
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549
FORM 10-Q**

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended September 30, 2020
OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission File Number: 333-239644

VERTEX, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

2301 Renaissance Blvd
King of Prussia, Pennsylvania
(Address of principal executive offices)

23-2081753
(I.R.S. Employer
Identification No.)

19406
(Zip Code)

Registrant's telephone number, including area code: (800) 355-3500

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading symbol	Name of each exchange on which registered
Class A Common Stock, Par Value \$0.001 Per Share	VERX	NASDAQ

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Small reporting company	<input type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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 pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of November 10, 2020, the registrant had 25,687,503 shares of Class A common stock, \$0.001 par value per share, and 120,417,000 shares of Class B common stock, \$0.001 par value per share, outstanding.

TABLE OF CONTENTS

	<u>Page</u>
	<u>Page</u>
Part I - Financial Information	
Item 1. Financial Statements	
Condensed Consolidated Balance Sheets as of December 31, 2019 and September 30, 2020 (unaudited)	5
Condensed Consolidated Statements of Comprehensive Income (Loss) for the Three and Nine Months Ended September 30, 2019 and 2020 (unaudited)	6
Condensed Consolidated Statements of Changes in Equity (Deficit) for the Nine Months Ended September 30, 2019 and 2020 (unaudited)	7
Condensed Consolidated Statements of Cash Flows for the Nine Months Ended September 30, 2019 and 2020 (unaudited)	9
Notes to Condensed Consolidated Financial Statements (unaudited)	10
Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations	45
Item 3. Quantitative and Qualitative Disclosures about Market Risk	67
Item 4. Controls and Procedures	68
Part II - Other Information	70
Item 1. Legal Proceedings	70
Item 1A. Risk Factors	70
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds	70
Item 3. Defaults Upon Senior Securities	70
Item 4. Mine Safety Disclosures	70
Item 5. Other Information	70
Item 6. Exhibits	71
Signatures	72

Cautionary Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended, (the “Exchange Act”), that involve substantial risks and uncertainties. All statements made in this Quarterly Report on Form 10-Q that are not statements of historical fact, including statements about our beliefs and expectations and regarding future events or our future results of operations, financial condition, business, strategies, financial needs, and the plans and objectives of management, are forward-looking statements and should be evaluated as such. These statements often include words such as “anticipate,” “believe,” “expect,” “suggests,” “plan,” “intend,” “estimates,” “targets,” “projects,” “should,” “could,” “would,” “may,” “will,” “forecast” and other similar expressions or the negatives of those terms. 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 Quarterly Report on Form 10-Q, 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. Important factors that may materially affect such forward-looking statements include, but are not limited to:

- the potential effects on our business of the current novel coronavirus (“COVID-19”) pandemic;
 - 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 beyond our control; and
-

- other factors discussed in other sections of this Quarterly Report on Form 10-Q, including the sections titled “Management’s Discussion and Analysis of Financial Conditions and Results of Operations” and under Part II, Item 1A. “Risk Factors.”

You should not place undue reliance on our forward-looking statements and you should not rely on forward-looking statements as predictions of future events. The results, events, and circumstances reflected in the forward-looking statements may not be achieved or occur, and actual results, events, or circumstances could differ materially from those described in the forward-looking statements. The forward-looking statements made in this Quarterly Report on Form 10-Q speak only as of the date of this report. We undertake no obligation to update any forward-looking statements made in this report to reflect events or circumstances after the date of this report or to reflect new information or the occurrence of unanticipated events, except as required by law. If we update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect to those or other forward-looking statements.

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

Vertex, Inc.
Condensed Consolidated Balance Sheets
As of December 31, 2019 and September 30, 2020 (unaudited)
(Amounts in thousands)

	September 30, 2020 (unaudited)	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	\$ 270,271	\$ 75,903
Funds held for customers	8,745	7,592
Accounts receivable, net of allowance of \$7,567 (unaudited), and \$7,515, respectively	66,789	70,367
Advances to stockholders	2	283
Prepaid expenses and other current assets	16,001	11,412
Total current assets	361,808	165,557
Property and equipment, net of accumulated depreciation	55,935	54,727
Capitalized software, net of accumulated amortization	32,619	32,075
Goodwill	18,667	—
Deferred commissions	10,372	11,196
Deferred income tax asset	32,440	219
Deposits and other assets	3,093	849
Total assets	\$ 514,934	\$ 264,623
Liabilities and Equity		
Current liabilities:		
Current portion of long-term debt	\$ 1,179	\$ 50,804
Accounts payable	11,828	10,729
Accrued expenses	15,014	13,308
Distributions payable	—	13,183
Customer funds obligations	8,711	7,553
Accrued salaries and benefits	20,276	15,195
Accrued variable compensation	16,154	22,237
Deferred compensation, current	3,220	8,935
Deferred revenue	185,445	191,745
Deferred rent and other	908	840
Future acquisition commitment, current	780	—
Total current liabilities	263,515	334,529
Deferred compensation, net of current portion	2,156	18,530
Deferred revenue, net of current portion	12,095	14,046
Long-term debt, net of current portion	329	682
Future acquisition commitment, net of current portion	9,485	—
Deferred other liabilities	8,793	9,268
Total liabilities	296,373	377,055
Commitments and contingencies (Note 11)		
Options for redeemable shares	—	17,344
Stockholders' equity (deficit):		
Preferred shares, \$0.001 par value, 30,000 and 0 shares authorized, respectively; 0 and 0 shares issued and outstanding, respectively	—	—
Class A voting common stock, \$0.001 par value, 0 and 600 shares authorized, respectively; 0 and 300 shares issued, respectively; 0 and 147 shares outstanding, respectively	—	—
Class B non-voting common stock, \$0.001 par value, 0 and 299,400 shares authorized, respectively; 0 and 162,297 shares issued, respectively; 0 and 120,270 shares outstanding, respectively	—	54
Class A voting common stock, \$0.001 par value, 300,000 and 0 shares authorized, respectively; 25,688 and 0 shares issued and outstanding, respectively	26	—
Class B voting common stock, \$0.001 par value, 150,000 and 0 shares authorized, respectively; 120,417 and 0 shares issued and outstanding, respectively	120	—
Additional paid in capital	200,722	—
Retained earnings (accumulated deficit)	21,696	(90,701)
Accumulated other comprehensive loss	(4,003)	(491)
Treasury stock	—	(38,638)
Total stockholders' equity (deficit)	218,561	(129,776)
Total liabilities and equity	\$ 514,934	\$ 264,623

The accompanying notes are an integral part of these consolidated financial statements.

Vertex, Inc.
Condensed Consolidated Statements of Comprehensive Income (Loss)
For the three and nine months ended September 30, 2019 and 2020 (unaudited)
(Amounts in thousands, except per share data)

	Three months ended September 30,		Nine months ended September 30,	
	2020	2019	2020	2019
	(unaudited)		(unaudited)	
Revenues:				
Software subscriptions	\$ 79,778	\$ 71,041	\$ 232,844	\$ 202,692
Services	14,827	11,398	42,277	32,736
Total revenues	<u>94,605</u>	<u>82,439</u>	<u>275,121</u>	<u>235,428</u>
Cost of revenues:				
Software subscriptions	29,161	18,647	79,846	56,490
Services	18,807	8,786	49,329	23,616
Total cost of revenues	<u>47,968</u>	<u>27,433</u>	<u>129,175</u>	<u>80,106</u>
Gross profit	<u>46,637</u>	<u>55,006</u>	<u>145,946</u>	<u>155,322</u>
Operating expenses:				
Research and development	16,501	7,271	43,197	22,049
Selling and marketing	29,423	15,830	78,300	49,164
General and administrative	48,043	17,263	123,437	49,358
Depreciation and amortization	2,735	2,311	8,109	6,528
Other operating (income) expense, net	(60)	4	154	472
Total operating expenses	<u>96,642</u>	<u>42,679</u>	<u>253,197</u>	<u>127,571</u>
Income (loss) from operations	<u>(50,005)</u>	<u>12,327</u>	<u>(107,251)</u>	<u>27,751</u>
Other (income) expense:				
Interest income	(79)	(251)	(535)	(775)
Interest expense	1,875	503	3,959	1,579
Total other expense, net	<u>1,796</u>	<u>252</u>	<u>3,424</u>	<u>804</u>
Income (loss) before income taxes	<u>(51,801)</u>	<u>12,075</u>	<u>(110,675)</u>	<u>26,947</u>
Income tax (benefit) expense	<u>(30,773)</u>	<u>175</u>	<u>(31,508)</u>	<u>600</u>
Net (loss) income	<u>(21,028)</u>	<u>11,900</u>	<u>(79,167)</u>	<u>26,347</u>
Other comprehensive loss from foreign currency translation adjustments and revaluations, net of tax	238	174	3,512	176
Total comprehensive income (loss)	<u>\$ (21,266)</u>	<u>\$ 11,726</u>	<u>\$ (82,679)</u>	<u>\$ 26,171</u>
Net (loss) income attributable to Class A stockholders, basic	<u>\$ (2,751)</u>	<u>\$ 22</u>	<u>\$ (2,427)</u>	<u>\$ 21</u>
Net (loss) income per Class A share, basic	<u>\$ (0.15)</u>	<u>\$ 0.10</u>	<u>\$ (0.40)</u>	<u>\$ 0.16</u>
Weighted average Class A common stock, basic	<u>18,124</u>	<u>225</u>	<u>6,129</u>	<u>134</u>
Net (loss) income attributable to Class A stockholders, diluted	<u>\$ (2,751)</u>	<u>\$ 373</u>	<u>\$ (2,427)</u>	<u>\$ 826</u>
Net (loss) income per Class A share, diluted	<u>\$ (0.15)</u>	<u>\$ 0.10</u>	<u>\$ (0.40)</u>	<u>\$ 0.21</u>
Weighted average common Class A stock, diluted	<u>18,124</u>	<u>3,893</u>	<u>6,129</u>	<u>3,898</u>
Net (loss) income attributable to Class B stockholders, basic	<u>\$ (18,277)</u>	<u>\$ 11,878</u>	<u>\$ (76,740)</u>	<u>\$ 26,326</u>
Net (loss) income per Class B share, basic	<u>\$ (0.15)</u>	<u>\$ 0.10</u>	<u>\$ (0.64)</u>	<u>\$ 0.22</u>
Weighted average common Class B stock, basic	<u>120,417</u>	<u>120,417</u>	<u>120,417</u>	<u>120,417</u>
Net (loss) income attributable to Class B stockholders, diluted	<u>\$ (18,277)</u>	<u>\$ 11,527</u>	<u>\$ (76,740)</u>	<u>\$ 25,521</u>
Net (loss) income per Class B share, diluted	<u>\$ (0.15)</u>	<u>\$ 0.10</u>	<u>\$ (0.64)</u>	<u>\$ 0.21</u>
Weighted average common Class B stock, diluted	<u>120,417</u>	<u>120,417</u>	<u>120,417</u>	<u>120,417</u>
Loss before income taxes	<u>\$ (51,801)</u>		<u>\$ (110,675)</u>	
Pro forma provision for income tax benefit	<u>(13,106)</u>		<u>(28,001)</u>	
Pro forma net loss	<u>\$ (38,695)</u>		<u>\$ (82,674)</u>	
Pro forma net loss attributable to Class A stockholders	<u>\$ (5,062)</u>		<u>\$ (4,004)</u>	
Weighted average Class A common stock, basic and diluted	<u>18,124</u>		<u>6,129</u>	
Pro forma net loss per Class A share, basic and diluted	<u>\$ (0.28)</u>		<u>\$ (0.65)</u>	
Pro forma net loss attributable to Class B stockholders	<u>\$ (33,633)</u>		<u>\$ (78,670)</u>	
Weighted average Class B common stock, basic and diluted	<u>120,417</u>		<u>120,417</u>	
Pro forma net loss per Class B share, basic and diluted	<u>\$ (0.28)</u>		<u>\$ (0.65)</u>	

The accompanying notes are an integral part of these consolidated financial statements.

Vertex, Inc.
Condensed Consolidated Statements of Changes in Equity (Deficit)
For the nine months ended September 30, 2019 (unaudited)
(Amounts in thousands)

	Before Recapitalization				After Recapitalization				Additional Paid-in Capital	Retained Earnings (Accumulated Deficit)	Accumulated Other Comprehensive Loss	Treasury Shares Issued	Treasury Stock	Total Stockholders' Equity (Deficit)	Options for Redeemable Shares
	Outstanding Class A Shares	Class A Common Stock	Outstanding Class B Shares	Class B Common Stock	Outstanding Class A Shares	Class A Common Stock	Outstanding Class B Shares	Class B Common Stock							
Balance, January 1, 2019	147	\$ —	120,270	\$ 54	—	\$ —	—	\$ —	\$ —	\$ (88,038)	\$ (496)	41,685	\$(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 revaluations	—	—	—	—	—	—	—	—	—	—	21	—	—	21	—
Net income	—	—	—	—	—	—	—	—	—	7,325	—	—	—	7,325	—
Balance, March 31, 2019	147	—	120,270	54	—	—	—	—	—	(86,575)	(475)	41,685	(37,797)	(124,793)	15,188
Remeasurement of options for redeemable shares	—	—	—	—	—	—	—	—	—	424	—	—	—	424	(424)
Exercise of stock options, net	—	—	225	—	—	—	—	—	—	(116)	—	—	—	(116)	—
Distributions declared	—	—	—	—	—	—	—	—	—	(6,105)	—	—	—	(6,105)	—
Foreign currency translation adjustments and revaluations	—	—	—	—	—	—	—	—	—	—	(23)	—	—	(23)	—
Net income	—	—	—	—	—	—	—	—	—	7,122	—	—	—	7,122	—
Balance, June 30, 2019	147	—	120,495	54	—	—	—	—	—	(85,250)	(498)	41,685	(37,797)	(123,491)	14,764
Remeasurement of options for redeemable shares	—	—	—	—	—	—	—	—	—	(579)	—	—	—	(579)	579
Foreign currency translation adjustments and revaluations	—	—	—	—	—	—	—	—	—	—	(174)	—	—	(174)	—
Net income	—	—	—	—	—	—	—	—	—	11,900	—	—	—	11,900	—
Balance, September 30, 2019	147	\$ —	120,495	\$ 54	—	\$ —	—	\$ —	\$ —	\$(73,929)	\$(672)	41,685	\$(37,797)	\$(112,344)	\$ 15,343

The accompanying notes are an integral part of these consolidated financial statements.

