: Assistant Treasurer and Chief Accounting Officer

VERTEX DELAWARE, LLC

By: Vertex Inc., its Sole Member

By: /s/ Lisa Butler

Name: Lisa Butler

Title: Assistant Treasurer and Chief Accounting Officer

[Signature Page to First Amendment]

PNC BANK, NATIONAL ASSOCIATION,
individually and as Administrative Agent

By: /s/ John M DiNapoli

Name: John M DiNapoli

Title: Senior Vice President

[Signature Page to First Amendment]

EXHIBIT A
TO FIRST AMENDMENT

SCHEDULE 1.1(A)

PRICING GRID—

VARIABLE PRICING AND FEES BASED ON NET LEVERAGE RATIO

PRICING GRID A

Level	Net Leverage Ratio	Commitment Fee	Letter of Credit Fee	Revolving Credit Base Rate Spread	Term Loan Base Rate Spread	Revolving Credit Euro-Rate Spread	Term Loan Euro-Rate Spread
I	Less than or equal to 0.75 to 1.0	0.15 %	1.00 %	0.00 %	0.00 %	1.00 %	1.00 %
II	Greater than 0.75 to 1.0 but less than or equal to 1.50 to 1.0	0.175 %	1.25 %	0.25 %	0.25 %	1.25 %	1.25 %
III	Greater than 1.50 to 1.0 but less than or equal to 2.25 to 1.0	0.20 %	1.50 %	0.50 %	0.50 %	1.50 %	1.50 %
IV	Greater than 2.25 to 1.0 but less than or equal to 3.00 to 1.0	0.25 %	1.75 %	0.75 %	0.75 %	1.75 %	1.75 %
V	Greater than 3.00 to 1.0	0.30 %	2.00 %	1.00 %	1.00 %	2.00 %	2.00 %

Exhibit A-1

PRICING GRID B

Level	Net Leverage Ratio	Commitment Fee	Letter of Credit Fee	Revolving Credit Base Rate Spread	Term Loan Base Rate Spread	Revolving Credit Euro-Rate Spread	Term Loan Euro-Rate Spread
I	Less than or equal to 0.75 to 1.0	0.15 %	1.00 %	0.00 %	0.25 %	1.00 %	1.25 %
II	Greater than 0.75 to 1.0 but less than or equal to 1.50 to 1.0	0.175 %	1.25 %	0.25 %	0.50 %	1.25 %	1.50 %
III	Greater than 1.50 to 1.0 but less than or equal to 2.25 to 1.0	0.20 %	1.50 %	0.50 %	0.75 %	1.50 %	1.75 %
IV	Greater than 2.25 to 1.0 but less than or equal to 3.00 to 1.0	0.25 %	1.75 %	0.75 %	1.00 %	1.75 %	2.00 %
V	Greater than 3.00 to 1.0	0.30 %	2.00 %	1.00 %	1.25 %	2.00 %	2.25 %

For purposes of determining the Applicable Margin, the Applicable Commitment Fee Rate and the Applicable Letter of Credit Fee Rate, (i) for the period from the Closing Date to and including the date that is one hundred and eighty (180) days after the Closing Date, the pricing in Pricing Grid A shall be applicable, and (ii) from and after the one hundred and eighty-first (181st) day after the Closing Date, the pricing in Pricing Grid B shall be applicable, in each case, in accordance with the following:

Exhibit A-2

(a) The Applicable Margin, the Applicable Commitment Fee Rate and the Applicable Letter of Credit Fee Rate shall start on the Closing Date in Level III of Pricing Grid A.

(b) Subject to clause (d) below, the Applicable Margin, the Applicable Commitment Fee Rate and the Applicable Letter of Credit Fee Rate shall be recomputed as of the end of each fiscal quarter ending after the Closing Date based on the Net Leverage Ratio as of such quarter end. Any increase or decrease in the Applicable Margin, the Applicable Commitment Fee Rate or the Applicable Letter of Credit Fee Rate computed as of a quarter end shall be effective on the date on which the Compliance Certificate evidencing such computation is due to be delivered under Section 8.3.3 [Certificate of Borrower]; provided that, until the Compliance Certificate for the quarter ending September 30, 2020 is due to be delivered under Section 8.3.3 [Certificate of Borrower], if a Compliance Certificate shall indicate that the Net Leverage Ratio is in Pricing Level I or Level II, then the Pricing Level shall be deemed to be Level III (i.e., the best Pricing Level that the Borrower may be in prior to delivery of the Compliance Certificate for the quarter ending September 30, 2020 shall be Level III). If a Compliance Certificate is not delivered when due in accordance with such Section 8.3.3, then the rates in Level V shall apply as of the first Business Day after the date on which such Compliance Certificate was required to have been delivered and shall remain in effect until the date on which such Compliance Certificate is delivered.

