

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 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, 2019  
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: 001-36383

**Five9, Inc.**

(Exact Name of Registrant as Specified in Its Charter)

**Delaware**  
(State or Other Jurisdiction of  
Incorporation or Organization)

**94-3394123**  
(I.R.S. Employer  
Identification No.)

**Bishop Ranch 8**  
**4000 Executive Parkway, Suite 400**  
**San Ramon, CA 94583**  
(Address of Principal Executive Offices) (Zip Code)  
**(925) 201-2000**  
(Registrant's Telephone Number, Including Area Code)

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

<b>Title of Each Class</b>	<b>Trading Symbol(s)</b>	<b>Name of Each Exchange on Which Registered</b>
Common stock, par value \$0.001 per share	FIVN	The NASDAQ Global Market

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post 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 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 checked="" type="checkbox"/>	Accelerated Filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting Company)	Smaller Reporting Company	<input type="checkbox"/>
		Emerging Growth Company	<input 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. Yes:  No:

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 October 31, 2019, there were 61,078,573 shares of the Registrant's common stock, par value \$0.001 per share, outstanding.

**FIVE9, INC.**

**FORM 10-Q**

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## SPECIAL 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 and Section 21E of the Securities Exchange Act of 1934, which involve substantial risks and uncertainties. These statements reflect the current views of our senior management with respect to future events and our financial performance. These forward-looking statements include statements with respect to our business, expenses, strategies, losses, growth plans, product and client initiatives, market growth projections, and our industry. Statements that include the words “expect,” “intend,” “plan,” “believe,” “project,” “forecast,” “estimate,” “may,” “should,” “anticipate” and similar statements of a future or forward-looking nature identify forward-looking statements for purposes of the federal securities laws or otherwise.

Forward-looking statements address matters that involve risks and uncertainties. Accordingly, there are or will be important factors that could cause our actual results to differ materially from those indicated in these statements. These factors include the information set forth in Part 1, Item 1A, of our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, which we encourage you to carefully read, and include the following:

- our quarterly and annual results may fluctuate significantly, including as a result of the timing and success of new product and feature introductions by us, may not fully reflect the underlying performance of our business and may result in decreases in the price of our common stock;
- if we are unable to attract new clients or sell additional services and functionality to our existing clients, our revenue and revenue growth will be harmed;
- our recent rapid growth may not be indicative of our future growth, and even if we continue to grow rapidly, we may fail to manage our growth effectively;
- failure to adequately expand our sales force could impede our growth;
- if we fail to manage our technical operations infrastructure, our existing clients may experience service outages, our new clients may experience delays in the deployment of our solution and we could be subject to, among other things, claims for credits or damages;
- security breaches and improper access to or disclosure of our data or our clients’ data, or other cyber attacks on our systems, could result in litigation and regulatory risk, harm our reputation and adversely affect our business;
- the markets in which we participate involve numerous competitors and are highly competitive, and if we do not compete effectively, our operating results could be harmed;
- if our existing clients terminate their subscriptions or reduce their subscriptions and related usage, our revenues and gross margins will be harmed and we will be required to spend more money to grow our client base;
- our growth depends in part on the success of our strategic relationships with third parties and our failure to successfully grow and manage these relationships could harm our business;
- we have established, and are continuing to increase, our network of master agents and resellers to sell our solution; our failure to effectively develop, manage, and maintain this network could materially harm our revenues;
- we sell our solution to larger organizations that require longer sales and implementation cycles and often demand more configuration and integration services or customized features and functions that we may not offer, any of which could delay or prevent these sales and harm our growth rates, business and operating results;
- because a significant percentage of our revenue is derived from existing clients, downturns or upturns in new sales will not be immediately reflected in our operating results and may be difficult to discern;
- we rely on third-party telecommunications and internet service providers to provide our clients and their customers with telecommunication services and connectivity to our cloud contact center software and any failure by these service providers to provide reliable services could cause us to lose clients and subject us to claims for credits or damages, among other things;
- we have a history of losses and we may be unable to achieve or sustain profitability;
- the contact center software solutions market is subject to rapid technological change, and we must develop and sell incremental and new products in order to maintain and grow our business;

- we may not be able to secure additional financing on favorable terms, or at all, to meet our future capital needs;
- failure to comply with laws and regulations could harm our business and our reputation; and
- we may not have sufficient cash to service our convertible senior notes and repay such notes, if required.