Vertex, Inc.
Condensed Consolidated Statements of Changes in Equity (Deficit) (Continued)
For the nine months ended September 30, 2020 (unaudited)
(Amounts in thousands)

	Before Recapitalization				After Recapitalization				Additional Paid-in Capital	Retained Earnings (Accumulated Deficit)	Accumulated Other Comprehensive Loss	Treasury Shares Issued	Treasury Stock	Total Stockholders' Equity (Deficit)	Options for Redeemable Shares
	Outstanding Class A Shares	Class A Common Stock	Outstanding Class B Shares	Class B Common Stock	Outstanding Class A Shares	Class A Common Stock	Outstanding Class B Shares	Class B Common Stock							
Balance, January 1, 2020	147	\$ —	120,270	\$ 54	—	\$ —	—	\$ —	\$ —	\$ (90,701)	\$ (491)	41,910	\$(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 revaluations	—	—	—	—	—	—	—	—	—	—	(2,998)	—	—	(2,998)	—
Net loss	—	—	—	—	—	—	—	—	—	(29,064)	—	—	—	(29,064)	—
Balance, March 31, 2020	147	—	120,270	54	—	—	—	—	—	(139,017)	(3,489)	41,910	(38,638)	(181,090)	32,586
Remeasurement of options for redeemable shares	—	—	—	—	—	—	—	—	—	(14,637)	—	—	—	(14,637)	14,637
Exercise of stock options, net	—	—	173	—	—	—	—	—	—	53	—	—	—	53	—
Distributions declared	—	—	—	—	—	—	—	—	—	(123,185)	—	—	—	(123,185)	—
Foreign currency translation adjustments and revaluations	—	—	—	—	—	—	—	—	—	—	(276)	—	—	(276)	—
Net loss	—	—	—	—	—	—	—	—	—	(29,075)	—	—	—	(29,075)	—
Balance, June 30, 2020	147	—	120,443	54	—	—	—	—	—	(305,861)	(3,765)	41,910	(38,638)	(348,210)	47,223
Distributions declared	—	—	—	—	—	—	—	—	—	(5,706)	—	—	—	(5,706)	—
Reclassification of accumulated S Corporation earnings	—	—	—	—	—	—	—	—	(354,291)	354,291	—	—	—	—	—
Remeasurement of options for redeemable shares	—	—	—	—	—	—	—	—	(21,954)	—	—	—	—	(21,954)	21,954
Reclassification of options for redeemable shares	—	—	—	—	—	—	—	—	69,177	—	—	—	—	69,177	(69,177)
Recapitalization prior to Offering	(147)	—	(120,443)	(54)	173	—	120,417	120	(38,704)	—	—	(41,910)	38,638	—	—
Reclassification of SAR liability to equity in connection with Offering	—	—	—	—	—	—	—	—	143,519	—	—	—	—	143,519	—
Auto-exercised options in connection with Offering	—	—	—	—	564	1	—	—	(13,809)	—	—	—	—	(13,808)	—
Shares issued in connection with Offering, net of Offering costs	—	—	—	—	23,812	24	—	—	416,778	—	—	—	—	416,802	—
Exercise of stock options in connection with the Offering	—	—	—	—	510	—	—	—	(7,023)	—	—	—	—	(7,023)	—
Vested restricted stock issued in connection with Offering	—	—	—	—	19	—	—	—	361	—	—	—	—	361	—
Exercise of stock options, net	—	—	—	—	610	1	—	—	1,007	—	—	—	—	1,008	—
Stock-based compensation expense	—	—	—	—	—	—	—	—	5,661	—	—	—	—	5,661	—
Foreign currency translation adjustments and revaluations	—	—	—	—	—	—	—	—	—	—	(238)	—	—	(238)	—
Net loss	—	—	—	—	—	—	—	—	—	(21,028)	—	—	—	(21,028)	—
Balance, September 30, 2020	—	\$ —	—	\$ —	25,688	\$ 26	120,417	\$ 120	\$ 200,722	\$ 21,696	\$ (4,003)	—	\$ —	\$ 218,561	\$ —

The accompanying notes are an integral part of these consolidated financial statements.

Vertex, Inc.
Condensed Consolidated Statements of Cash Flows
For the nine months ended September 30, 2019 and 2020 (unaudited)
(Amounts in thousands)

	Nine Months Ended September 30,	
	2020	2019
	(unaudited)	
Cash flows from operating activities:		
Net (loss) income	\$ (79,167)	\$ 26,347
Adjustments to reconcile net (loss) income to net cash provided by operating activities:		
Depreciation and amortization	23,586	18,152
Provision for subscription cancellations and non-renewals	52	(27)
Amortization of deferred financing costs	356	199
Write-off of deferred financing costs	1,351	—
Stock-based compensation expense	140,890	3,930
Deferred income taxes	(32,004)	—
Redemption of Converted SARs	(22,889)	—
Other	86	51
Changes in operating assets and liabilities:		
Accounts receivable	4,143	3,010
Advances to stockholders	281	115
Prepaid expenses and other current assets	(4,613)	(1,379)
Deferred commissions	824	(253)
Accounts payable	1,193	128
Accrued expenses	1,382	(1,767)
Accrued and deferred compensation	(5,399)	(4,197)
Deferred revenue	(8,251)	1,053
Other	(1,777)	437
Net cash provided by operating activities	<u>20,044</u>	<u>45,799</u>
Cash flows from investing activities:		
Acquisition of business, net of cash acquired	(12,318)	—
Property and equipment additions	(14,982)	(13,315)
Capitalized software additions	(9,246)	(12,345)
Net cash used in investing activities	<u>(36,546)</u>	<u>(25,660)</u>
Cash flows from financing activities:		
Net increase in customer funds obligations	1,158	1,223
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	(226,029)	(4,339)
Payments for deferred financing costs, net	(2,436)	—
Proceeds from issuance of shares in connection with Offering	423,024	—
Payments for offering costs	(6,222)	—
Payments for taxes on exercised options	(11,999)	(184)
Proceeds from exercise of stock options	6,023	68
Distributions to stockholders	(146,084)	(22,252)
Net cash provided by (used in) financing activities	<u>212,435</u>	<u>(25,484)</u>
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(412)	(176)
Net increase (decrease) in cash, cash equivalents and restricted cash	195,521	(5,521)
Cash, cash equivalents and restricted cash, beginning of period	83,495	59,174
Cash, cash equivalents and restricted cash, end of period	<u>\$ 279,016</u>	<u>\$ 53,653</u>
Reconciliation of cash, cash equivalents and restricted cash to the Consolidated Balance Sheets, end of period:		
Cash and cash equivalents	\$ 270,271	\$ 49,094
Restricted cash—funds held for customers	8,745	4,559
Total cash, cash equivalents and restricted cash, end of period	<u>\$ 279,016</u>	<u>\$ 53,653</u>

The accompanying notes are an integral part of these consolidated financial statements.

Vertex, Inc.
Notes to Condensed Consolidated Financial Statements (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.

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 the Company 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 the Company does not have full decision-making authority as it is shared with the minority interest owners, as the minority interest owners are considered related parties, the Company 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 the Company owns 100% of the VIE. As of September 30, 2020, the net assets of Systax were \$20,556 (unaudited). The Company 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 the Company exercises its future share purchase commitment through 2024. See Note 2.

Registration of Company Stock and Initial Public Offering

On July 28, 2020, the Company filed its amended and restated certificate of incorporation with the Delaware Secretary of State to: (i) effect a three-for-one forward stock split (the “Stock Split”); (ii) establish a new capital structure for the Company (the “New Capital Structure”); and (iii) effect a share exchange (the “Share Exchange”) (collectively, the “Recapitalization”). The Stock Split resulted in each one share owned by a stockholder being exchanged for three shares of common stock, and the number of shares of the Company’s common stock issued and outstanding was increased proportionately based on the Stock Split. After the Stock Split, the Share Exchange occurred, resulting in stockholders of record exchanging their existing Class A and Class B common stock (“former Class A” and “former Class B”, respectively) for newly created shares of Class A and Class B common stock (“Class A” and “Class B”, respectively) issued in connection with the New Capital Structure. The effect of the Stock Split and the Share Exchange are recognized retrospectively in the Consolidated Financial Statements.

The Company’s Registration Statement on Form S-1 (the “S-1”) with the Securities and Exchange Commission (“SEC”) was declared effective on July 28, 2020, resulting in the Class A shares being registered and available for trading on the NASDAQ exchange (the “Offering”).

The Company received \$423,024 in proceeds from the sale of 23,812 shares of Class A at a public offering price of \$19.00 per share on July 28, 2020, net of underwriting fees, and used a portion of the proceeds to pay off \$175,000 in outstanding debt. The net proceeds remaining after payment of Offering costs will be used for working capital and other corporate purposes as described in the S-1.

Unaudited Interim Financial Information

The accompanying unaudited condensed consolidated balance sheet as of December 31, 2019, which has been derived from audited financial statements, and the unaudited interim condensed consolidated financial statements have been prepared pursuant to the rules and regulations of the SEC for interim financial information and include the accounts of the Company. All intercompany transactions have been eliminated in consolidation. Certain information and disclosures normally included in consolidated financial statements prepared in accordance with accounting principles generally accepted in the U.S. (“GAAP”) have been condensed or omitted. Accordingly, these consolidated financial statements should be read in conjunction with the audited consolidated financial statements and the related notes for the year ended December 31, 2019 included in the Company’s final S-1 dated July 28, 2020 and filed with the SEC pursuant to Rule 424(b)(4) under the Securities Act of 1933, as amended, (the “Securities Act”), on July 30, 2020 (the “Prospectus”). The accompanying interim condensed consolidated balance sheet as of September 30, 2020, the interim condensed consolidated statement of comprehensive income (loss) for the three and nine months ended September 30, 2020 and 2019, and the interim condensed consolidated statements of changes in equity (deficit) and cash flows for the nine months ended September 30, 2020 and 2019 are unaudited. The unaudited interim condensed consolidated financial statements have been prepared on a basis consistent with that used to prepare the annual audited consolidated financial statements and include, in the opinion of management, all adjustments, consisting of normal and recurring items, necessary for the fair presentation of the consolidated financial statements. The operating results for the three and nine months ended September 30, 2020 and 2019 are not necessarily indicative of the results expected for the full year periods ending December 31, 2020 and 2019, respectively.

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 three and nine months ended September 30, 2020 and 2019, approximately 3% of the Company’s revenues were generated outside the U.S. in each respective period. As of December 31, 2019, none of the Company’s long-lived assets were held outside of the U.S. As of September 30, 2020, 18%, or \$18,870, of the Company’s long-lived assets were held outside of the U.S. (unaudited) and consists primarily of goodwill of \$18,667 (unaudited) at September 30, 2020 related to the acquisition of the controlling interest in Systax, which is located in Brazil. See Note 2.

Fair Value Measurement

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. A three-level fair value hierarchy (the “Fair Value Hierarchy”) prioritizes the inputs used to measure fair value. The hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs. The three levels of inputs used to measure fair value are as follows:

Level 1: Inputs are unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2: Inputs are quoted prices for similar assets and liabilities in active markets or quoted prices for identical or similar instruments in markets that are not active and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets.

Level 3: Inputs are unobservable inputs based on the Company’s assumptions and valuation techniques used to measure assets and liabilities at fair value. The inputs require significant management judgment or estimation.

The Company's assessment of the significance of an input to the fair value measurement requires judgment, which may affect the valuation of fair value assets and liabilities and their placement within the fair value hierarchy levels.

The Company has investments in money market accounts, which are included in cash and cash equivalents on the consolidated balance sheets. Fair value inputs for these investments are considered Level 1 measurements within the Fair Value Hierarchy since money market account fair values are known and observable through daily published floating net asset values. The fair value of the Company's investments in money market accounts were \$159,851 and \$38,520 at September 30, 2020 and December 31, 2019, respectively.

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, 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 of the Company's stock used to determine the intrinsic value of stock-based compensation awards, (iv) Black-Scholes-Merton option pricing model ("Black-Scholes model") input assumptions used to determine the fair value of stock-based compensation awards and (x) 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 as investments in money market funds are included within cash and cash equivalents.

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 funds 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 in a business combination 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
Internal-use software developed	3 - 5 years
Computer software	3 - 7 years
Equipment	3 - 10 years
Automobiles	5 years
Furniture and fixtures	7 - 10 years

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 and amortization 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 least annually at December 31, and whenever events or circumstances make it more likely than not that impairment may have occurred. In event of an impairment, unamortized capitalized software costs are compared to the net realizable value of the related product and 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.

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 amounts. 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"). Thus 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 during this Measurement Period. 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 reflected in 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 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.

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

On the effective date of the Offering, the Company adopted the 2020 Incentive Award Plan (the “2020 Plan”) and the 2020 Employee Stock Purchase Plan (the “ESPP”), which provides for the award of stock appreciation rights (“SARs”) stock options (“options”), restricted stock awards (“RSAs”), restricted stock units (“RSUs”), and participation in the ESPP (collectively, the “awards”), which are subject to guidance set forth in 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. 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 value of the SARs at the end of each reporting period and accruing the portion of the requisite service rendered at that date. Prior to July 2, 2020, the date management determined the Company was considered to have become a public entity, the Company measured SARs based on their intrinsic value which reflected the difference between the fair value of the Company’s former Class B common stock less the grant date fair value of the underlying shares as this was the value the SAR participant could derive from exercise of the SAR award. Prior to the Offering, the fair value of the Company’s common stock was determined periodically by the Board with the assistance of management and a third-party valuation firm. Upon becoming a public entity, and up to the effective date of the Offering, management remeasured outstanding SARs using the fair value-based method under ASC 718. See Note 9 for discussion of the impact of the resulting change in accounting policy. Outstanding SARs are included in deferred compensation, current and deferred compensation, net of current portion in the consolidated balance sheets.

Stock-based compensation expense for new options issued under the 2020 Plan after the Offering is measured based on the grant date fair value of the award and is estimated using the Black-Scholes model. Compensation cost is recognized on a straight-line basis over the requisite service or performance period associated with the award.

Stock-based compensation expense for RSAs and RSUs is based on the the fair value of the Company’s underlying common stock on the date of grant. Compensation cost is recognized on a straight-line basis over the requisite service or performance period associated with the award.

The ESPP permits participants to purchase Class A common stock through payroll deductions up to a specified percentage of their eligible compensation, or a lump sum contribution amount for the initial offering period (July 28 to November 30, 2020), subject to the plan’s maximum purchase provisions during the specified offering periods. The plan is a compensatory plan as it allows participants to purchase stock at a 15% discount from the lower of the fair value of the Class A common on the first or last day of the ESPP offering period (the “ESPP discount”). The ESPP is accounted for as an equity-classified award. Stock-based compensation expense for the ESPP is measured based on the fair value of the ESPP award at the start of the offering period. The fair value is comprised of the value of the ESPP discount and the value associated with the variability in the Class A common stock price during the offering period (the “Call”), which is estimated using the Black-Scholes model. Compensation cost is recognized on a straight-line basis over the respective offering period.

The Company has elected to recognize award forfeitures as they occur.

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.

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 \$2,068 at December 31, 2019 and September 30, 2020 (unaudited), respectively, 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

The Company recognizes revenue in accordance with 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 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 three months ended September 30,		For the nine months ended September 30,	
	2020	2019	2020	2019
	(unaudited)		(unaudited)	
Sources of revenue:				
Software subscriptions	\$ 79,778	\$ 71,041	\$ 232,844	\$ 202,692
Services	14,827	11,398	42,277	32,736
Total revenue	<u>\$ 94,605</u>	<u>\$ 82,439</u>	<u>\$ 275,121</u>	<u>\$ 235,428</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 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 \$7,567 at December 31, 2019 and September 30, 2020 (unaudited), respectively. 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 year ended December 31,		For the nine months ended September 30,	
	2019		2020	
			(unaudited)	
Balance, beginning of period	\$ 62,235		\$ 70,367	
Balance, end of period		70,367		66,789
Increase (decrease), net	<u>\$ 8,132</u>		<u>\$ (3,578)</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 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 \$5,170 at December 31, 2019 and September 30, 2020 (unaudited), respectively. 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 three months ended September 30, 2020 (unaudited)	
	Balance	Net Change
Allowance balance, July 1	\$ (7,669)	
Allowance balance, September 30	(7,567)	
Change in allowance		\$ (102)
Deferred allowance balance, July 1	5,335	
Deferred allowance balance, September 30	5,170	
Change in deferred allowance		165
Net amount charged to revenue		\$ 63

	For the three months ended September 30, 2019 (unaudited)	
	Balance	Net Change
Allowance balance, July 1	\$ (4,845)	
Allowance balance, September 30	(5,500)	
Change in allowance		\$ 655
Deferred allowance balance, July 1	3,720	
Deferred allowance balance, September 30	4,198	
Change in deferred allowance		(478)
Net amount charged to revenue		\$ 177

	For the nine months ended September 30, 2020 (unaudited)	
	Balance	Net Change
Allowance balance, January 1	\$ (7,515)	
Allowance balance, September 30	(7,567)	
Change in allowance		\$ 52
Deferred allowance balance, January 1	5,614	
Deferred allowance balance, September 30	5,170	
Change in deferred allowance		444
Net amount charged to revenue		\$ 496

	For the nine months ended September 30, 2019 (unaudited)	
	Balance	Net Change
Allowance balance, January 1	\$ (5,527)	
Allowance balance, September 30	(5,500)	
Change in allowance		\$ (27)
Deferred allowance balance, January 1	4,858	
Deferred allowance balance, September 30	4,198	
Change in deferred allowance		660
Net amount charged to revenue		\$ 633

The table provides information about the balances of and changes to deferred revenue for the following periods:

	As of December 31, 2019	As of September 30, 2020 (unaudited)
Deferred revenue, current	\$ 191,745	\$ 185,445
Deferred revenue, non-current	14,046	12,095
Total	\$ 205,791	\$ 197,540

	For the three months ended September 30,		For the nine months ended September 30,	
	2020	2019	2020	2019
(unaudited)				
Changes to deferred revenue:				
Beginning balance	\$ 198,437	\$ 179,351	\$ 205,791	\$ 178,703
Additional amounts deferred	93,708	82,844	266,870	236,481
Revenue recognized	(94,605)	(82,439)	(275,121)	(235,428)
Ending balance	<u>\$ 197,540</u>	<u>\$ 179,756</u>	<u>\$ 197,540</u>	<u>\$ 179,756</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.