(c) If, as a result of any restatement of or other adjustment to the financial statements of the Borrower or for any other reason, the Borrower or the Lenders determine that (i) the Net Leverage Ratio as calculated by the Borrower as of any applicable date was inaccurate and (ii) a proper calculation of the Net Leverage Ratio would have resulted in higher pricing for such period, the Borrower shall immediately and retroactively be obligated to pay to the Administrative Agent for the account of the applicable Lenders, promptly on demand by the Administrative Agent (or, after the occurrence of an actual or deemed entry of an order for relief with respect to the Borrower under the Bankruptcy Code of the United States, automatically and without further action by the Administrative Agent, any Lender or the Issuing Lender), an amount equal to the excess of the amount of interest and fees that should have been paid for such period over the amount of interest and fees actually paid for such period. This paragraph shall not limit the rights of the Administrative Agent, any Lender or the Issuing Lender, as the case may be, under Section 2.9 [Letter of Credit Subfacility] or Section 4.3 [Interest After Default] or Section 9 [Default]. The Borrower's obligations under this paragraph shall survive the termination of the Commitments and the repayment of all other Obligations hereunder.

(d) For the avoidance of doubt and notwithstanding anything to the contrary herein, commencing on the one hundred and eighty-first (181st) day after the Closing Date, Pricing Grid B shall be applicable for all purposes under the Credit Agreement and, as a result, any Term Loans outstanding from and after such date shall bear interest based on Pricing Grid B and not Pricing Grid A.

VERTEX, INC.

THIRD AMENDED AND RESTATED
2007 STOCK APPRECIATION RIGHTS PLAN

SECTION 1

AMENDMENT AND RESTATEMENT AND PURPOSE

Vertex, Inc., a Pennsylvania corporation (the “*Company*”), hereby amends and restates in its entirety the SECOND AMENDED AND RESTATED VERTEX, INC. 2007 STOCK APPRECIATION RIGHTS PLAN (the “*Plan*”), effective as of May 4, 2017. The purpose of the Plan is to promote the long-term growth and profitability of the Company by (i) providing key people with incentives to improve shareholder value and to contribute to the growth and financial success of the Company, and (ii) enabling the Company to attract, retain and reward the best available persons for positions of substantial responsibility. To accomplish such purposes, the Plan authorizes the granting of stock appreciation rights in the form of awards of SAR Units.

The Plan is a compensatory benefit plan within the meaning of Rule 701 under the Securities Act of 1933 (the “*Securities Act*”). Except to the extent any other exemption from the Securities Act is expressly relied upon in connection with any agreement entered into pursuant to the Plan or the securities issuable hereunder are registered under the Securities Act, the awarding of SAR Units pursuant to the Plan is intended to qualify for the exemption from registration under the Securities Act provided by Rule 701. To the extent that an exemption from registration under the Securities Act provided by Rule 701 is unavailable, all awards of SAR Units pursuant to the Plan are intended to be exempt from registration under the Securities Act in

reliance upon the private offering exemption contained in Section 4(2) of the Securities Act, or other available exemption, and the Plan shall be so administered.

SECTION 2

DEFINITIONS

Under this Plan, except where the context otherwise indicates, the following definitions shall apply:

2.1. **“Adjusted Net Cash Flow from Operating Activities”** for a Fiscal Year means the Company’s net cash provided by operating activities, less cash used in investing activities for (i) purchases and capitalized property and equipment, and (ii) capitalized software additions, all as reflected in the comparative statements of cash flow constituting part of the Company’s annual audited consolidated financial statements for such Fiscal Year.

2.2. **“Annual Liquidity Pool”** with respect to a Fiscal Year means the Adjusted Net Cash Flow from Operating Activities for such Fiscal Year, multiplied by the Vested SAR Unit Fraction for such Fiscal Year. Written notice of the annual determination of the Annual Liquidity Pool shall be provided to each Participant who is a grantee of SAR Units which have not yet terminated or been the subject of a Triggering Event.

2.3. **“Award”** means a grant of a stock appreciation right in the form of SAR Units pursuant to Section 5 of the Plan.

2.4. **“Base Value”** of a SAR Unit means the Fair Market Value of such SAR Unit on the Grant Date.

2.5. **“Beneficiary”** means the person or persons designated by a Participant to receive amounts payable under the Plan as a result of the Participant’s death on the Designation of Beneficiary form set forth as Exhibit A to the Plan, which is incorporated into and made a part of the Plan. Any such designation may be changed by a Participant by filing a new form with the Committee. If no named Beneficiary shall survive a Participant, or if the Participant fails to designate a Beneficiary, any payments due under the Plan after the death of a Participant shall be made in the following order of priority to: (i) the Participant’s surviving spouse; (ii) the Participant’s surviving children, including adopted children, in equal shares; or (iii) the legal representative of the Participant’s estate.

2.6. **“Board”** means the Board of Directors of the Company.