The table provides information about the changes to contract cost balances as of and for the following periods:

	For the three months ended September 30,		For the nine months ended September 30,	
	2020	2019	2020	2019
(unaudited)				
Deferred commissions:				
Beginning balance	\$ 10,390	\$ 8,760	\$ 11,196	\$ 8,830
Additions	1,876	1,884	4,570	4,950
Amortization	(1,894)	(1,560)	(5,394)	(4,696)
Ending balance	<u>\$ 10,372</u>	<u>\$ 9,084</u>	<u>\$ 10,372</u>	<u>\$ 9,084</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).

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).

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' (equity) 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).

Income Taxes

On July 27, 2020, the Company's S-corporation election (the "S election") was terminated by the Company's stockholders in connection with the Offering. As a result, Vertex will now be taxed at the corporate level as a C-corporation for U.S. federal and state income tax purposes. In connection with the S election termination, the Company entered into an agreement with the S-corporation stockholders pursuant to which the Company has indemnified them for unpaid income tax liabilities and may be required to make future payments in material amounts to them attributable to incremental income taxes resulting from an adjustment to S-corporation related taxable income that arises after the effective date of the S election termination (the "Tax Sharing Agreement"). In addition, the Tax Sharing Agreement indemnifies the S-corporation stockholders for any interest, penalties, losses, costs or expenses arising out of any claim under the agreement. Correspondingly, the S-corporation stockholders have indemnified the Company with respect to unpaid tax liabilities (including interest and penalties) to the extent that such unpaid tax liabilities are attributable to a decrease in S-corporation stockholders' taxable income for any period and a corresponding increase in our taxable income for any period.

Prior to July 27, 2020, as Vertex was taxed as an S-corporation for U.S. federal income tax purposes and for most states, net income or loss was allocated to the stockholders and was included on their individual income tax returns. Historically the Company distributed amounts to the stockholders to satisfy their tax liabilities resulting from allocated net income or loss. In certain states, Vertex was taxed at the corporate level. Accordingly, the income tax provision or benefit was based on taxable income allocated to these states. In certain foreign jurisdictions, Vertex 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.

Certain 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. In conjunction with the termination of the S election, certain direct and indirect wholly-owned foreign subsidiaries that were previously treated as disregarded entities for U.S. federal income tax purposes and most states under the Internal Revenue Service (“IRS”) “check-the-box” regulations, “unchecked-the-box” to become regarded entities and as a result, became CFCs. Prior to these elections, the income and loss from these entities was 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 regardless of whether or not the earnings were repatriated.

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. A valuation allowance is recorded when it is more likely than not that some or all of the deferred tax assets will not be realized.

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. The Company assesses its income tax positions and records tax benefits or expense based upon management’s evaluation of the facts, circumstances, and information available at the reporting date.

The Company recorded a \$32,440 deferred tax asset during the three months ended September 30, 2020 as a result of the conversion from an S-corporation to a C-corporation. The deferred tax asset is primarily due to future stock-based compensation deductions for tax purposes resulting from SARs that were previously issued by the Company, converted to options and immediately exercised upon the effective date of the Offering. The exercise of these options is projected to result in a net operating loss for the C-corporation short tax year beginning July 27, 2020 and ending December 31, 2020, for which it is more likely than not the Company will realize this benefit within the next several tax years. Based on Management’s evaluation of the positive and negative evidence, it is more likely than not that the Company will realize these benefits on future U.S. tax returns.

Total Comprehensive Income (Loss)

Total comprehensive income (loss) consists of net (loss) 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’ equity (deficit) but are excluded from net income. Other comprehensive income (loss) is comprised solely of foreign currency translation adjustments and revaluations.

Earnings Per Share (“EPS”)

The Company has two classes of common stock outstanding and thus calculates EPS following the two-class method. This method allocates earnings for the respective periods between the two classes of common stock in proportion to the weighted average shares outstanding for each class of common stock as a percentage of total weighted average shares of both classes of common stock outstanding. Neither the Class A nor Class B common stock has any liquidity or dividend preferences and are both considered to be participating securities. Basic and diluted net (loss) income per share attributable

to common stockholders is calculated using the treasury stock method. The basic net (loss) income per share attributable to Class A common stockholders includes RSAs, RSUs and ESPP shares once vesting or purchase contingencies are resolved and the related shares are deemed to be outstanding. The diluted net (loss) income per share attributable to Class A 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 shares of Class A common stock, RSAs and RSUs, and ESPP shares for which the Company has received payments for are considered common stock equivalents.

In accordance with ASC 260, *Earnings Per Share*, the historical EPS was retrospectively restated similar to the treatment of a stock split to reflect the Share Exchange for all periods presented prior to the Offering as management concluded that there was no economic value attributable to the exchange of shares in connection with the Recapitalization. Class A common stock issued in connection with the Offering are reflected in the weighted average share calculation from their issuance date.

Unaudited Pro Forma Income Taxes

Effective July 27, 2020, the Company converted to and will 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 three and nine months ended September 30, 2020. The Company has computed pro forma entity level income tax expense using an estimated effective tax rate of approximately 25% for these periods, 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 three and nine months ended September 30, 2020 to reflect the pro forma adjustment to income taxes resulting from the conversion to a C-corporation effective July 27, 2020.

	<u>For the three months ended September 30, 2020</u>	<u>For the nine months ended September 30, 2020</u>
	(unaudited)	
Class A common stock:		
Numerator:		
Pro forma net loss attributable to all stockholders	\$ (38,695)	\$ (82,674)
Class A stock as a percentage of total shares outstanding	13.08 %	4.84 %
Pro forma net loss attributable to Class A stockholders	<u>\$ (5,062)</u>	<u>\$ (4,004)</u>
Denominator:		
Weighted average Class A common stock, basic and diluted	<u>18,124</u>	<u>6,129</u>
Pro forma net loss per Class A share, basic and diluted	<u>\$ (0.28)</u>	<u>\$ (0.65)</u>

Class B common stock:	For the three months ended September 30, 2020	For the nine months ended September 30, 2020
	(unaudited)	
Numerator:		
Pro forma net loss attributable to all stockholders	\$ (38,695)	\$ (82,674)
Class B stock as a percentage of total shares outstanding	86.92 %	95.16 %
Pro forma net loss attributable to Class B stockholders	<u>\$ (33,633)</u>	<u>\$ (78,670)</u>
Denominator:		
Weighted average Class B common stock outstanding, basic and diluted	<u>120,417</u>	<u>120,417</u>
Pro forma net loss per Class B share, basic and diluted	<u>\$ (0.28)</u>	<u>\$ (0.65)</u>

Supplemental Cash Flow Disclosures

Supplemental cash flow disclosures are as follows for the respective periods:

	For the nine months ended September 30,	
	2020	2019
(unaudited)		
Cash paid for:		
Interest	\$ 1,912	\$ 1,388
Income taxes	<u>\$ 522</u>	<u>\$ 526</u>
Non-cash investing and financing activities:		
Acquisition purchase commitment liability at acquisition date	\$ 14,344	\$ —
Equipment acquired through capital leases	\$ 826	\$ 1,904
Remeasurement of options for redeemable shares	\$ 51,833	\$ 762
Conversions of SAR's in connection with the Offering	\$ 128,870	\$ —
Exchange of Amended Options in connection with the Offering	<u>\$ 69,177</u>	<u>\$ —</u>

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 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 and interim periods 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 ASU 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 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. 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. To protect the health and well-being of Company employees and customers, substantial modifications were made to employee travel policies, our offices were closed and employees advised to work from home, and conferences and other marketing events were cancelled or shifted to virtual-only. The COVID-19 pandemic has impacted and may continue to impact Company operations, including employees, customers and partners, and there is substantial uncertainty in the nature and degree of its continued effects over time.

The Company did not experience any significant reductions in sales, revenues or collections through September 30, 2020 as a result of COVID-19. The uncertainty caused by the COVID-19 pandemic could, however, impact Company billings to new customers for the remainder of 2020, and may also negatively impact Company efforts to expand revenues from existing customers as they continue to evaluate certain long-term projects and budget constraints. In addition to the potential impact on sales, the Company may see delays in collections over the coming months. However, these delays are not expected to materially impact the business, and thus the Company has not recorded an additional allowance for doubtful

accounts in connection with any delays. The Company believes it has ample liquidity and capital resources to continue to meet its operating needs, and to service debt and other financial obligations.

The extent to which the COVID-19 pandemic impacts the business going forward will depend on numerous evolving factors that cannot reliably be predicted, 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 Company 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.

2. ACQUISITION

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 payment 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 available at that time. This amount will fluctuate as a result of foreign currency translation adjustments and is reflected in future acquisition commitment in the consolidated balance sheet at September 30, 2020. 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 after the acquisition date will be recorded as interest expense related to financing costs in the consolidated statements of comprehensive income (loss) in the period the change is identified.

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 customer list, 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.

[Table of Contents](#)

The following table presents the preliminary purchase price allocation recorded in the Company's consolidated balance sheet as of the acquisition date (unaudited):

Net Assets and Assumed Liabilities	Initial Purchase Price Allocation (unaudited)
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 September 30, 2020 (unaudited) reflected in the consolidated statement of comprehensive income (loss), after elimination of intercompany activity, were \$915 and \$(242), respectively. Systax revenue and net loss for the nine months ended September 30, 2020 (unaudited) reflected in the consolidated statement of comprehensive income (loss), after elimination of intercompany activity, were \$3,002 and \$(523), respectively. As the Systax acquisition did not have a material impact on the Company's reported revenue or net loss for the three and nine months ended September 30, 2020, 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.

3. PROPERTY AND EQUIPMENT

The major components of property and equipment are as follows:

	As of December 31, 2019	As of September 30, 2020 (unaudited)
Leasehold improvements	\$ 20,887	\$ 20,890
Equipment	40,598	41,918
Computer software acquired	11,232	11,391
Internal-use software developed		
Cloud-based services	51,442	59,518
Internal systems and tools	23,957	25,083
Furniture and fixtures	7,451	7,670
Automobiles	27	58
In-process internal-use software	809	4,164
	<u>156,403</u>	<u>170,692</u>
Less accumulated depreciation	<u>(101,676)</u>	<u>(114,757)</u>
Property and equipment, net	<u>\$ 54,727</u>	<u>\$ 55,935</u>

Depreciation expense for property and equipment, excluding all internal-use software and capital leases, was \$1,970 and \$1,707 for the three months ended September 30, 2020 and 2019 (unaudited), respectively, and \$5,918 and \$4,495 for the nine months ended September 30, 2020 and 2019 (unaudited), respectively. Depreciation for property and equipment,

[Table of Contents](#)

excluding cloud-based internal-use software, is reflected in depreciation and amortization in the consolidated statements of comprehensive income (loss).

Assets under capital leases of \$1,455 and \$1,769, net of accumulated depreciation of \$627 and \$1,140, at December 31, 2019 and September 30, 2020 (unaudited), respectively, are included in property and equipment in the consolidated balance sheets. Depreciation expense for assets held under capital leases was \$178 and \$168 for the three months ended September 30, 2020 and 2019 (unaudited), respectively, and \$513 and \$397 for the nine months ended September 30, 2020 and 2019 (unaudited), respectively. Depreciation expense for assets held under capital leases is included in depreciation and amortization expense in the consolidated statements of comprehensive income (loss).

The major components of internal-use software are as follows:

	<u>As of December 31,</u> <u>2019</u>	<u>As of September 30,</u> <u>2020</u> <u>(unaudited)</u>
Internal-use software developed	\$ 75,399	\$ 84,601
Less accumulated depreciation	(53,852)	(62,028)
	<u>21,547</u>	<u>22,573</u>
In-process internal-use software	809	4,164
Internal-use software developed, net	<u>\$ 22,356</u>	<u>\$ 26,737</u>

Amounts capitalized for internal-use software and included in property and equipment additions on the consolidated statements of cash flows are as follows:

	<u>For the nine months ended September 30,</u>	
	<u>2020</u>	<u>2019</u>
	<u>(unaudited)</u>	
Cloud-based solutions	\$ 12,574	\$ 7,041
Internal systems and tools	1,463	2,971
Total	<u>\$ 14,037</u>	<u>\$ 10,012</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 three months ended September 30, 2020 and 2019 (unaudited) was \$2,183 and \$1,899, respectively, and \$6,647 and \$6,118 for the nine months ended September 30, 2020 and 2019 (unaudited), respectively. Depreciation expense for internal-use software used for cloud-based solutions 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 September 30, 2020 and 2019 (unaudited) was \$587 and \$436, respectively, and \$1,678 and \$1,636 for the nine months ended September 30, 2020 and 2019 (unaudited), respectively. Depreciation expense for internal-use software utilized for internal systems and tools is included in depreciation and amortization in the consolidated statements of comprehensive income (loss).

Research and development costs associated with internal-use software were \$3,119 and \$2,778 for the three months ended September 30, 2020 and 2019 (unaudited), respectively, and \$7,119 and \$8,639 for the nine months ended September 30, 2020 and 2019 (unaudited), respectively.

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 three months

[Table of Contents](#)

ended September 30, 2020 and 2019 (unaudited) were \$2,591 and \$4,244, respectively, and \$9,246 and \$12,345 for the nine months ended September 30, 2020 and 2019 (audited), respectively.

The major components of capitalized software are as follows:

	<u>As of December 31, 2019</u>	<u>As of September 30, 2020</u> (unaudited)
Capitalized software	\$ 47,862	\$ 60,557
Less accumulated amortization	20,281	28,983
	<u>27,581</u>	<u>31,574</u>
In-process capitalized software	4,494	1,045
Capitalized software, net	<u>\$ 32,075</u>	<u>\$ 32,619</u>

Capitalized software amortization expense for the three months ended September 30, 2020 and 2019 was \$3,124 and \$1,788, respectively, and \$8,702 and \$5,506 for the nine months ended September 30, 2020 and 2019, respectively, and is included in cost of revenues, software subscriptions in the consolidated statements of comprehensive income (loss).

5. GOODWILL

The changes in the carrying amount of goodwill for the nine months ended September 30, 2020 are as follows:

	<u>2020</u> (unaudited)
Balance, January 1	\$ —
Acquisition of Systax, January	26,124
Foreign currency translation adjustment for the three months ended March 30	(5,893)
Foreign currency translation adjustment for the three months ended June 30	(876)
Foreign currency translation adjustment for the three months ended September 30	(688)
Balance, September 30	<u>\$ 18,667</u>

6. DEBT

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”). Net proceeds from the New Term Loan after payment of financing fees of \$2,904 and repayment of aggregate amounts outstanding at March 31, 2020 under the previous credit agreement term loan and line of credit of \$61,656, were used to fund a portion of the \$123,185 distribution made to the stockholders on May 29, 2020.

A portion of the Offering proceeds was used to repay the \$175,000 New Term Loan in full on July 31, 2020. The Company received a refund of \$468 of financing fees as a result of repayment of the New Term Loan within 90 days of execution of the New Credit Agreement, which was recorded as a reduction of deferred financing costs associated with the New Term Loan. The Company wrote off the remaining balance of deferred financing costs associated with the New Term Loan of \$1,174, which was recorded as interest expense in the consolidated statement of comprehensive income (loss) for the three and nine months ended September 30, 2020.

The New Line of Credit matures in March 2025 and had no outstanding borrowings at closing or at September 30, 2020. 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 September 30, 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 and contains financial and operating covenants. The Company was in compliance with these covenants at September 30, 2020.

Credit Agreement

At December 31, 2019, the Company had a credit agreement (the "Credit Agreement") consisting of a term loan (the "Term Loan") with an outstanding principal balance of \$50,375 and a \$40,000 committed Line of Credit with no outstanding borrowings. The Company had 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 were determined by certain financial covenant performance as defined in the Credit Agreement. At December 31, 2019, the Base Rate Option and LIBOR Option resulted in rates of 4.75% and 2.69%, respectively. The Credit Agreement was collateralized by certain assets of the Company and contained financial and operating covenants, which included limitations on the amount of dividends payable in a given period. The Company was in compliance with these covenants at December 31, 2019.

The Term Loan required 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 was included in current portion of long-term debt on the consolidated balance sheet at December 31, 2019.

The Line of Credit was due to expire on November 1, 2020. The Company was 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 0.20%.

Unamortized deferred financing costs of \$221 at December 31, 2019 are included as a reduction in current portion of long-term debt in the consolidated balance sheets. Amortization expense of deferred financing costs on the Term Loan was \$44 for the nine months ended September 30, 2020. The Company wrote off the remaining unamortized deferred financing costs associated with the Term Loan of \$177, which was recorded as interest expense in the consolidated statement of comprehensive income for the three and nine months ended September 30, 2020.

Capital Leases

Capital lease obligations were \$1,333 and \$1,509 at December 31, 2019 and September 30, 2020 (unaudited), respectively, and are included in current portion of long-term debt and long-term debt, net of current portion in the consolidated balance sheets.

7. STOCKHOLDERS' EQUITY (DEFICIT)

Termination of S-Corporation status

In connection with termination of the Company's S-corporation status effective July 27, 2020, the Company had an accumulated deficit of \$354,291 pertaining to the S-corporation shareholders which was reclassified to additional paid in capital upon such termination.

Common Stock

In connection with the Recapitalization, the Company: (i) effected the three-for-one Stock Split, which is reflected retrospectively in the condensed consolidated financial statements; (ii) established the New Capital Structure; and (iii) effected the Share Exchange.

Prior to the Share Exchange, the Company had 147 shares of former Class A common stock and 120,443 shares of former Class B common stock outstanding. Members of a family (the "Family") owned 99.9% of all outstanding shares of both former classes of common stock, which was comprised of 100% of the former Class A common stock and 120,270 shares of the former Class B common stock. The remaining 173 shares of former Class B common stock were owned by non-Family members. There were no dividend or liquidation preference differences between the former Class A and former Class B shares.

In connection with establishing the New Capital Structure, the shareholders authorized 450,000 shares of common stock, par value \$0.001 per share, and 30,000 shares of preferred stock, par value \$0.001 per share. Common stock is divided into two classes, Class A with one vote per share, and Class B with ten votes per share. The rights of the holders of Class A and Class B are identical, except with respect to voting and conversion rights. Upon transfer of Class B shares to a non-Family member, such shares will automatically convert to an equivalent number of Class A shares with the respective voting rights attributable to such new shares. Authorized Class A and Class B shares are 300,000 and 150,000 shares, respectively. There are no dividend or liquidation preference differences between Class A and Class B.

In connection with the Share Exchange, the Family members exchanged each share of former Class A and former Class B for the equivalent number of Class B shares established as part of the New Capital Structure. In addition, the non-Family members exchanged their former Class B shares for an equivalent number of Class A shares established as part of the New Capital Structure. No funds were exchanged in connection with the Share Exchange and the aggregate number of shares outstanding both immediately prior to and after the Share Exchange remained the same at 120,590. In addition, common stock equivalents, all of which were held by non-Family members and which were previously exercisable into former Class B shares, became exercisable into Class A shares established as part of the New Capital Structure.

In April 2020, Vertex issued 173 shares of former Class B common stock in connection with the exercise of stock options by option holders for cash of \$53. These shares were exchanged for Class A common stock in connection with the Recapitalization on July 28, 2020. Also on July 28, 2020, the Company sold 23,812 shares of Class A in connection with the Offering for \$423,024, net of underwriting fees. Offering costs paid from these proceeds aggregated \$6,222 and are reflected as a reduction of additional paid in capital in stockholders' equity. In addition, the company issued 510 shares of Class A in connection with the exercise of stock options by option holders, net of 381 shares returned to the Company in lieu of payment of the exercise price and taxes due on these exercises. In connection with the Offering, the Company also issued an aggregate 564 shares of Class A related to the conversion of SARs into options and the immediate exercise of these options into shares, net of 860 shares returned to the Company in lieu of payment of the exercise price and taxes due on these exercises. The Company also issued 610 Class A shares in connection with the exercise of outstanding options and 19 Class A shares in connection with RSAs granted at the Offering, which vested immediately.

[Table of Contents](#)

In April 2019, Vertex issued 225 shares of former Class B common stock in connection with the exercise of stock options by option holders for cash of \$68, net of 51 shares that were immediately returned to Vertex upon exercise in lieu of payment of income taxes payable by the option holders.

At December 31, 2019 the Company repurchased shares (“Treasury Stock”) aggregating 41,910 which are carried at cost and included in Treasury Stock in the consolidated balance sheet. Such amount is comprised of 41,757 shares of former Class B common stock and 153 shares of former Class A common stock. In connection with the Recapitalization, the Treasury Stock was retired and amounts associated with the Treasury Stock were reclassified to additional paid in capital. At September 30, 2020, there was no Treasury Stock outstanding.

The Board declared distributions of \$4,010 (\$0.03 per share) and \$123,185 (\$1.02 per share) during the three months ended March 31 and June 30, 2020, respectively, and \$5,706 (\$0.05 per share) through July 25, 2020, pro rata to stockholders of former Class A and former Class B common stock. No distributions were declared subsequent to the termination of the S election.

The Board declared distributions of \$5,255 (\$0.04 per share) and \$6,105 (\$0.05 per share) during the three months ended March 31 and June 30, 2019, respectively, pro rata to stockholders of former Class A and former Class B common stock. No distributions were declared during the three months ended September 30, 2019.

8. EARNINGS PER SHARE

The table below illustrates the calculation of basic and diluted net (loss) income per common share for the Class A common and Class B common for the periods reflected below. The weighted average shares outstanding have been retrospectively restated to reflect the Share Exchange for all periods prior to the Offering, resulting in the Class A shares

[Table of Contents](#)

representing non-Family owned shares and Class B representing Family-owned shares for all periods presented. See Note 7 for further information on the Share Exchange.

Class A common stock:	For the three months ended September 30,		For the nine months ended September 30,	
	2020	2019	2020	2019
	(unaudited)			
Numerator, basic:				
Net (loss) income attributable to all stockholders	\$ (21,028)	\$ 11,900	\$ (79,167)	\$ 26,347
Class A stock as a percentage of total shares outstanding, basic	13.08 %	0.19 %	3.07 %	0.08 %
Net (loss) income attributable to Class A stockholders, basic	<u>\$ (2,751)</u>	<u>\$ 22</u>	<u>\$ (2,427)</u>	<u>\$ 21</u>
Numerator, diluted:				
Net (loss) income attributable to all stockholders	\$ (21,028)	\$ 11,900	\$ (79,167)	\$ 26,347
Class A stock as a percentage of total shares outstanding, diluted	13.08 %	3.13 %	3.07 %	3.14 %
Net (loss) income attributable to Class A stockholders, diluted	<u>\$ (2,751)</u>	<u>\$ 373</u>	<u>\$ (2,427)</u>	<u>\$ 826</u>
Denominator, basic and diluted:				
Weighted average Class A common stock, basic	18,124	225	6,129	134
Dilutive effect of common stock equivalents	—	3,668	—	3,764
Weighted average Class A common stock, diluted	<u>18,124</u>	<u>3,893</u>	<u>6,129</u>	<u>3,898</u>
Net (loss) income per Class A share, basic	<u>\$ (0.15)</u>	<u>\$ 0.10</u>	<u>\$ (0.40)</u>	<u>\$ 0.16</u>
Net (loss) income per Class A share, diluted	<u>\$ (0.15)</u>	<u>\$ 0.10</u>	<u>\$ (0.40)</u>	<u>\$ 0.21</u>

Class B common stock:	For the three months ended September 30,		For the nine months ended September 30,	
	2020	2019	2020	2019
	(unaudited)			
Numerator, basic:				
Net (loss) income attributable to all stockholders	\$ (21,028)	\$ 11,900	\$ (79,167)	\$ 26,347
Class B stock as a percentage of total shares outstanding, basic	86.92 %	99.81 %	96.93 %	99.92 %
Net (loss) income attributable to Class B stockholders, basic	<u>\$ (18,277)</u>	<u>\$ 11,878</u>	<u>\$ (76,740)</u>	<u>\$ 26,326</u>
Numerator, diluted:				
Net (loss) income attributable to all stockholders	\$ (21,028)	\$ 11,900	\$ (79,167)	\$ 26,347
Class B stock as a percentage of total shares outstanding, diluted	86.92 %	96.87 %	96.93 %	96.86 %
Net (loss) income attributable to Class B stockholders, diluted	<u>\$ (18,277)</u>	<u>\$ 11,527</u>	<u>\$ (76,740)</u>	<u>\$ 25,521</u>
Denominator, basic and diluted:				
Weighted average Class B common stock, basic	120,417	120,417	120,417	120,417
Dilutive effect of common stock equivalents	—	—	—	—
Weighted average Class B common stock, diluted	<u>120,417</u>	<u>120,417</u>	<u>120,417</u>	<u>120,417</u>
Net (loss) income per Class B share, basic	<u>\$ (0.15)</u>	<u>\$ 0.10</u>	<u>\$ (0.64)</u>	<u>\$ 0.22</u>
Net (loss) income per Class B share, diluted	<u>\$ (0.15)</u>	<u>\$ 0.10</u>	<u>\$ (0.64)</u>	<u>\$ 0.21</u>

9. 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 \$913 and \$818 for the three months ended September 30, 2020 and 2019 (unaudited), respectively, and \$3,003 and \$2,747 for the nine months ended September 30, 2020 and 2019 (unaudited), respectively. In addition, a discretionary profit-sharing contribution of 3% of eligible compensation for eligible employees was approved and aggregated \$3,363 for the year ended December 31, 2019 and is reflected in accrued salaries and benefits in the consolidated balance sheet. Accrued salaries and benefits includes \$981 and \$2,923 for the three and nine months ended September 30, 2020 (unaudited), respectively, for an estimated discretionary profit-sharing contribution for 2020.

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”).

Compensation expense included \$732 and \$817 for the three months ended September 30, 2020 and 2019 (unaudited), respectively, and \$2,329 and \$1,802 for the nine months ended September 30, 2020 and 2019 (unaudited), respectively, for open Reward Performance Periods. Amounts paid to participants in 2020 for the Reward Performance Period starting in 2017 of \$2,717 is reflected in deferred compensation, current in the consolidated balance sheet as of December 31, 2019. Amounts estimated to be paid in 2021 for performance through September 30, 2020 for the Reward Performance Period starting in 2018 of \$2,096 (unaudited) is reflected in deferred compensation, current in the consolidated balance sheet as of September 30, 2020. The remaining balances of accrued LTR Award Opportunities for open Reward Performance Periods of \$1,812 and \$1,965 at December 31, 2019 and September 30, 2020 (unaudited) are reflected in deferred compensation, net of current portion, in the consolidated balance sheets.

Stock-Based Award Plans

On the effective date of the Offering, the Company adopted the 2020 Plan and the ESPP. The 2020 Plan provides the ability to grant cash and equity-based incentive awards to eligible employees, directors and service providers in order to attract, retain and motivate those that make important contributions to the Company. The 2020 Plan provides for the award of stock options, RSAs, RSUs, SARs and other cash compensation. The Company granted 694 RSAs and 10 RSUs on the effective date of the Offering.

The ESPP provides eligible employees with rights during each six-month ESPP offering period to purchase shares of the Company’s Class A common at the ESPP discount through payroll deductions, or through lump sum payments during the initial offering period (July 28 to November 30, 2020). Amounts withheld or received from participants are reflected in accrued salaries and benefits in the consolidated balance sheet until such shares are purchased. Lump sum payments from ESPP participants for the initial offering period will be due prior to the end of the offering period, and none were received by September 30, 2020.

Stock-based award plan events and related activity are described further below.

Prior to the adoption of the 2020 Plan, the Company had a SAR plan for the purpose of providing incentives to key members of management and consultants to contribute to the growth and financial success of the Company. As a result of the Offering, SAR participants were offered the option to either redeem their SARs upon the occurrence of the Offering or amend their SARs pursuant to which, upon effectiveness of the 2020 Plan, such SARs would become options to purchase shares of Class A common stock under the 2020 Plan (the “SAR Exchange Offer”). All SAR participants eligible to receive the SAR Exchange Offer accepted and had their outstanding SARs, which aggregated 12,038, converted to stock options with equivalent terms under the 2020 Plan at the Offering effective date (the “Converted SARs”). This was considered a modification of these SAR awards as described further below. The SAR plan was retired (“Retired SAR Plan”) and any future SARs will be granted under the 2020 Plan. This activity is described further below.

Prior to the adoption of the 2020 Plan, the Company had options outstanding to purchase 3,676 shares of former Class B common stock. Upon the effectiveness of the Offering, these options were amended and exchanged for options to purchase an equivalent number of Class A shares at the same exercise price and vesting, subject to many of the terms of the 2020 Plan. These options remain subject to expiration in connection with a Triggering Event under the terms of the original option agreements (the “Amended Options”). This activity is described further below.

The following table reflects the exchanges and new issuances of stock-based awards in connection with the Offering:

	<u>Units outstanding July 27, 2020</u>	<u>Units (exchanged) issued in connection with Offering</u>	<u>Units outstanding July 28, 2020 (prior to exercises)</u>
		(unaudited)	
SARs	12,086	(12,038)	48
Amended Options	3,676	(3,676)	—
2020 Plan options	—	15,714	15,714
RSA's	—	694	694
RSU's	—	10	10

Compensation expense and additional information pertaining to stock-based awards is described further below.

2020 Plan

An aggregate of 16,500 shares of our Class A common stock was initially available for issuance under the 2020 Plan. The number of shares initially available for issuance will be increased annually on January 1 of each calendar year beginning in 2021 and ending in and including 2030, equal to the lesser of (i) 4% of the shares of Class A and Class B common stock outstanding on the final day of the immediately preceding calendar year and (ii) a smaller number of shares as determined by the Board. No more than 3,000 shares of Class A common may be issued under the 2020 Plan upon the exercise of incentive stock options. Shares available under the 2020 Plan may consist of 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 or acquisition by the Company 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 issued under the 2020 Plan vest based on service criteria established by the Board. The company has elected to account for forfeitures as they occur rather than estimate forfeitures at date of grant.

Amended and Retired SAR Plan

The Retired SAR Plan enabled the Company to grant awards ("SAR Awards") as a fixed number of shares of former Class B common stock ("SAR Units"). SAR Units outstanding aggregated 12,276 at December 31, 2019. SAR Units were issued at the equivalent of the fair value of the equivalent number of shares of the Company's former 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 recorded based upon the appreciation of the SAR Units in excess of the Base Value over the requisite service period. SAR Awards were exercisable upon 50% vesting or upon the occurrence of a triggering event.

Prior to the SAR Exchange Offer being made, vested SAR Units were redeemable upon the occurrence of a triggering event which included: (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.

[Table of Contents](#)

SAR participants were limited to exercising no more than 25% of their vested SAR Units in any given year. SAR Awards generally vested 50% and 100% after two years and five years, respectively, from the grant date, or as determined by the Board. Maximum contractual terms ranged from ten years to term of employment of the participant. SAR Awards were settled in cash only, not through the issuance of shares. SAR Award exercises were 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 was defined as cash from operating activities less cash paid for property and equipment and capitalized software for a given period.