2.7. **“Board Advisor”** means any person, other than an Employee or a Director, who is hired by the Company to advise the Board.

2.8. **“Cause”** means:

A. As to any person who first becomes a Participant after June 30, 2016 and who is a party to an employment or other service agreement with the Company or a Subsidiary, (i) if such agreement defines cause, **“Cause”** means the definition of cause in such agreement, or (ii) if such agreement specifies conditions under which the Company or the Subsidiary may terminate the Participant’s employment or services without advance notice, **“Cause”** means any of such conditions; and

B. As to all Participants other than Participants who first became a Participant after June 30, 2016 and are a party to an employment or other service agreement with the Company or a Subsidiary that is described in Section 2.8.A(i) or (ii), **“Cause”** means such Participant’s: (i) repeated or extended failure to perform the

Participant's duties or obligations to the Company or any Subsidiary (other than as a result of the Participant's death or incapacity due to physical or mental illness or injury); (ii) willful misconduct that is materially injurious to the Company or any Subsidiary, monetarily or otherwise; (iii) dishonesty, unethical, fraudulent or similar misconduct in connection with the Participant's employment by, or performance of services for, the Company or any Subsidiary; (iv) use of non-prescription controlled substances, misuse of prescription drugs or habitual intoxication, during work hours; (v) conviction of a felony or any other crime involving fraud, dishonesty or moral turpitude; (vi) material violation of any policy of the Company or any policy of any Subsidiary for whom the Participant performs services; (vii) material breach of any provision of any written agreement entered into between the Participant and the Company or any Subsidiary (but only if such first became a Participant after June 30, 2016) or (viii) refusal to follow any lawful directions of the Board or any other person at the Company or any Subsidiary to whom the Participant reports.

2.9. **"Change of Control"** means: (i) any issuance, sale or other transfer of the Company's voting shares to an unrelated third party, which when taken together with any other issuances, sales or other transfers of Company voting shares within the preceding 12 month period, consists of shares that constitute more than 50% of the voting power of all of the Company's issued and outstanding voting shares immediately following such issuance, sale or other transfer; or (ii) a statutory merger (regardless of whether or not the Company is the surviving entity) or a sale of all or substantially all of the assets of the Company, but only if the merger or sale results in members of the Westphal family (the descendants of Rainer Westphal and Antoinette Westphal) or their nominees holding less than an absolute majority of votes that may be cast by all shareholders of the surviving entity in the election of directors.

2.10. **“Change of Control Value”** means the total amount of cash and property and the principal amount of any promissory notes to be delivered in connection with a transaction or series of transactions that results in a Change of Control, as consideration for the acquisition of all of the assets and/or shares of the Company or in a merger of the Company; provided, that (i) Change of Control Value shall not include any debt of the Company or any Subsidiary assumed as part of the Change of Control, (ii) any property (other than promissory notes) deliverable in connection with a Change of Control shall be valued as of the effective date of the Change of Control, and (iii) if any portion of the consideration payable in connection with a Change of Control is contingent upon the occurrence of a future event, the value of the right to such contingent consideration shall be determined as of the effective date of the Change of Control pursuant to an appraisal by a regionally recognized investment banking firm selected by the Committee. If the Change of Control results in less than all of the assets and/or outstanding shares of the Company being transferred, the Committee shall derive the Change of Control Value by extrapolating from the value of the consideration to be delivered in connection with the Change of Control.

2.11. **“Class B Common”** means the Class B nonvoting common stock of the Company.

2.12. **“Code”** means the Internal Revenue Code of 1986, as amended, and any regulations issued thereunder.

2.13. **“Committee”** means the Board or other committee of individuals, including a committee of Board members, appointed pursuant to Section 3 of the Plan to administer the Plan.

2.14. **“Director”** means a person who is a member of the Board.

2.15. **“Employee”** means any person who is treated as a common law employee on the payroll records of the Company or any Subsidiary.

2.16. **“Exercising Participant”** with respect to a Fiscal Year in which the Annual Liquidity Pool limits the amount payable under Section 5.2.B of the Plan means each Participant who validly exercised SAR Units with respect to such Fiscal Year.

2.17. **“Expiration Date”** of a SAR Unit means such date, if any, as may be specified in the sole discretion of the Committee in the Grant Agreement awarding such SAR Unit.

2.18. **“Fair Market Value”** of the Company as of a Grant Date or a Measurement Date means, except in the event of a Change of Control or an IPO, the fair market value of the Company as of the last day of the Fiscal Year preceding such Grant Date or Measurement Date. The Committee shall determine the Fair Market Value of the Company annually by selecting a regionally recognized investment banking firm to appraise the value of the Company as of the last day of each Fiscal Year; provided, that in the event information subsequently becomes available to the Committee, which the Committee reasonably believes may materially affect the value of the Company and which was not taken into account in the investment banking firm’s determination, including (without limitation) the commencement or settlement of material litigation or the issuance of a patent, the Committee may adjust the Fair Market Value of the Company to reflect such subsequently available information. In the event of a Change of Control, **“Fair Market Value”** of the Company means the Change of Control Value. In the event of an IPO, **“Fair Market Value”** of the Company means the IPO Value.

2.19. **“Fair Market Value of a SAR Unit”** as of a Grant Date or Measurement Date means the Fair Market Value of a share of Class B Common. To determine the Fair Market Value of a share of Class B Common, the Fair Market Value of the Company as of such Grant Date or Measurement Date shall be adjusted by the investment banking firm retained by the Committee, to reflect those discounts as are normally applied to the valuation of minority interests and lack of marketability in closely-held entities, and such adjusted Fair Market Value shall be allocated by the investment banking firm between (or among) the classes of shares of the Company that have shares outstanding (including all classes of common and/or preferred shares), on the basis of such criteria as are customarily used to measure the relative value of different classes of shares of the same corporation. Written notice of the annual determination of the Fair Market Value of a SAR Unit shall be provided to each Participant who is a grantee of SAR Units which have not yet terminated or been exercised or been the subject of a Triggering Event.

2.20. **“Fiscal Year”** means the calendar year, or such other 12 month period as the Board may designate for financial reporting purposes from time to time.

2.21. **“Good Reason”** means, with respect to a Participant who is an Employee, the occurrence of any of the following: (i) the directive by the Company or a Subsidiary that the Employee’s principal office be moved to a location that is more than 100 miles from the location of the Employee’s principal office as of the commencement of the Employee’s employment with the Company or a Subsidiary; (ii) a material reduction in the Employee’s functions, duties or responsibilities relative to the Employee’s functions, duties or responsibilities in effect immediately prior to such reduction; (iii) a material reduction in the Employee’s base salary; or (iv) a material breach of a written employment agreement between the Employee and the Company or between the

Employee and a Subsidiary, which is not corrected by the Company or such Subsidiary within 30 days after written notice by the Employee to the Company or the Subsidiary of such breach.

2.22. **“Grant Agreement”** means a written agreement between the Company and a Participant memorializing the terms and conditions of an Award granted to such Participant pursuant to the Plan.

2.23. **“Grant Date”** means the date on which the Committee formally acts to grant an Award to a Participant or such later date as the Committee shall so designate at the time of taking such formal action.

2.24. **“IPO”** means the first underwritten sale of Company common shares pursuant to an effective registration filed by the Company under the Securities Act.

2.25. **“IPO Value”** means the value of the Company determined on the basis of the average closing selling price of the Company’s class of common shares that was the subject of the IPO on the first 10 days of trading following the IPO; provided, that if in addition to the class of shares registered in the IPO, there shall be one or more classes of shares of the Company (including one or more classes or series of common and/or preferred shares) outstanding immediately following the IPO, the Committee shall ratably increase the value of the Company, for purposes of determining the IPO Value, to take into account such other outstanding class or classes of shares.

2.26. **“Measurement Date”** means, with respect to a SAR Unit, the date on which such SAR Unit is exercised or the date on which a Triggering Event with respect to such SAR Unit occurs.

2.27. **“Net Appreciation”** of a SAR Unit means the amount equal to the excess, if any, of the Fair Market Value of such SAR Unit, as of the Measurement Date, over the Base Value of such SAR Unit.

2.28. **“Participant”** means any Employee, Director or Board Advisor who is selected by the Committee to receive an Award.

2.29. **“Permanent Disability”** means a the inability of a Participant who is an Employee to perform the Participant’s customary duties as an Employee due to either a physical or mental illness or injury, which either continues for a period of 6 consecutive months or which the Committee determines is likely to continue for a period of 6 consecutive months. In the event of a dispute as to whether a Participant has suffered a Permanent Disability, the Committee may require that the Participant be examined by a physician of the Committee’s choice, in which event the Participant shall submit to such tests and examinations as such physician shall deem appropriate to determine whether the Participant has suffered a Permanent Disability. The decision of such physician as to whether a Participant has suffered a Permanent Disability shall be final and binding on all parties.

2.30. **“Pro Rata Number of SAR Units”** has the meaning set forth in Section 5.3 of the Plan.

2.31. **“Retirement”** means, with respect to an Award made to a Participant who is an Employee, such Participant’s resignation from the Company or a Subsidiary, with Board approval, after the Participant’s Retirement Date.

2.32. **“Retirement Date”** means, with respect to an Award made to a Participant who is an Employee, the last day of the month such Participant attains the retirement age specified in the Grant Agreement evidencing such Award.

2.33. **“SAR Unit”** means a right to receive, subject to and in accordance with the terms of the Plan and the Grant Agreement that awarded the SAR Unit, appreciation in the value of one share of Class B Common.

2.34. “**Subsidiary**” and “**Subsidiaries**” means any corporation or other legal entity of which the Company has at least 51% of the equity ownership.