The SAR Exchange Offer resulted in eligible SAR participants amending their SARs pursuant to which, upon effectiveness of the Company’s 2020 Plan, such SARs were exchanged for options under the 2020 Plan. Effective July 13, 2020, the SAR Exchange Offer period ended and all SAR participants eligible to receive the offer accepted and had their outstanding SARs converted to stock options with equivalent terms under the 2020 Plan on the effective date of the plan upon the Offering. This was considered a modification of these SAR Awards.

Converted SARs with either no expiration date or that expired during calendar year 2020 were converted to options and automatically exercised into shares (the “Auto Exercise New Options”) on the effective date of the Offering. Shares issued in connection with the Auto Exercise New Options were net of the number of shares of common stock necessary to satisfy the aggregate exercise price and the tax withholding obligation of such options of \$13,835. The Auto Exercise New Option participants also had the ability to require the Company to repurchase all or a portion of these on the Offering effective date for cash based on the Offering price of \$19, which aggregated \$9,054 (unaudited). The aggregate of these amounts of \$22,889 is reflected as a reduction of cash provided by operating activities as these payment requirements arose when the original SARs were liability-classified prior to their conversion and exercise.

Management continued to record changes in the intrinsic value of the SARs in 2020 up to July 2, 2020, the date on which management determined the Company was considered to have become a public entity. Management recorded the change in accounting policy of \$2,422 in accordance with ASC 718 during the three months ended September 30, 2020, which included \$1,299 of vested Converted SARs that was recognized as compensation expense during this period, with the remaining \$1,122 of unvested Converted SARs being recognized as compensation expense over the remaining service period of one to five years through 2025. The additional incremental increase in fair value of the Converted SARs after July 2, 2020 and up to the time of the exchange on the Offering effective date resulting from the modification was recorded as compensation expense. The fair value of the Converted SARs, estimated using the Black-Scholes model, was \$197,708 (unaudited), of which \$153,366 (unaudited) is vested. Management recorded additional compensation expense of \$57,079 (unaudited) for vested Converted SARs from July 1 to the Offering effective date, which included the \$1,299 impact of the change in accounting of vested Converted SARs. The remaining \$44,342 (unaudited) of unvested Converted SAR liability, which includes the \$1,122 of unvested Converted SARs in connection with the change in accounting policy on July 2, 2020, will be recognized as compensation expense over the remaining service period of one to five years through 2025. Upon modification, the Converted SARs are no longer being recorded as a liability under ASC 718 and the accumulated liability balance, net of amounts for payment of tax withholding and redemption, was reclassified to stockholders’ equity. No incremental compensation expense arose in connection with the SAR modification.

The assumptions used in the Black-Scholes model to determine the fair value of the Converted SARs on the modification date are as follows:

Fair market value of common stock	\$	19.00
Volatility		36.7%
Expected term (years)		6.5
Expected dividend yield		-
Risk-free interest rate		0.4%

The Company lacks sufficient historical data on the volatility of its stock price. Selected volatility is representative of expected future volatility and was based on the historical and implied volatility of comparable publicly traded companies over a similar expected term. The expected term represents the term of the Converted SARs, which ranges from within one year to ten years. The Company does not expect to pay dividends after the Offering. The risk-free interest rate was based on the rate for a U.S. Treasury zero-coupon issue with a term that closely approximates the expected term of the SAR grants.

Prior to the Offering, the fair value of the common stock underlying the SAR Awards was determined by the Board with assistance from management and an independent third-party valuation firm. The determination of value used the market and income approaches, with an adjustment for marketability discount pertinent to private company entities 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 the Offering, 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 approached the Offering effective date, this resulted in increases in the value of the SAR Awards which resulted in corresponding increases to compensation expense for the three and nine months ended September 30, 2020 which exceeded historical results.

The below table represents SAR activity for the following periods:

	Units			Range of grant values
	Vested	Nonvested	Total (unaudited)	
Balance, January 1, 2019	5,889	4,782	10,671	\$ 0.92–\$3.17
Granted	297	2,112	2,409	\$ 3.73
Exercised	(609)	—	(609)	\$ 1.31–\$2.50
Forfeited	—	(195)	(195)	\$ 2.13–\$2.50
Vested	630	(630)	—	
Balance, December 31, 2019	6,207	6,069	12,276	\$ 0.92–\$3.73
Granted	21	681	702	\$ 4.70
Exercised	(829)	—	(829)	\$ 1.31–\$2.50
Forfeited	—	(63)	(63)	\$ 2.50
Vested	1,410	(1,410)	—	
Converted	(6,761)	(5,277)	(12,038)	\$ 0.92–\$4.70
Balance September 30, 2020	48	—	48	\$ 2.50

Prior to July 2, 2020, the weighted average grant date intrinsic value of the SARs on grant date was zero as the Company’s Board granted all awards at a price per share not less than the per share fair value of the Company’s former Class B common stock underlying such awards on the date of grant.

Accrued SAR Awards of \$5,790 and \$1,051 at December 31, 2019 and September 30, 2020 (unaudited), respectively, representing SAR Units scheduled for redemption and 25% of the vested SAR Units eligible for exercise within 12-months of the balance sheet date are reflected in deferred compensation, current in the consolidated balance sheets. The remaining balance of accrued SAR Awards of \$16,506 at December 31, 2019 is reflected as deferred compensation, net of current portion, in the consolidated balance sheet. We had approximately \$3,900 of total unrecognized compensation expense for unvested SAR Awards at December 31, 2019 which we expect to recognize over the respective service periods of one to five years.

At the Offering effective date, the total unrecognized compensation for unvested SAR Awards of \$44,342 was reclassified to additional paid in capital as these awards were reclassified to equity-based awards on this date subject to the terms of the 2020 Plan. This amount will be recognized as compensation expense under the 2020 Plan over the respective service periods of one to five years.

Amended Options

On July 20, 2020, the Amended Options resulted from the Board amending the outstanding options to provide for their exchange for options to purchase an equivalent number of Class A shares available under the 2020 Plan at the same exercise price, vesting and term. The amendment of the options was deemed a modification. No incremental compensation was recorded in connection with this modification as it was determined that the value of the Amended Options was the same both before and after the modification. The Amended Options remain exercisable upon: (i) the option holder no longer serving as 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). Prior to being amended, the option agreements provided 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. Upon amendment, the options are instead now subject to restrictions on trading during certain periods ("blackout dates"). Option holders are permitted 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.

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 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").

Prior to the amendment, the options permitted holders to put their exercised shares back to the Company, thus the options were classified as temporary equity and included in "Options for Redeemable Shares" on the consolidated balance sheets. The Company recorded increases in the value of Options for Redeemable Shares of \$21,954 and \$579 for the three months ended September 30, 2020 and 2019 (unaudited), respectively, and \$69,177 and \$762 for the nine months ended September 20, 2020 and 2019 (unaudited), respectively. The option holders' ability to put the exercised Amended Option shares to the Company in order to attain liquidity was exchanged for the right by the holders to exercise these options and sell the related shares on the NASDAQ exchange. As a result of this put right no longer being applicable, the options were no longer considered temporary equity and were reclassified to stockholders' equity in the amount of \$69,177 during the three months ended September 30, 2020.

[Table of Contents](#)

The following table summarizes activity for the Amended Options from January 1, 2019:

<u>Amended Option Activity</u>	<u>Units</u>	<u>Weighted average exercise price</u>	<u>Weighted average remaining contractual life (years)</u>	<u>Aggregate intrinsic value (in thousands)</u>
			(unaudited)	
Outstanding at January 1, 2019	4,125	\$ 0.20	*	\$ 14,581
Exercised	(276)	\$ 0.25		\$ 957
Outstanding at December 31, 2019	3,849	\$ 0.19	*	\$ 17,344
Exercised through June 30	(173)	\$ 0.30		\$ 759
Amendment and exchange of options	(3,676)	\$ 0.19	*	\$ 69,177
Outstanding at September 30, 2020	—			

*Options have indefinite contractual lives

Options under 2020 Plan

The Company issued no options under the 2020 Plan through September 30, 2020 other than those associated with the Converted SARs and the Amended Options previously discussed. The following table summarizes activity for options outstanding under the 2020 Plan:

<u>2020 Plan Option Activity</u>	<u>Units</u>	<u>Weighted average exercise price</u>	<u>Weighted average remaining contractual life (years)</u>	<u>Aggregate intrinsic value (in thousands)</u>
			(unaudited)	
Outstanding at January 1, 2020	—	—		
Issued in connection with Converted SARs	12,038	\$ 2.18		
Issued in connection with Amended Options	3,676	\$ 0.19	*	
Exercised	(3,402)	\$ 1.11		\$ 63,295
2020 Plan options outstanding as of September 30, 2020	12,312	\$ 2.45	7.47	\$ 253,006
2020 Plan options exercisable as of September 30, 2020	7,224	\$ 1.76	7.14	\$ 153,414

*Amended Options have indefinite contractual lives

The detail of options outstanding, vested and exercisable under the 2020 Plan as of September 30, 2020 is as follows:

Exercise Prices	Options outstanding		Options vested and exercisable	
	Units	Weighted average life (years)	Units	Weighted average life (years)
			(unaudited)	
\$0.15 to \$0.71	2,552	9.4	2,552	9.4
\$2.15	1,295	4.4	1,295	4.4
\$2.50	2,816	5.7	1,808	5.6
\$2.67	901	6.4	430	6.4
\$3.17	1,674	7.5	861	7.5
\$3.73	2,392	9.0	278	8.9
\$4.70	682	9.4	—	—
	12,312		7,224	

The Board intends all options granted to be exercisable at a price per share not less than the per share fair market value of the Company's Class A common stock underlying the options on the date of grant. Compensation expense for new option awards issued subsequent to the Offering to participants under the 2020 Plan are measured based on the grant date fair value of the awards and recognized in the consolidated statements of operations over the period during which the participant is required to perform the requisite services. The vesting period is generally one to four years. The grant date fair value of options is estimated using the Black-Scholes model. No new options were granted subsequent to the Offering through September 30, 2020. Unrecognized compensation expense associated with the Converted SARs was \$40,434 at September 30, 2020 (unaudited), which will be recognized over the respective remaining service periods of one to five years.

Restricted Stock Units

The Company issued RSUs to eligible participants during the quarter ended September 30, 2020. The following table summarizes RSU activity for the nine months ended September 30, 2020:

	Units	Weighted average grant date fair value per share
	(Unaudited)	
Outstanding at January 1, 2020	—	\$ —
Granted	88	22.36
Outstanding at September 30, 2020	88	\$ 22.36

Stock-based compensation cost for RSUs is measured based on the fair value of the Company's underlying common stock on the date of grant and aggregated \$1,958. This cost will be recognized on a straight-line basis in the consolidated statements of operations over the period during which the participant is required to perform services in exchange for the award, which is generally one to four years. During the three and nine months ended September 30, 2020, the Company recorded stock-based compensation expense of \$18 related to these awards. At September 30, 2020, \$1,940 of unrecognized compensation cost is expected to be recognized over a weighted average period of approximately 4.0 years.

Restricted Stock Awards

The Company issued RSAs to eligible participants during the quarter ended September 30, 2020. The following table summarizes RSA activity for the nine months ended September 30, 2020:

	Units	Weighted average grant date fair value per share
	(unaudited)	
Outstanding at January 1, 2020	—	\$ —
Granted	694	19.00
Vested	(21)	19.00
Forfeited	(1)	19.00
Outstanding at September 30, 2020	672	\$ 19.00

Stock-based compensation cost for RSAs is measured based on the fair value of the Company's underlying common stock on the date of grant and aggregated \$13,190 during the three months ended September 30, 2020. This cost will be recognized on a straight-line basis in the consolidated statements of operations over the period during which the participants are required to perform services in exchange for the award, which is generally one to four years. During the three and nine months ended September 30, 2020, the Company recorded stock-based compensation expense of \$2,014, net of forfeitures, related to these awards. At September 30, 2020, \$11,158 of unrecognized compensation cost is expected to be recognized over a weighted average period of approximately 2.2 years.

Employee Stock Purchase Plan

The 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 ESPP during the initial offering period (July 28 to November 30, 2020). The maximum number of shares that may be purchased by a participant during any offering period is determined by the plan administrator in advance of each offering period.

On the first trading day of each offering period, each participant will automatically be granted an option to purchase shares of Class A common. 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 accumulated or contributions made during such offering period. The purchase price of the shares, in the absence of a contrary designation, is 85% of the lower of the fair value of the Class A common on the first or last day of the ESPP offering period. Participants may voluntarily end their participation in the plan 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 related contributions, if applicable, that have not yet been used to purchase shares of Class A common. If a participant withdraws from the plan during an offering period, the participant cannot rejoin until the next offering period. Participation ends automatically upon a participant's termination of employment.

A total of 1,000 shares of Class A common were initially reserved for issuance under the ESPP. The number of shares available for issuance under the ESPP will be increased annually on January 1 of each calendar year beginning in 2021 and ending in and including 2030, by an amount equal to the lesser of (i) 1% of the shares of Class A and Class B common stock outstanding on the final day of the immediately preceding calendar year and (ii) such smaller number of shares as is

determined by the Board, provided that no more than 16,000 shares of Class A common stock may be issued. The ESPP is administered by a committee of the Board.

During the three and nine months ended September 30, 2020, the Company recorded stock-based compensation expense of \$121 related to the ESPP initial offering period. No shares of Class A common stock were purchased under the ESPP as no amounts were withheld through payroll or contributed by participants through this date. As of September 30, 2020, there was approximately \$116 of unrecognized stock-based compensation cost related to the ESPP's initial offering period that is expected to be recognized on a straight-line basis over the remaining term of the offering period that ends on November 30, 2020.

For the periods presented, the fair value of ESPP purchase rights is comprised of the value of the 15% ESPP discount and the value associated with the the Call over the ESPP offering period. The value of the Call was estimated using the Black-Scholes model with the following assumptions:

	For the three months ended September 30,		For the nine months ended September 30,	
	2020	2019	2020	2019
Fair market value of common stock	\$ 19.00	n/a	\$ 19.00	\$ n/a
Volatility	35%	n/a	35%	n/a
Expected term (years)	0.33	n/a	0.33	n/a
Expected dividend yield	-	n/a	-	n/a
Risk-free interest rate	0.11%	n/a	0.11%	n/a

The Company lacks sufficient historical data on the volatility of its stock price. Selected volatility is representative of expected future volatility and was based on the historical and implied volatility of comparable publicly traded companies over a similar expected term. The expected term represents the term of the ESPP offering period, which is generally six months except for the initial offering period which is from July 28 to November 30, 2020. The Company does not expect to pay dividends after the Offering. The risk-free interest rate was based on the rate for a U.S. Treasury zero-coupon issue with a term that closely approximates the expected term of the award at the date nearest the offering term.

Stock-Based Compensation

The Company recognized total stock-based compensation cost related to incentive awards as follows:

	For the three months ended September 30,		For the nine months ended September 30,	
	2020	2019	2020	2019
	(unaudited)			
Stock-based compensation cost:				
SARs	\$ 62,141	\$ 1,310	\$ 138,737	\$ 3,930
Stock options	-	-	-	-
RSUs	18	-	18	-
RSAs	2,014	-	2,014	-
ESPP	121	-	121	-
Total stock-based compensation cost	\$ 64,294	\$ 1,310	\$ 140,890	\$ 3,930

[Table of Contents](#)

The Company recognized stock-based compensation cost in the condensed consolidated statements of comprehensive income (loss) as follows:

	For the three months ended September 30,		For the nine months ended September 30,	
	2020	2019	2020	2019
		(unaudited)		
Cost of revenues, software subscriptions	\$ 6,342	\$ 131	\$ 14,002	\$ 393
Cost of revenues, services	9,230	197	20,719	591
Research and development	6,340	131	14,000	393
Selling and marketing	12,821	261	28,140	784
General and administrative	29,561	590	64,029	1,769
Total stock-based compensation	<u>\$ 64,294</u>	<u>\$ 1,310</u>	<u>\$ 140,890</u>	<u>\$ 3,930</u>

10. RELATED PARTIES

The Company advanced amounts to certain stockholders of the Company of \$283 and \$2 at December 31, 2019 and September 30, 2020 (unaudited), respectively. The 2019 amounts are short-term in nature and repaid within three months. The amounts in 2020 are related to settlement of S-Corporation tax obligations as permitted under the Tax Sharing Agreement. These amounts are included in advances to stockholders in the consolidated balance sheets.