2.35. “**Triggering Event**” means:

A. The closing on a transaction that constitutes a Change of Control;

B. The date of payment to the Company and/or selling shareholders for shares offered in an IPO;

C. With respect to a Participant who is an Employee, such Participant’s termination of employment with the Company or a Subsidiary as a result of such Participant’s death, Permanent Disability or Retirement, or such Participant’s termination of employment by the Company or a Subsidiary other than for Cause, or such Participant’s resignation within 30 days after an event that constitutes Good Reason;

D. With respect to a Participant who is a Director, but who is not an Employee, such Participant’s ceasing to be a member of the Board other than as a result of having been removed from the Board for Cause;

E. With respect to a Participant who is a Board Advisor, the termination of such Participant’s services as a Board Advisor for any reason other than a termination by the Board for Cause or a termination related to such Participant becoming a member of the Board; and

F. The Expiration Date, if any, of a SAR Unit.

2.36. “**Vested SAR Unit Fraction**” with respect to a Fiscal Year means a fraction (i) the numerator of which is the aggregate number of SAR Units, which as of the last day of such Fiscal Year are 50% vested (as determined in accordance with Section 5.4 of the Plan), and which have not terminated or been exercised or been the subject of a Triggering Event, and (ii) the denominator of which is the total number of

outstanding shares of Class B Common, on a fully diluted basis, as of the last day of such Fiscal Year.

SECTION 3

ADMINISTRATION

3.1. **Procedure.** The Plan shall be administered by the Board. In the alternative, the Board may appoint a Committee to administer the Plan on behalf of the Board, subject to such terms and conditions as the Board may prescribe. Once appointed, the Committee shall continue to serve until otherwise directed by the Board. From time to time, the Board may increase the size of the Committee and appoint additional members thereof, remove members (with or without cause) and appoint new members in substitution therefor, fill vacancies, however caused, and remove all members of the Committee and, thereafter, directly administer the Plan. In the event that the Board is the administrator of the Plan in lieu of a Committee, the term "Committee" as used herein shall be deemed to mean the Board.

The Committee shall meet at such times and places and upon such notice as it may determine. A majority of the Committee shall constitute a quorum. Any acts by the Committee may be taken at any meeting at which a quorum is present and shall be by majority vote of those members entitled to vote. Additionally, any acts reduced to writing or approved in writing by all of the members of the Committee shall be valid acts of the Committee.

3.2. **Powers of the Committee.** The Committee shall have all the powers vested in it by the terms of the Plan, such powers to include the authority, in its sole and absolute discretion, to grant Awards under the Plan, determine the Fair Market

Value of the Company (including, without limitation, the Change of Control Value and the IPO Value) and the Annual Liquidity Pool, prescribe Grant Agreements evidencing such Awards and to establish programs for granting Awards. The Committee shall have full power and authority to take all other actions necessary to carry out the purposes and intent of the Plan, including, but not limited to, the authority to:

- A. Determine the eligible persons to whom, and the time or times at which, Awards shall be granted;
- B. Determine the number of SAR Units awarded pursuant to an Award;
- C. Impose such terms, limitations, restrictions and conditions upon any such Award as the Committee shall deem appropriate;
- D. Modify, extend or renew outstanding Awards, accept the surrender of outstanding Awards and substitute new Awards, provided that no such action shall be taken with respect to any outstanding Award which would adversely affect the Participant who is the grantee of the Award without the Participant's consent;
- E. Accelerate or otherwise change the time in which an Award may be exercised or becomes payable and to waive or accelerate the lapse, in whole or in part, of any restriction or condition with respect to such Award, including, but not limited to, any restriction or condition with respect to the exercisability of an Award following termination of any Participant's employment;
- F. Establish objectives and conditions, if any, for earning Awards; and
- G. Establish, modify or remove any vesting requirements applicable to Awards.

12

The Committee shall have full power and authority to administer and interpret the Plan and to adopt such rules, regulations, agreements, guidelines and instruments for the administration of the Plan and for the conduct of its business as the Committee deems necessary or advisable and to interpret same, all within the Committee's sole and absolute discretion.

3.3. **Rounding of Dollar Amounts and SAR Units.** For purposes of calculations under the Plan:

- A. Dollar amounts shall be rounded to the nearest whole dollar; and
- B. SAR Units shall be rounded to the nearest one-hundredth of a SAR Unit.

3.4. **Limited Liability.** To the maximum extent permitted by law, no member of the Board or Committee shall be liable for any action taken or decision made in good faith relating to the Plan or any Award thereunder.

3.5. **Indemnification.** To the maximum extent permitted by law, the members of the Board and Committee shall be indemnified by the Company in respect of all their activities under the Plan undertaken in good faith.

3.6. **Section 409A of the Code.** In adopting the Plan, it is the intent of the Company that the SAR Units, and the right to receive payments with respect to the SAR Units, are exempt from Section 409A of the Code and, accordingly, to the maximum extent permitted, the Plan and all Grant Agreements shall be interpreted in a manner consistent with such exemption.

3.7. **Effect of Committee's Decision.** All actions taken and decisions and determinations made by the Committee on all matters relating to the Plan pursuant to the powers vested in it hereunder shall be in the Committee's sole and absolute discretion and shall be conclusive and binding on all parties concerned, including the

13

Company, its stockholders, any Participants in the Plan and any other Employees, and all of their respective successors in interest.

SECTION 4

PARTICIPATION

The persons eligible to participate in the Plan are those Employees and Directors selected by the Committee, in its sole discretion, from time to time.

SECTION 5

SAR UNITS

Any SAR Units awarded under the Plan shall be subject to the following terms and conditions as well as all other applicable provisions of the Plan:

5.1. **Grants of SAR Units.**

A. An award of SAR Units shall be evidenced by a Grant Agreement, executed by the Company and the Participant who is the grantee of the SAR Units, setting forth the number of SAR Units awarded and the Base Value of the SAR Units, and such other terms and conditions applicable to such award of SAR Units, consistent with the provisions of the Plan, as the Committee may determine.

B. SAR Units do not constitute shares of common stock of the Company or otherwise represent any ownership interest in the Company. No Participant or Beneficiary shall have any of the rights of a shareholder of the Company by virtue of the award of a SAR Unit.

5.2. **Payments for SAR Units.**

A. **Right to Payment.** Subject to Section 5.5 of the Plan, payment shall be made to a Participant (or if on the date that such payment is to be made such Participant has died, to the Participant's Beneficiary, in which event, each reference to a Participant hereunder shall be deemed to be a reference to such Participant's Beneficiary) if either (i) subject to Section 5.2.B(2) of the Plan, the Participant validly exercises SAR Units, in accordance with Section 5.2.B(1) of the Plan, or (ii) a Triggering Event with respect to such SAR Units occurs. The amount and manner of such payment shall be determined in accordance with Sections 5.2.B and 5.2.C of the Plan.

B. **Exercise of SAR Units.**

(1) **General Rule.** Subject to Section 5.2.B(2) of the Plan, a Participant who is the holder of SAR Units that are at least 50% vested as of the last day of a Fiscal Year may exercise such vested SAR Units with respect to such Fiscal Year by notifying the Committee in writing of the number of SAR Units, not in excess of 25% of the number of vested and unexercised SAR Units then held by the Participant, that the Participant would like to exercise. Notwithstanding the foregoing, a Participant may only exercise a SAR Unit pursuant to this Section 5.2.B(1) during each 15 day period that begins on the date that notice of an annual determination of the Fair Market Value of a SAR Unit and the Annual Liquidity Pool has been provided to such Participant, and then only if (i) notice of such exercise is provided to the Committee prior to the occurrence of a Triggering Event or other event resulting in the termination of the SAR Units covered by such exercise, and (ii) the Fair Market Value of the Company applicable to such exercise (except with respect to the Participant's first exercise of SAR Units) exceeds the highest Fair Market Value of the Company

applicable to any prior exercise of the Participant's SAR Units. A Participant who has received more than one Award of SAR Units must exercise such SAR Units in the order in which the SAR Units were granted. The amount payable upon a valid exercise of a SAR Unit shall be the Net Appreciation, if any, of such SAR Unit.

(2) Impact of Annual Liquidity Pool. Notwithstanding Section 5.2.B(1) of the Plan, if the aggregate amount of Net Appreciation with respect to all of the SAR Units validly exercised with respect to a Fiscal Year exceeds the Annual Liquidity Pool for such Fiscal Year, the total amount payable with respect to the exercise of such SAR Units shall be limited to the amount of such Annual Liquidity Pool, and each Exercising Participant shall be deemed to have exercised such Exercising Participant's Pro Rata Number of SAR Units, as determined in accordance with Section 5.3 of the Plan, and each Exercising Participant shall be paid the Net Appreciation of such Exercising Participant's Pro Rata Number of SAR Units.

(3) Payment upon Exercise. The amount payable with respect to the exercise of a SAR Unit, as determined in accordance with Section 5.2.B(1) or Section 5.2.B(2) of the Plan, shall be paid in the form of a lump sum cash payment no later than 180 days after the date notice of the exercise of the SAR Units is given.

(4) Examples. Examples of the calculation of the amount payable upon the exercise of SAR Units are provided in Exhibit B to the Plan, which is incorporated into and made a part of the Plan.