11. 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 \$1,736 and \$1,628 for the three months ended September 30, 2020 and 2019 (unaudited), respectively, and \$5,187 and \$4,720 for the nine months ended September 30, 2020 and 2019 (unaudited), respectively. These amounts are reflected in general and administrative expense in the consolidated statements of comprehensive income (loss).

The Company may become involved in various lawsuits and legal proceedings, which arise, in the ordinary course of business. However, litigation is subject to inherent uncertainties, and an adverse result in these or other matters may arise from time to time that may harm our business. The Company is not aware of any such legal proceedings or claims that management believes will have a material adverse effect on our business, financial condition, or operating results.

Item 2. 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 Quarterly Report on Form 10-Q. 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 Quarterly Report on Form 10-Q, particularly in the section titled "Risk Factors" in Part II, Item 1A.

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, sellers 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.

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 September 30, 2020, we had over 4,000 customers and our Annual Recurring Revenue ("ARR") per customer was over \$75,000, while at September 30, 2019, we had over 4,000 customers and our ARR per customer was over \$65,000. 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 28.7% and 21.0% of software subscription revenue from cloud-based subscriptions during the three months ended September 30, 2020 and 2019, respectively, and 26.6% and 18.7% for the nine months ended September 30, 2020 and 2019, respectively. While our on-premise software subscription revenue comprises 73.4% of our 2020 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 the compliance environment provides durable and accelerating growth opportunities for our business. We generated revenue of \$82.4 million and \$94.6 million for the three months ended September 30, 2019 and 2020, respectively. We generated revenue of \$235.4 million and \$275.1 million for the nine months ended September 30, 2019 and 2020, respectively. We had net income of \$11.9 million and a net loss of \$21.0 million for the three months ended September 30, 2019 and 2020, respectively. We had net income of \$26.3 million and a net loss of \$79.2 million for the nine months ended September 30, 2019 and 2020, respectively. Adjusted EBITDA was \$19.6 million and \$22.5 million for the three months ended September 30, 2019 and 2020, respectively. Adjusted EBITDA was \$50.8 million and \$59.3 million for the nine months ended September 30, 2019 and 2020, respectively. Additionally, we generated net cash provided by operating activities of \$45.8 million and \$20.0 million in the nine months ended September 30, 2019 and 2020, respectively. Our free cash flow was \$3.7 million and \$15.8 million in the three months ended September 30, 2019 and 2020, respectively. Our free cash flow was \$20.1 million and \$18.7 million in the nine months ended September 30, 2019 and 2020, respectively. Adjusted EBITDA and free cash flow are non-GAAP financial measures. Refer to *"Use and Reconciliation of Non-GAAP Financial Measures"* for further discussion of non-GAAP financial measures and their comparison to GAAP financial measures.

Recent Developments—

Initial Public Offering

On July 31, 2020, we completed our initial public offering ("IPO") in which we sold 23,812,216 shares of our Class A common stock, and certain selling stockholders sold an additional 510,284 shares of Class A common stock, at a public offering price of \$19.00 per share. We received proceeds of approximately \$423.0 million, after deducting underwriting discounts and commissions, from sales of our shares in the IPO. We did not receive any of the proceeds from the sale of shares by the selling stockholders.

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 half 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 the first half of 2020, nor any material 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 billings at the end of the first quarter of 2020. 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.

For the third quarter of 2020, new software billings exceeded our original third quarter of 2020 forecasts. We have seen some delays due to prospects shifting to working remotely, and some due to economic uncertainty. We expect that the uncertainty caused by the COVID-19 pandemic could 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 our growth strategies will be materially impacted by the COVID-19 pandemic, as companies continue to rely on us for their indirect tax solutions.

In addition to the impacts on our sales, our cash collections from existing customers were lower than expected at the end of the first quarter of 2020. During the second and third quarters of 2020, 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 the COVID-19 pandemic, 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 the 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)	September 30		Period-over-Period change	
	2020	2019		
Annual Recurring Revenue	\$ 306.5	\$ 265.6	\$ 40.9	15.4 %

ARR increased by \$40.9 million or 15.4% for the twelve month period ended September 30, 2020, as compared to the same period in 2019. The increase was primarily driven by \$20.0 million of growth in revenues from existing customers through their expanded use of our solutions as well as price increases and \$20.9 million of on premise and cloud-based subscription sales of our tax solutions to new customers.

Net Revenue Retention Rate.

We believe that our Net Revenue Retention Rate (“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.

	September 30	
	2020	2019
Net Revenue Retention Rate	108 %	109 %

The NRR declined from 109% at September 30, 2019 to 108% at September 30, 2020 due primarily to a reduction in new sales to existing customers.

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, share-based compensation expense, severance charges and offering transaction costs. Adjusted EBITDA margin represents Adjusted EBITDA divided by total revenues for the same period. For purposes of comparison, our net (loss) income was \$(21.0) million and \$11.9 million for the three months ended September 30, 2020 and 2019, respectively, while our net income margin was (22.2)% and 14.4% over the same periods, respectively. Additionally, our net (loss) income was \$(79.2) million and \$26.3 million for the nine months ended

September 30, 2020 and 2019, respectively, while our net income margin was (28.8)% and 11.2% over the same periods, respectively.

(dollars in thousands)	For the three months ended September 30		For the nine months ended September 30	
	2020	2019	2020	2019
Adjusted EBITDA:				
Net (loss) income	\$ (21,028)	\$ 11,900	\$ (79,167)	\$ 26,347
Interest, net	1,796	252	3,424	804
Income tax (benefit) expense	(30,773)	175	(31,508)	600
Depreciation and amortization – cost of subscription revenues	5,307	3,687	15,349	11,624
Amortization of acquired intangibles - selling and marketing expense	128	—	128	—
Depreciation and amortization	2,735	2,311	8,109	6,528
Stock-based compensation	64,294	1,310	140,890	3,930
Severance charges	72	1	2,114	948
Adjusted EBITDA	<u>\$ 22,531</u>	<u>\$ 19,636</u>	<u>\$ 59,339</u>	<u>\$ 50,781</u>
Adjusted EBITDA Margin:				
Total revenues	<u>\$ 94,605</u>	<u>\$ 82,439</u>	<u>\$ 275,121</u>	<u>\$ 235,428</u>
Adjusted EBITDA margin	<u>23.8 %</u>	<u>23.8 %</u>	<u>21.6 %</u>	<u>21.6 %</u>

The increase in Adjusted EBITDA for the three months ended September 30, 2020 of \$2.9 million over the comparable period 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 remained consistent at 23.8% for the three months ended September 30, 2020 over the comparable period in 2019.

The increase in Adjusted EBITDA for the nine months ended September 30, 2020 of \$8.6 million over the comparable period 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 remained consistent at 21.6% for the nine months ended September 30, 2020 over the comparable period in 2019.

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 this 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, adjusted for the redemption of stock appreciation rights (“SARs”) in 2020 in connection with the Offering reflected as a reduction of 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 net cash provided by operating activities was \$20.0 million and \$45.8 million for the nine months ended September 30, 2020 and 2019, respectively, while our operating cash flow margin was 7% and 19% over the same periods, respectively. Net cash used in investing activities was \$36.5 million and \$25.7 million for the nine months ended September 30, 2020 and 2019, respectively. Net cash provided

by (used in) financing activities was \$212.4 million and \$(25.5) million for the nine months ended September 30, 2020 and September 30, 2019, respectively.

(dollars in thousands)	Nine months ended	
	September 30	
	2020	2019
Free cash flow:		
Cash provided by operating activities	\$ 20,044	\$ 45,799
Redemption of Converted SARs	22,889	—
Property and equipment additions	(14,982)	(13,315)
Capitalized software additions	(9,246)	(12,345)
Free cash flow	<u>\$ 18,705</u>	<u>\$ 20,139</u>
Free cash flow margin:		
Total revenues	<u>\$ 275,121</u>	<u>\$ 235,428</u>
Free cash flow margin	<u>6.8 %</u>	<u>8.6 %</u>

Free cash flow decreased by \$1.4 million for the nine months ended September 30, 2020 as compared to the same period in 2019, driven primarily by a decrease in cash from operating activities of \$25.8 million due to a \$22.9 million payment for redemption of converted SARs in connection with the IPO, a reduction in cash provided by changes in operating assets and liabilities of \$9.4 million, partially offset by an increase in non-cash operating activity resulting from increases in depreciation and amortization of \$5.4 million and the write-off of deferred financing fees of \$1.4 million. The \$22.9 million payment for redemption of converted SARs pertain to SARs converted to stock options and immediately redeemed for cash upon the IPO. The reduction in operating assets and liabilities of \$9.4 million was primarily due to a reduction in deferred revenue of \$9.3 million. Deferred revenue decreased due to a \$5.6 million decrease in nonrecurring extended product support fees billed in the first half of 2019 related to older versions of software subscription solutions retired during 2019. The balance of the deferred revenue reduction of \$3.7 million is 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. Such billing frequency modification results in a short-term reduction in deferred revenue, but no impact to revenue. The increase in depreciation and amortization of \$5.4 million was due to increased development costs related to the release of O Series 9.0 and internal automation projects. The write-off of deferred financing fees of \$1.4 million was a result of the redemption of debt during the nine months ended September 30, 2020.

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 Vertex-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 nine months ended September 30, 2020 and 2019, \$9.2 million and \$12.3 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, costs associated with our annual customer conferences and amortization of acquired intangibles. 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, severance, 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 includes write downs of deferred financing costs upon redemption of debt. Interest expense will vary as a result of fluctuations in the level of debt outstanding as well as interest rates on such debt. In addition, interest expense will include adjustments to the fair value of contracts that may be entered into to hedge risks associated with currency fluctuations for cash receipts or cash payments denominated in currencies other than U.S. dollars and which do not qualify for hedge accounting. In addition, changes in the settlement value of the future payment obligation for the Systax acquisition will be recorded as interest expense, as described further in “Note 2—Acquisition” to our interim consolidated financial statements included in this Quarterly Report on Form 10-Q.

Provision for Taxes

Prior to July 27, 2020, 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 prior to this date 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 going forward. Accordingly, the income tax provision or benefit for such periods was based on taxable income allocated to those 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.

Effective as of July 27, 2020, we converted 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. Upon 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. We recorded a tax benefit of \$30.5 million upon such conversion, which is included in the condensed consolidated statement of comprehensive income (loss) for the three months ended September 30, 2020 included in Part 1 – Financial Information in this Quarterly Report on Form 10-Q.

Results of Operations

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our consolidated financial statements and the notes thereto included elsewhere in this Quarterly Report on Form 10-Q and our Prospectus filed with the SEC on July 30, 2020. The period-to-period comparison of financial results is not necessarily indicative of financial results to be achieved in future periods.

The following table sets forth our consolidated statements of comprehensive income (loss) for the periods indicated.

(Dollars in thousands) (unaudited)	Three months ended September 30			Nine months ended September 30				
	2020	2019	Period-over-Period change	2020	2019	Period-over-Period change		
Revenue:								
Software subscriptions	\$ 79,778	\$ 71,041	\$ 8,737	12.3 %	\$ 232,844	\$ 202,692	\$ 30,152	14.9 %
Services	14,827	11,398	3,429	30.1 %	42,277	32,736	9,541	29.1 %
Total revenue	94,605	82,439	12,166	14.8 %	275,121	235,428	39,693	16.9 %
Cost of Revenue:								
Software subscriptions ⁽¹⁾	29,161	18,647	10,514	56.4 %	79,846	56,490	23,356	41.3 %
Services ⁽¹⁾	18,807	8,786	10,021	114.1 %	49,329	23,616	25,713	108.9 %
Total cost of revenues	47,968	27,433	20,535	74.9 %	129,175	80,106	49,069	61.3 %
Gross profit	46,637	55,006	(8,369)	(15.2)%	145,946	155,322	(9,376)	(6.0)%
Operating expenses:								
Research and development ⁽¹⁾	16,501	7,271	9,230	126.9 %	43,197	22,049	21,148	95.9 %
Selling and marketing ⁽¹⁾	29,423	15,830	13,593	85.9 %	78,300	49,164	29,136	59.3 %
General and administrative ⁽¹⁾	48,043	17,263	30,780	178.3 %	123,437	49,358	74,079	150.1 %
Depreciation and amortization	2,735	2,311	424	18.3 %	8,109	6,528	1,581	24.2 %
Other operating expense	(60)	4	(64)	(1,600.0)%	154	472	(318)	(67.4)%
Total operating expenses	96,642	42,679	53,963	126.4 %	253,197	127,571	125,626	98.5 %
Income (loss) from operations	(50,005)	12,327	(62,332)	(505.7)%	(107,251)	27,751	(135,002)	(486.5)%
Other (income) expense:								
Interest income	(79)	(251)	172	(68.5)%	(535)	(775)	240	(31.0)%
Interest expense	1,875	503	1,372	272.8 %	3,959	1,579	2,380	150.7 %
Total other expense, net	1,796	252	1,544	612.7 %	3,424	804	2,620	325.9 %
Income (loss) before income taxes	(51,801)	12,075	(63,876)	(529.0)%	(110,675)	26,947	(137,622)	(510.7)%
Income tax (benefit) expense	(30,773)	175	(30,948)	(17,684.6)%	(31,508)	600	(32,108)	(5,351.3)%
Net (loss) income	(21,028)	11,900	(32,928)	(276.7)%	(79,167)	26,347	(105,514)	(400.5)%
Other comprehensive loss from foreign currency translations	238	174	64	36.8 %	3,512	176	3,336	1,895.5 %
Total comprehensive income (loss)	\$ (21,266)	\$ 11,726	\$ (32,992)	(281.4)%	\$ (82,679)	\$ 26,171	\$ (108,850)	(415.9)%

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

	Three months ended September 30		Nine months ended September 30	
	2020	2019	2020	2019
	(unaudited) (In thousands)			
Cost of revenues, software subscriptions	\$ 6,342	\$ 131	\$ 14,002	\$ 393
Cost of revenues, services	9,230	197	20,719	591
Research and development	6,340	131	14,000	393
Selling and marketing	12,821	261	28,140	784
General and administrative	29,561	590	64,029	1,769
Total stock-based compensation	\$ 64,294	\$ 1,310	\$ 140,890	\$ 3,930

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

	Three months ended September 30		Nine months ended September 30	
	2020	2019	2020	2019
	(unaudited)			
Revenue:				
Software subscriptions	84.3 %	86.2 %	84.6 %	86.1 %
Services	15.7 %	13.8 %	15.4 %	13.9 %
Total revenue	100.0 %	100.0 %	100.0 %	100.0 %
Cost of Revenue:				
Software subscriptions	30.8 %	22.6 %	29.0 %	24.0 %
Services	19.9 %	10.7 %	17.9 %	10.0 %
Total cost of revenues	50.7 %	33.3 %	46.9 %	34.0 %
Gross profit	49.3 %	66.7 %	53.1 %	66.0 %
Operating expenses:				
Research and development	17.4 %	8.8 %	15.7 %	9.4 %
Selling and marketing	31.1 %	19.2 %	28.5 %	20.9 %
General and administrative	50.8 %	20.9 %	44.9 %	21.0 %
Depreciation and amortization	2.9 %	2.8 %	2.9 %	2.8 %
Other operating expense, net	(0.1)%	— %	0.1 %	0.1 %
Total operating expenses	102.1 %	51.7 %	92.1 %	54.2 %
Income (loss) from operations	(52.8)%	15.0 %	(39.0)%	11.8 %
Other (income) expense:				
Interest income	(0.1)%	(0.3)%	(0.2)%	(0.3)%
Interest expense	2.0 %	0.6 %	1.4 %	0.7 %
Total other expense, net	1.9 %	0.3 %	1.2 %	0.4 %
Income (loss) before income taxes	(54.7)%	14.7 %	(40.2)%	11.4 %
Income tax (benefit) expense	(32.5)%	0.2 %	(11.5)%	0.3 %
Net (loss) income	(22.2)%	14.5 %	(28.7)%	11.1 %
Other comprehensive loss from foreign currency translations	0.3 %	0.2 %	1.3 %	0.1 %
Total comprehensive income (loss)	(22.5)%	14.3 %	(30.0)%	11.0 %

Three Months Ended September 30, 2020 Compared to Three Months Ended September 30, 2019**Revenue**

(Dollars in thousands)	Three months ended September 30		Period-over-Period change	
	2020	2019		
Revenue:				
Software subscriptions	\$ 79,778	\$ 71,041	\$ 8,737	12.3 %
Services	14,827	11,398	3,429	30.1 %
Total revenue	<u>\$ 94,605</u>	<u>\$ 82,439</u>	<u>\$ 12,166</u>	14.8 %

Revenue increased \$12.2 million, or 14.8%, to \$94.6 million for the three months ended September 30, 2020 compared to \$82.4 million for the three months ended September 30, 2019. The increase in software subscriptions revenue of \$8.7 million, or 12.3%, was primarily driven by \$7.7 million in revenue growth derived from our existing customers and \$1.0 million of revenue growth from new customers.