C. Payment upon a Triggering Event. The amount payable upon a Triggering Event with respect to a SAR Unit shall be the Net Appreciation, if any, of the SAR Unit, multiplied by the vested percentage of such SAR Unit (as determined in accordance with Section 5.4 of the Plan). Such amount shall be paid in the form of a lump sum cash payment no later than the last day of the calendar year in which the

Triggering Event occurs, or if later, by the 15th day of the third month following the date of the Triggering Event, provided that the Participant who experienced the Triggering Event is not permitted, directly or indirectly, to designate the taxable year of payment.

5.3. **Determination of Pro Rata Number of SAR Units.** For purposes of Section 5.2.B(2) of the Plan, the “Pro Rata Number of SAR Units” of an Exercising Participant for a Fiscal Year shall be determined as follows:

A. The Annual Liquidity Pool for such Fiscal Year shall be allocated to each Exercising Participant by multiplying the Liquidity Pool by a fraction (i) the numerator of which is the aggregate Net Appreciation of the SAR Units that such Exercising Participant validly exercised with respect to such Fiscal Year and (ii) the denominator of which is the aggregate Net Appreciation of all of the SAR Units that were validly exercised by all Exercising Participants with respect to such Fiscal Year.

B. If an Exercising Participant exercised SAR Units with more than one Grant Date, the amount allocated to such Exercising Participant pursuant to Section 5.3.A of the Plan shall be applied to the Net Appreciation of the Exercising Participant’s SAR Units in the order in which the SAR Units were granted.

C. If the allocations pursuant to Sections 5.3.A and 5.3.B of the Plan would result in an Exercising Participant’s Pro Rata Number of SAR Units being other than a whole number of SAR Units, the Pro Rata Number of SAR Units for such Exercising Participant shall be rounded down to the next largest whole number; provided, for the avoidance of doubt, it is recognized that such rounding may result in less than all of the Annual Liquidity Pool for a Fiscal Year being paid to the Exercising Participants.

5.4. **Vesting of SAR Units.** Except as may be specified at the sole discretion of the Committee in the Grant Agreement awarding SAR Units, a grant of SAR Units to a Participant shall vest as follows:

A. Prior to the second anniversary of the Grant Date of such SAR Units, the vested percentage of such SAR Units shall be 0%.

B. If the Participant is an Employee, a Director or a Board Advisor on the second anniversary of the Grant Date of such SAR Units, from the second anniversary of such Grant Date until the fifth anniversary of such Grant Date, the vested percentage of such SAR Units shall be 50%.

C. If the Participant is an Employee, Director or a Board Advisor on the fifth anniversary of the Grant Date of such SAR Units, from and after the fifth anniversary of such Grant Date, the vested percentage of such SAR Units shall be 100%.

5.5. **Termination of SAR Units.**

A. Notwithstanding any provision of the Plan to the contrary, a SAR Unit shall terminate, and all rights of the Participant who is the grantee of such SAR Unit in such SAR Unit shall terminate, upon the occurrence of a Triggering Event (subject to the rights with respect to such SAR Unit that arise hereunder as a result of such Triggering Event), or if earlier, upon the occurrence of any of the following:

(1) In the case of a Participant who is an Employee, the termination of such Employee's employment by the Company or a Subsidiary for Cause or the resignation of such Employee other than within 30 days after an event that constitutes Good Reason;

(2) In the case of a Participant who is a Director, but who is not an Employee, such Director's removal from the Board for Cause; or

(3) In the case of a Participant who is a Board Advisor, the termination of such Board Advisor's services by the Board for Cause.

B. In the event of the exercise of a SAR Unit, the Participant who is the grantee of such SAR Unit shall not be entitled, upon any subsequent exercise of such SAR Unit or upon any subsequent Triggering Event, to any further payment of additional Net Appreciation with respect to such SAR Unit. Upon the occurrence of a Triggering Event with respect to a SAR Unit, the Participant who is the grantee of such SAR Unit shall not be entitled to the payment of any additional Net Appreciation with respect to such SAR Unit upon any subsequent Triggering Event.

SECTION 6

WITHHOLDING OF TAXES

The Company, to the extent permitted or required by law, shall have the right to deduct from any payment pursuant to the Plan or from any payment of any other kind (including salary or bonus) otherwise due to a Participant any federal, state or local taxes of any kind required by law to be withheld with respect to any taxable event under the Plan.

SECTION 7

NONASSIGNABILITY

The right of any Participant or Beneficiary to any payments hereunder is not subject to voluntary or involuntary transfer, alienation or assignment, and to the

maximum extent permitted by law, is not subject to attachment, execution, garnishment, sequestration or other legal or equitable process.

SECTION 8

ADJUSTMENTS

In the event of the issuance of additional shares by the Company (other than shares of Class B Common) including (without limitation) a new class of shares, which has the effect of diluting the value of the Class B Common, the Committee shall make such adjustments as it deems appropriate and equitable to the outstanding Awards to ameliorate the effect of such dilution.