The \$3.4 million increase in services revenue is primarily driven by an increase of \$2.9 million in software subscription related services associated with the growth in subscription revenues, which includes new customers implementing our solutions and existing customers upgrading to newer versions of our solutions. In addition, our managed services offering experienced a \$0.5 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

(Dollars in thousands)	Three months ended September 30		Period-over-Period change	
	2020	2019		
Cost of software subscription revenue	\$ 29,161	\$ 18,647	\$ 10,514	56.4 %

Cost of software subscriptions revenue increased \$10.5 million, or 56.4%, to \$29.2 million for the three months ended September 30, 2020 compared to \$18.6 million for the three months ended September 30, 2019. Of this increase, 59.1% is due to an increase in stock-based compensation of \$6.3 million for the three months ended September 30, 2020 over the same period in 2019. After excluding the impact of stock-based compensation there is a remaining increase of \$4.2 million. Of this increase, \$0.6 million is due primarily to increased amortization expense associated with late Q3 2019 release of O Series 9.0. The remaining \$3.6 million variance is associated with 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 30.8% for the three months ended September 30, 2020 compared to 22.6% in September 30, 2019. Adjusting for the increase in stock-based compensation in 2020, cost of software subscriptions as a percentage of total revenue would have been 24.1% for the three months ended September 30, 2020.

Cost of Services Revenue

(Dollars in thousands)	Three months ended September 30		Period-over-Period change	
	2020	2019		
Cost of services revenue	\$ 18,807	\$ 8,786	\$ 10,021	114.1 %

Cost of services revenue increased \$10.0 million, or 114.1%, to \$18.8 million for the three months ended September 30, 2020 compared to \$8.8 million for the three months ended September 30, 2019. Of this increase, 90.1% is due to an increase in stock-based compensation of \$9.2 million for the three months ended September 30, 2020 over the same period in 2019. The balance of the increase of \$0.8 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 19.9% in 2020 compared to 10.7% 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 10.1% for the three months ended September 30, 2020.

Research and Development

(Dollars in thousands)	Three months ended September 30		Period-over-Period change	
	2020	2019		
Research and development	\$ 16,501	\$ 7,271	\$ 9,230	126.9 %

Research and development expenses increased \$9.2 million, or 126.9%, to \$16.5 million for the three months ended September 30, 2020 compared to \$7.3 million for the three months ended September 30, 2019. Of this increase, 67.3% is due to an increase in stock-based compensation of \$6.3 million for the three months ended September 30, 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 \$2.9 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 17.4% for the three months ended September 30, 2020 compared to 8.8% for the three months ended September 30, 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 10.7% for the three months ended September 30, 2020.

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

Selling and Marketing

(Dollars in thousands)	Three months ended September 30		Period-over-Period change	
	2020	2019		
Selling and marketing	\$ 29,423	\$ 15,830	\$ 13,593	85.9 %

Selling and marketing expenses increased \$13.6 million, or 85.9%, to \$29.4 million for the three months ended September 30, 2020 compared to \$15.8 million for the same period in 2019. Of this increase, 92.4% is due to an increase in stock-based compensation of \$12.8 million for the three months ended September 30, 2020 over the same period in 2019. The balance of the increase of \$0.8 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. As a percentage of total revenue, selling and marketing expenses increased to 31.1% for the three months ended September 30, 2020 compared to 19.2% 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 17.5% for the three months ended September 30, 2020.

General and Administrative

(Dollars in thousands)	Three months ended September 30		Period-over-Period change	
	2020	2019		
General and administrative	\$ 48,043	\$ 17,263	\$ 30,780	178.3 %

General and administrative expenses increased \$30.8 million, or 178.3%, to \$48.0 million for the three months ended September 30, 2020 compared to \$17.3 million for the same period in 2019. Of this increase, 94.1% is due to an increase in stock-based compensation of \$29.6 million for the three months ended September 30, 2020 over the same period in 2019. The balance of the increase of \$1.2 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 50.8% for the three months ended September 30, 2020 compared to 20.9% 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 19.5% for the three months ended September 30, 2020.

Depreciation and Amortization

(Dollars in thousands)	Three months ended September 30		Period-over-Period change	
	2020	2019		
Depreciation and amortization	\$ 2,735	\$ 2,311	\$ 424	18.3 %

Depreciation and amortization increased \$0.4 million, or 18.3%, to \$2.7 million for the three months ended September 30, 2020 compared to \$2.3 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 was relative consistent at 2.9% for the three months ended September 30, 2020 compared to 2.8% for the same period in 2019.

Interest Income

(Dollars in thousands)	Three months ended September 30		Period-over-Period change	
	2020	2019		
Interest income	\$ (79)	\$ (251)	\$ 172	56.5 %

Interest income for the three months ended September 30, 2020 decreased \$0.2 million or 56.5% due primarily to a significant decline in money market investment yields as compared to the same period in 2019.

Interest Expense

(Dollars in thousands)	Three months ended September 30		Period-over-Period change	
	2020	2019		
Interest expense	\$ 1,875	\$ 503	\$ 1,372	272.8 %

Interest expense increased \$1.4 million, or 272.8%, to \$1.9 million for the three months ended September 30, 2020 compared to \$0.5 million for the same period in 2019. The increase is primarily due to the writedown of deferred financing fees of \$1.4 million in connection with the July 2020 payoff of the New Term Loan with a portion of the proceeds from the IPO. This is offset by reductions in interest expense of \$0.1 million due to the Company having no outstanding debt during the three months ended September 30, 2020 after this payoff, as compared to \$51.6 million in outstanding debt for the same period in 2019.

Provision for Taxes

(Dollars in thousands)	Three months ended September 30		Period-over-Period change	
	2020	2019		
Income tax (benefit)	\$ (30,773)	\$ 175	\$ (30,948)	(17,684.6)%

Income tax expense decreased \$30.9 million, or 17,684.6%, to a \$(30.8) million income tax benefit for the three months ended September 30, 2020 compared to \$0.2 million of income tax expense for the same period in 2019. The decrease was primarily due to a pretax loss resulting from an increase in stock-based compensation in 2020. As a percentage of revenue, income tax benefit increased to (32.5)% for the three months ended September 30, 2020 compared to expense of 0.2% for the same period in 2019 due to a pretax loss in 2020 resulting from an increase in stock-based compensation.

Nine Months Ended September 30, 2020 Compared to Nine Months Ended September 30, 2019

Revenue

(Dollars in thousands)	Nine months ended September 30		Period-over-Period change	
	2020	2019		
Revenue:				
Software subscriptions	\$ 232,844	\$ 202,692	\$ 30,152	14.9 %
Services	42,277	32,736	9,541	29.1 %
Total revenue	<u>\$ 275,121</u>	<u>\$ 235,428</u>	<u>\$ 39,693</u>	16.9 %

Revenue increased \$39.7 million, or 16.9%, to \$275.1 million for the nine months ended September 30, 2020 compared to \$235.4 million for the nine months ended September 30, 2019. The increase in software subscriptions revenue of \$30.2 million, or 14.9%, was primarily driven by \$27.1 million in revenue growth derived from our existing customers and \$3.1 million of revenue from new customers.

The \$9.5 million increase in services revenue is primarily driven by an increase of \$7.7 million in software subscription-related services associated with the growth in subscription revenues, which includes new customers implementing our solutions and existing customers upgrading to newer versions of our solutions. In addition, our managed services offering experienced a \$1.8 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

(Dollars in thousands)	Nine months ended September 30		Period-over-Period change	
	2020	2019		
Cost of software subscription revenue	\$ 79,846	\$ 56,490	\$ 23,356	41.3 %

Cost of software subscriptions revenue increased \$23.4 million, or 41.3%, to \$79.8 million for the nine months ended September 30, 2020 compared to \$56.5 million for the nine months ended September 30, 2019. Of this increase, 58.3% is due to an increase in stock-based compensation of \$14.0 million for the nine months ended September 30, 2020 over the same period in 2019. After excluding the impact of stock-based compensation there is a remaining increase of \$9.4 million. Of this increase, \$1.8 million is due primarily to increased amortization expense associated with the late Q3 2019 release of O Series 9.0. The remaining \$7.6 million variance is associated with 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 29.0% for the nine months ended September 30, 2020 compared to 24.0% in September 30, 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 nine months ended September 30, 2020.

Cost of Services Revenue

(Dollars in thousands)	Nine months ended September 30		Period-over-Period change	
	2020	2019		
Cost of services revenue	\$ 49,329	\$ 23,616	\$ 25,713	108.9 %

Cost of services revenue increased \$25.7 million, or 108.9%, to \$49.3 million for the nine months ended September 30, 2020 compared to \$23.6 million for the nine months ended September 30, 2019. Of this increase, 78.3% is due to an increase in stock-based compensation of \$20.7 million for the nine months ended September 30, 2020 over the same period in 2019. The balance of the increase of \$5.0 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 17.9% in 2020 compared to 10.0% 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 12.8% for the nine months ended September 30, 2020.

Research and Development

(Dollars in thousands)	Nine months ended		Period-over-Period change	
	September 30			
	2020	2019		
Research and development	\$ 43,197	\$ 22,049	\$ 21,148	95.9 %

Research and development expenses increased \$21.1 million, or 95.9%, to \$43.2 million for the nine months ended September 30, 2020 compared to \$22.0 million for the nine months ended September 30, 2019. Of this increase, 64.3% is due to an increase in stock-based compensation of \$14.0 million for the nine months ended September 30, 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 \$7.1 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 15.7% for the nine months ended September 30, 2020 compared to 9.4% for the nine months ended September 30, 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 10.6% for the nine months ended September 30, 2020.

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

Selling and Marketing

(Dollars in thousands)	Nine months ended		Period-over-Period change	
	September 30			
	2020	2019		
Selling and marketing	\$ 78,300	\$ 49,164	\$ 29,136	59.3 %

Selling and marketing expenses increased \$29.1 million, or 59.3%, to \$78.3 million for the nine months ended September 30, 2020 compared to \$49.2 million for the same period in 2019. Of this increase, 93.9% is due to an increase in stock-based compensation of \$28.1 million for the nine months ended September 30, 2020 over the same period in 2019. The balance of the increase of \$1.0 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 28.5% for the nine months ended September 30, 2020 compared to 20.9% 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 18.2% for the nine months ended September 30, 2020.

General and Administrative

(Dollars in thousands)	Nine months ended		Period-over-Period change	
	September 30			
	2020	2019		
General and administrative	\$ 123,437	\$ 49,358	\$ 74,079	150.1 %

General and administrative expenses increased \$74.1 million, or 150.1%, to \$123.4 million for the nine months ended September 30, 2020 compared to \$49.4 million for the same period in 2019. Of this increase, 84.0% is due to an increase in stock-based compensation of \$64.0 million for the nine months ended September 30, 2020 over the same period in 2019.

The balance of the increase of \$10.1 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 44.9% for the nine months ended September 30, 2020 compared to 21.0% 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 21.6% for the nine months ended September 30, 2020.

Depreciation and Amortization

(Dollars in thousands)	Nine months ended September 30		Period-over-Period change
	2020	2019	
Depreciation and amortization	\$ 8,109	\$ 6,528	\$ 1,581 24.2 %

Depreciation and amortization increased \$1.6 million, or 24.2%, to \$8.1 million for the nine months ended September 30, 2020 compared to \$6.5 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 was relatively consistent at 2.9% for the nine months ended September 30, 2020 compared to 2.8% for the same period in 2019.

Interest Income

(Dollars in thousands)	Nine months ended September 30		Period-over-Period change
	2020	2019	
Interest income	\$ (535)	\$ (775)	\$ 240 56.5 %

Interest income for the nine months ended September 30, 2020 decreased \$0.2 million or 56.5% due primarily to a decline in money market investment yields as compared to the same period in 2019.

Interest Expense

(Dollars in thousands)	Nine months ended September 30		Period-over-Period change
	2020	2019	
Interest expense	\$ 3,959	\$ 1,579	\$ 2,380 150.7 %

Interest expense increased \$2.4 million, or 150.7%, to \$4.0 million for the nine months ended September 30, 2020 compared to \$1.6 million for the same period in 2019. The increase includes the writedown of deferred financing fees of \$1.4 million in connection with the July 2020 payoff of the New Term Loan with a portion of the proceeds from the IPO. The increase also includes interest expense of \$0.4 million related to an overall increase of \$41.0 million in the average balance of debt outstanding during the nine months ended September 30, 2020 due primarily to the New Term Loan of \$175.0 million being outstanding for approximately four months in 2020.

Provision for Taxes

(Dollars in thousands)	Nine months ended September 30		Period-over-Period change
	2020	2019	
Income tax (benefit) expense	\$ (31,508)	\$ 600	\$ (32,108) (5,351.3)%

Income tax expense decreased \$32.1 million, or 5,351.3%, to a \$(31.5) million income tax benefit for the nine months ended September 30, 2020 compared to \$0.6 million of income tax expense for the same period in 2019. The decrease was primarily due to a pre-tax loss resulting from an increase in stock-based compensation in 2020. As a percentage of revenue,

income tax benefit increased to (11.5)% for the nine months ended September 30, 2020 compared to expense of 0.3% for the same period in 2019 due to a pre-tax loss in 2020 resulting from an increase in stock-based compensation.

Liquidity and Capital Resources

As of September 30, 2020, we had cash and cash equivalents of \$270.3 million and retained earnings of \$21.7 million. Our primary sources of capital to date have been from sales of our solutions and proceeds from bank lending facilities. On July 31, 2020, we received \$423.0 million in proceeds, net of underwriting fees and commissions, from the sale of 23,812,216 shares of Class A common stock and used a portion of the proceeds to pay off the \$175.0 million term loan under the New Credit Agreement. As a result, we have no outstanding bank debt after such redemption. The net proceeds remaining after payment of IPO costs will be used for working capital and other corporate purposes as described in the Prospectus.

We believe that our existing cash resources and our bank line of credit will be sufficient to meet our capital requirements and fund our operations for at least the next 12 months. 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)	Nine months ended	
	September 30	
	2020	2019
	(unaudited)	
Net cash provided by operating activities	\$ 20,044	\$ 45,799
Net cash used in investing activities	(36,546)	(25,660)
Net cash used in financing activities	212,435	(25,484)
Effect of foreign exchange rate changes	(412)	(176)
Net increase (decrease) in cash, cash equivalents and restricted cash	\$ 195,521	\$ (5,521)

Operating Activities. Cash provided by operating activities was \$20.0 million for the nine months ended September 30, 2020 compared to \$45.8 million for the same period in 2019, a decrease of \$25.8 million. The decrease in cash from operating activities was driven primarily by a \$22.9 million payment for redemption of converted SARs in connection with the IPO, a reduction in cash provided by changes in operating assets and liabilities of \$9.4 million, partially offset by an increase in non-cash operating activity resulting from increases in depreciation and amortization of \$5.4 million and the write-off of deferred financing fees of \$1.4 million. The \$22.9 million payment for redemption of converted SARs pertain to SARs converted to stock options and immediately redeemed for cash upon the IPO. The reduction in operating assets and liabilities of \$9.4 million was primarily due to a reduction in deferred revenue of \$9.3 million. Deferred revenue decreased due to a \$5.6 million decrease in nonrecurring extended product support fees billed in the first half of 2019 related to older versions of software subscription solutions retired during 2019. The balance of the deferred revenue reduction of \$3.7 million is 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. Such billing frequency modification results in a short-term reduction in deferred revenue, but no impact to revenue. The increase in depreciation and amortization of \$5.4 million was due to increased development costs related to the release of O Series 9.0 and internal automation projects. The write-off of deferred financing fees of \$1.4 million were a result of the redemption of debt during the nine months ended September 30, 2020.

Investing Activities. Cash used in investing activities was \$36.5 million for the nine months ended September 30, 2020 compared to \$25.7 million for the same period in 2019, an increase of \$10.9 million. This increase was primarily related to the acquisition of a controlling interest in Systax, a Brazilian transaction tax software and content subscription

provider, for cash paid of \$12.3 million during the three months ended March 31, 2020. For additional information, see “Note 2 to the Interim Condensed Consolidated Financial Statements (unaudited) — Acquisition.”

Financing Activities. Cash provided by (used in) financing activities was \$212.4 million for the nine months ended September 30, 2020 compared to \$(25.5) million used for the same period in 2019, an increase of \$215.0 million. This change was due primarily to the \$423.0 million in proceeds received from the IPO, offset by the payoff of the \$175.0 million term loan under the New Credit Agreement.

Debt. As of September 30, 2020, we had a \$100 million line of credit with no outstanding borrowings. Interest on outstanding borrowings accrue at a Base Rate plus an applicable margin (3.75% as of September 30, 2020) or London Interbank Offered Rate (“LIBOR”) plus an applicable margin (2.5% as of September 30, 2020). As of September 30, 2020, the interest rate on the term loan was 2.50%. The Company has no outstanding bank debt at September 30, 2020.

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

Other than the redemption of our outstanding debt through use of a portion of the Offering proceeds, there have been no material updates or changes to our contractual obligations and commitments compared to contractual obligations and commitments described in our Quarterly Report on Form 10-Q for the period ended June 30, 2020.

Use and Reconciliation of Non-GAAP Financial Measures

In addition to our results determined in accordance with GAAP, we have calculated non-GAAP cost of revenues, non-GAAP gross profit, non-GAAP gross margin, non-GAAP research and development expense, non-GAAP sales and marketing expense, non-GAAP general and administrative expense, non-GAAP operating income, non-GAAP net income, and free cash flow, which are each non-GAAP financial measures. We have provided tabular reconciliations of each of these non-GAAP financial measures to its most directly comparable GAAP financial measure. Management uses these non-GAAP financial measures to understand and compare operating results across accounting periods, for internal budgeting and forecasting purposes, and to evaluate financial performance and liquidity. Our non-GAAP financial measures are presented as supplemental disclosure as we believe they provide useful information to investors and others in understanding and evaluating our results, prospects, and liquidity period-over-period without the impact of certain items that do not directly correlate to our performance and that may vary significantly from period to period for reasons unrelated to our operating performance, as well as comparing our financial results to those of other companies. Our definitions of these non-GAAP financial measures may differ from similarly titled measures presented by other companies, and therefore comparability may be limited. In addition, other companies may not publish these or similar metrics. Thus, our non-GAAP financial measures should be considered in addition to, not as a substitute for, or in isolation from, the financial information

prepared in accordance with GAAP measures, and should be read in conjunction with the financial statements included elsewhere in this Quarterly Report on Form 10-Q and the Prospectus.

We calculate these non-GAAP financial measures as follows:

- Non-GAAP cost of revenues is determined by adding back to GAAP cost of revenue the stock-based compensation expense and the depreciation and amortization of capitalized software costs included in cost of revenue for the respective periods.
- Non-GAAP gross profit is determined by adding back to GAAP gross profit the stock-based compensation expense and the depreciation and amortization of capitalized software costs included in cost of revenue for the respective periods.
- Non-GAAP gross margin is determined by adding back to GAAP gross margin the impact of stock-based compensation expense and depreciation and amortization of capitalized software costs included in cost of revenues as a percentage of revenue for the respective periods.
- Non-GAAP research and development expense, non-GAAP selling and marketing expense, and non-GAAP general and administrative expense are determined by adding back to GAAP research and development expense, GAAP selling and marketing expense, and GAAP general and administrative expense, the stock-based compensation expense and severance expense included in the applicable expense categories for the respective periods.
- Non-GAAP operating income is determined by adding back to GAAP operating income (loss) the stock-based compensation expense, depreciation and amortization of capitalized software costs and acquired intangibles, and severance costs included for the respective periods.
- Non-GAAP net income is determined by adding back to GAAP net (loss) income amortization of capitalized software costs and acquired intangibles, stock-based compensation expense, the impact of converting from an S- to a C-corporation, and severance costs included for the respective periods.
- Adjusted EBITDA is determined by adding back to GAAP net (loss) income the net interest expense, taxes, depreciation and amortization of property and equipment, capitalized software costs and acquired intangibles, stock-based compensation expense and severance cost included for the respective periods.
- Adjusted EBITDA margin is determined by dividing Adjusted EBITDA by total revenues for the respective periods.
- Free cash flow is determined by adjusting net cash provided by (used in) operating activities by adding back cash used for the redemption of SARs redeemed in connection with the IPO and reducing it for purchases of property and equipment and capitalized software additions for the respective periods.
- Free cash flow margin is determined by dividing free cash flow by total revenues for the respective periods.

We encourage investors and others to review our financial information in its entirety, not to rely on any single financial measure and to view these non-GAAP financial measures in conjunction with the related GAAP financial measures.

The following schedules reflect our non-GAAP financial measures and reconcile our non-GAAP financial measures to the related GAAP financial measures. Refer to *“Item 2. Management’s Discussion and Analysis of Financial Condition*

and Results of Operations - Key Business Metrics” for further discussion and reconciliation of Adjusted EBITDA, Adjusted EBITDA margin, free cash flow and free cash flow margin to the related GAAP financial measures.

(in thousands)	For the three months ended		For the nine months ended	
	September 30		September 30	
	2020	2019	2020	2019
Non-GAAP cost of revenues, software subscriptions	\$ 17,512	\$ 14,829	\$ 50,495	\$ 44,473
Non-GAAP cost of revenues, services	\$ 9,577	\$ 8,589	\$ 28,610	\$ 23,025
Non-GAAP gross profit	\$ 67,516	\$ 59,021	\$ 196,016	\$ 167,930
Non-GAAP gross margin	71.4 %	71.6 %	71.2 %	71.3 %
Non-GAAP research and development expense	\$ 10,161	\$ 7,140	\$ 29,197	\$ 21,656
Non-GAAP selling and marketing expense	\$ 16,474	\$ 15,569	\$ 50,032	\$ 48,380
Non-GAAP general and administrative expense	\$ 18,410	\$ 16,672	\$ 57,294	\$ 46,641
Non-GAAP operating income	\$ 19,796	\$ 17,325	\$ 51,230	\$ 44,253
Non-GAAP net income	\$ 21,639	\$ 16,898	\$ 52,180	\$ 42,849

(in thousands)	For the three months ended		For the nine months ended	
	September 30		September 30	
	2020	2019	2020	2019
Non-GAAP Cost of Revenue:				
Cost of revenues, software subscriptions	\$ 29,161	\$ 18,647	\$ 79,846	\$ 56,490
Stock-based compensation	(6,342)	(131)	(14,002)	(393)
Depreciation and amortization - cost of subscription revenues	(5,307)	(3,687)	(15,349)	(11,624)
Non-GAAP cost of revenues, software subscriptions	<u>\$ 17,512</u>	<u>\$ 14,829</u>	<u>\$ 50,495</u>	<u>\$ 44,473</u>
Cost of revenues, services	\$ 18,807	\$ 8,786	\$ 49,329	\$ 23,616
Stock-based compensation	(9,230)	(197)	(20,719)	(591)
Non-GAAP cost of revenues, services	<u>\$ 9,577</u>	<u>\$ 8,589</u>	<u>\$ 28,610</u>	<u>\$ 23,025</u>
Non-GAAP Gross Profit:				
Gross Profit	\$ 46,637	\$ 55,006	\$ 145,946	\$ 155,322
Stock-based compensation	15,572	328	34,721	984
Depreciation and amortization of capitalized software	5,307	3,687	15,349	11,624
Non-GAAP gross profit	<u>\$ 67,516</u>	<u>\$ 59,021</u>	<u>\$ 196,016</u>	<u>\$ 167,930</u>
Non-GAAP Gross Margin:				
Gross margin	49.3 %	66.7 %	53.0 %	66.0 %
Stock-based compensation as a percentage of revenue	16.5 %	0.4 %	12.6 %	0.4 %
Depreciation and amortization - cost of subscription revenues as a percentage of revenue	5.6 %	4.5 %	5.6 %	4.9 %
Non-GAAP gross margin	<u>71.4 %</u>	<u>71.6 %</u>	<u>71.2 %</u>	<u>71.3 %</u>
Non-GAAP Research and Development Expense:				
Research and development	\$ 16,501	\$ 7,271	\$ 43,197	\$ 22,049
Stock-based compensation	(6,340)	(131)	(14,000)	(393)
Non-GAAP research and development expense	<u>\$ 10,161</u>	<u>\$ 7,140</u>	<u>\$ 29,197</u>	<u>\$ 21,656</u>
Non-GAAP Selling and Marketing Expense:				
Selling and marketing	\$ 29,423	\$ 15,830	\$ 78,300	\$ 49,164
Amortization of acquired intangibles - selling and marketing expense	(128)	—	(128)	—
Stock-based compensation	(12,821)	(261)	(28,140)	(784)
Non-GAAP selling and marketing	<u>\$ 16,474</u>	<u>\$ 15,569</u>	<u>\$ 50,032</u>	<u>\$ 48,380</u>
Non-GAAP General and Administrative Expense:				
General and administrative	\$ 48,043	\$ 17,263	\$ 123,437	\$ 49,358
Stock-based compensation	(29,561)	(590)	(64,029)	(1,769)
Severance charges	(72)	(1)	(2,114)	(948)
Non-GAAP general and administrative	<u>\$ 18,410</u>	<u>\$ 16,672</u>	<u>\$ 57,294</u>	<u>\$ 46,641</u>
Non-GAAP Operating Income:				
Income (loss) from operations	\$ (50,005)	\$ 12,327	\$ (107,251)	\$ 27,751
Stock-based compensation	64,294	1,310	140,890	3,930
Severance expense	72	1	2,114	948
Amortization of acquired intangibles - selling and marketing expense	128	—	128	—
Depreciation and amortization - cost of subscription revenues	5,307	3,687	15,349	11,624
Non-GAAP operating income	<u>\$ 19,796</u>	<u>\$ 17,325</u>	<u>\$ 51,230</u>	<u>\$ 44,253</u>
Reconciliation of Non-GAAP Net Income:				
Net (loss) income	\$ (21,028)	\$ 11,900	\$ (79,167)	\$ 26,347
Stock-based compensation	64,294	1,310	140,890	3,930
Severance charges	72	1	2,114	948
Amortization of acquired intangibles - selling and marketing expense	128	—	128	—
Depreciation and amortization - cost of subscription revenues	5,307	3,687	15,349	11,624
Impact of S- to C-corporation conversion	(27,134)	—	(27,134)	—
Non-GAAP net income	<u>\$ 21,639</u>	<u>\$ 16,898</u>	<u>\$ 52,180</u>	<u>\$ 42,849</u>

Critical Accounting Policies and Estimates

The critical accounting policies that reflect our more significant judgments and estimates used in the preparation of our condensed consolidated financial statements include software development costs, goodwill, accounting for stock-based compensation, revenue recognition, and income taxes, which are described in “Note 1—Summary of Significant Accounting Policies” in Part I, Item 1 of this Quarterly Report on Form 10-Q.

There have been no material updates or changes to our critical accounting policies and estimates compared to the critical accounting policies and estimates described in our Quarterly Report on Form 10-Q for the period ended June 30, 2020.

Recent Accounting Pronouncements

For further information on recent accounting pronouncements, refer to Note 1 in the consolidated financial statements contained within this Quarterly Report on Form 10-Q.

Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

We had cash and cash equivalents of \$270.3 million as of September 30, 2020. In addition, the Company received proceeds, net of underwriter fees, from its Offering of \$423.0 million on July 31, 2020, which it used to pay off outstanding debt of \$175.0 million resulting in the Company having no outstanding bank debt after such redemption. We maintain our cash and cash equivalents in deposit accounts and money market funds with various 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 any outstanding borrowings. 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 three and nine months ended September 30, 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 (loss) income 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 operations 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. In May 2020, we entered into a series of foreign currency forward contracts to hedge approximately 40% of our exposure to adverse fluctuations in the Brazilian Real associated with these future purchase commitments.

Inflation

Historically 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.

Item 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures. Solely as a result of the material weaknesses described below, our principal executive officer and principal financial officer concluded that, as of September 30, 2020, our disclosure controls and procedures were not effective.

We have performed additional analyses, reconciliations, and other post-closing procedures and have concluded that, notwithstanding the material weaknesses in our internal control over financial reporting, the unaudited interim condensed consolidated financial statements for the periods covered by and included in this Quarterly Report on Form 10-Q fairly state, in all material respects, our financial position, results of operations and cash flows for the periods presented in conformity with GAAP.

Previously Identified Material Weaknesses

As previously disclosed, 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. 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
- began to implement 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.

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.

The Company will require additional time to demonstrate the effectiveness of the remediation efforts. The material weaknesses will not be considered remediated until the applicable controls operate for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively.

Changes in Internal Control over Financial Reporting

Other than the changes described above regarding enhancements associated with ongoing remediation efforts, there were no changes in our internal control over financial reporting during the period covered by this Quarterly Report on Form 10-Q that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II---OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we may become involved in various lawsuits and legal proceedings, which arise, in the ordinary course of business. However, litigation is subject to inherent uncertainties, and an adverse result in these or other matters may arise from time to time that may harm our business. We are currently not aware of any such legal proceedings or claims that we believe will have a material adverse effect on our business, financial condition, or operating results.

ITEM 1A. RISK FACTORS

There are no material changes to the risk factors discussed in the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020 under the heading "Risk Factors." You should carefully consider these risks, together with management's 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 Quarterly Report on Form 10-Q. If any of the events contemplated should occur, our business, results of operations, financial condition and cash flows could suffer significantly.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

<u>Exhibit Number</u>	<u>Exhibit Description</u>	<u>Form</u>	<u>File No.</u>	<u>Exhibit</u>	<u>Filing Date</u>	<u>Filed Herewith</u>	<u>Furnished Herewith</u>
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002						X
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002						X
32.1	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002						X
32.2	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002						X
101.INS	XBRL Instance Document						X
101.SCH	XBRL Taxonomy Extension Schema Document						X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document						X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document						X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document						X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document						X

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Vertex, Inc.

Date: November 12, 2020

By: /s/ David DeStefano
David DeStefano
President, Chief Executive Officer and Chairperson (principal executive officer)

Date: November 12, 2020

By: /s/ John Schwab
John Schwab
Chief Financial Officer (principal financial officer)

CERTIFICATION

I, David DeStefano, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Vertex, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 12, 2020

By: /s/ David DeStefano
David DeStefano
Chief Executive Officer
(principal executive officer)

CERTIFICATION

I, John Schwab, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Vertex, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 12, 2020

By: /s/ John Schwab
John Schwab
Chief Financial Officer
(principal financial officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of Vertex, Inc. (the "Company") for the period ended September 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 12, 2020

By: /s/ David DeStefano
David DeStefano
Chief Executive Officer
(principal executive officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of Vertex, Inc. (the "Company") for the period ended September 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 12, 2020

By: /s/ John Schwab
John Schwab
Chief Financial Officer
(principal financial officer)