The Committee is authorized to make adjustments in the terms and conditions of, and the criteria included in, Awards in recognition of unusual or nonrecurring events (in addition to issuances of shares, as provided in the preceding paragraph of this Section 8), affecting the Company or any Subsidiary, or the financial statements of the Company or any Subsidiary, or of changes in applicable laws, regulations, or accounting principles, whenever the Committee determines that such adjustments are appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan.

SECTION 9

TERMINATION AND MODIFICATION OF THE PLAN

The Board may modify or terminate the Plan or any portion thereof at any time, except that no modification shall become effective without prior approval of the

stockholders of the Company if shareholder approval is necessary to comply with any tax or regulatory requirement; provided, further, that no modification or termination of the Plan may adversely affect any outstanding Award without the consent of the Participant who is the grantee of such Award.

The Committee shall be authorized to make minor or administrative modifications to the Plan as well as modifications to the Plan that may be dictated by requirements of federal or state laws applicable to the Company or that may be authorized or made desirable by such laws. The Committee may amend or modify the grant of any outstanding Award in any manner to the extent that the Committee would have had the authority to make such Award as so modified or amended.

SECTION 10

NON-GUARANTEE OF EMPLOYMENT OR CONTINUED SERVICES

Nothing in the Plan or in any Grant Agreement shall confer any right on any Participant to continue in the employ of the Company or to continue to perform services for the Board or to continue to be a member of the Board, nor shall anything in the Plan or in any Grant Agreement interfere in any way with the right of the Company or the Company's shareholders to terminate the employment or services or Board membership of any Participant at any time.

SECTION 11

NON-UNIFORM DETERMINATIONS

The Committee's determinations under the Plan (including without limitation determinations of the persons to receive Awards, the form, amount and timing of such Awards, the terms and provisions of such Awards and the agreements evidencing same) need not be uniform and may be made by it selectively among persons who receive, or are eligible to receive, Awards under the Plan, whether or not such persons are similarly situated.

SECTION 12

NO LIMIT ON OTHER COMPENSATION ARRANGEMENTS

Nothing contained in the Plan shall prevent the Company or its Subsidiaries from adopting or continuing in effect other compensation arrangements (whether such arrangements be generally applicable or applicable only in specific cases) including, without limitation, the payment of commissions, bonuses and deferred compensation, and the granting of stock options, stock awards, stock appreciation rights or phantom stock units otherwise than under the Plan.

SECTION 13

NO TRUST OR FUND CREATED

Neither the Plan nor any Award shall create or be construed to create a trust or separate fund of any kind or a fiduciary relationship between the Company and a Participant or any other person. To the extent that any Participant or other person

acquires a right to receive payments from the Company pursuant to an Award, such right shall be no greater than the right of any unsecured general creditor of the Company.

SECTION 14

GOVERNING LAW

The validity, construction and effect of the Plan and of the Grant Agreements entered into pursuant to the Plan, and of any rules, regulations, determinations or decisions made by the Board or Committee relating to the Plan or such Grant Agreements, and the rights of any and all persons having or claiming to have any interest therein or thereunder, shall be determined exclusively in accordance with applicable federal laws and the laws of the Commonwealth of Pennsylvania, without regard to its conflict of laws rules and principles.

SECTION 15

PLAN SUBJECT TO CHARTER AND BY-LAWS

This Plan is subject to the Charter and By-Laws of the Company, as they may be amended from time to time.

SECTION 16

MISCELLANEOUS PROVISIONS

16.1. **Severability.** If any one or more of the provisions of the Plan shall be held or deemed to be inoperative, unenforceable, or invalid in a particular case, such provision shall not be deemed to be invalid in any other case or to render any of the other provisions of the Plan inoperative, unenforceable or invalid.

16.2. **Headings.** The headings or other captions in the Plan are for convenience of reference only and shall not be used in interpreting, construing or enforcing any of the provisions of the Plan.

Date Approved by the Board: May 4, 2017



May 12, 2020

Securities and Exchange Commission
100 F Street, N.E.
Washington, DC 20549

Ladies and Gentlemen:

We have read the disclosure set forth under the caption "Change in Independent Accountant" in the Registration Statement on Form S-1 of Vertex, Inc. dated May 12, 2020 and are in agreement with the statements contained therein insofar as they relate to our Firm. We have no basis to agree or disagree with other statements of Vertex, Inc. contained therein.

A handwritten signature in black ink that reads "Baker Tilly Virchow Krause, LLP".

Baker Tilly Virchow Krause, LLP

Baker Tilly Virchow Krause, LLP trading as Baker Tilly is a member of the global network of Baker Tilly International Ltd., the members of which are separate and independent legal entities. © 2018 Baker Tilly Virchow Krause, LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the use in this Registration Statement of Vertex, Inc. on Form S-1 of our report dated March 27, 2020 on the consolidated financial statements of Vertex, Inc. and to the reference to us under the heading “Experts” in the prospectus.

/s/ Crowe LLP
Crowe LLP

New York, New York
July 2, 2020