The foregoing factors should not be construed as exhaustive and should be read together with the other cautionary statements included in this report. If one or more of these or other risks or uncertainties materialize, or if our underlying assumptions prove to be incorrect, our actual results may differ materially from what we anticipate. You should not place undue reliance on our forward-looking statements. Any forward-looking statements you read in this report reflect our views only as of the date of this report with respect to future events and are subject to these and other risks, uncertainties and assumptions relating to our operations, results of operations, growth strategy and liquidity. 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.

**PART I. FINANCIAL INFORMATION**

**ITEM 1. Financial Statements**

**FIVE9, INC.**

**CONDENSED CONSOLIDATED BALANCE SHEETS**

(In thousands, except per share data)

	<u>September 30, 2019</u>	<u>December 31, 2018</u>
	(Unaudited)	
<b>ASSETS</b>		
<b>Current assets:</b>		
Cash and cash equivalents	\$ 120,573	\$ 81,912
Marketable investments	200,385	209,907
Accounts receivable, net	31,407	24,797
Prepaid expenses and other current assets	11,140	8,014
Deferred contract acquisition costs	11,947	9,372
<b>Total current assets</b>	<b>375,452</b>	<b>334,002</b>
Property and equipment, net	28,399	25,885
Operating lease right-of-use assets	8,933	—
Intangible assets, net	367	631
Goodwill	11,798	11,798
Other assets	1,100	836
Deferred contract acquisition costs — less current portion	27,975	21,514
<b>Total assets</b>	<b>\$ 454,024</b>	<b>\$ 394,666</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>Current liabilities:</b>		
Accounts payable	\$ 6,757	\$ 7,010
Accrued and other current liabilities	20,141	13,771
Operating lease liabilities	5,010	—
Accrued federal fees	1,981	1,434
Sales tax liabilities	1,435	1,741
Finance lease liabilities	4,457	6,647
Deferred revenue	21,858	17,391
<b>Total current liabilities</b>	<b>61,639</b>	<b>47,994</b>
Convertible senior notes	206,301	196,763
Sales tax liabilities — less current portion	833	841
Operating lease liabilities — less current portion	4,530	—
Finance lease liabilities — less current portion	1,516	4,509
Other long-term liabilities	1,234	1,811
<b>Total liabilities</b>	<b>276,053</b>	<b>251,918</b>
Commitments and contingencies (Note 10)		
<b>Stockholders' equity:</b>		
Common stock	61	59
Additional paid-in capital	334,568	294,279
Accumulated other comprehensive income (loss)	227	(93)
Accumulated deficit	(156,885)	(151,497)
<b>Total stockholders' equity</b>	<b>177,971</b>	<b>142,748</b>
<b>Total liabilities and stockholders' equity</b>	<b>\$ 454,024</b>	<b>\$ 394,666</b>

See accompanying notes to the unaudited condensed consolidated financial statements.

## FIVE9, INC.

**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS  
AND COMPREHENSIVE INCOME (LOSS)**

(Unaudited, in thousands, except per share data)

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Revenue	\$ 83,769	\$ 65,304	\$ 235,743	\$ 185,329
Cost of revenue	34,472	26,179	96,571	75,695
Gross profit	49,297	39,125	139,172	109,634
Operating expenses:				
Research and development	11,665	9,582	33,022	25,721
Sales and marketing	25,014	17,818	69,965	53,208
General and administrative	12,146	10,746	35,950	29,682
Total operating expenses	48,825	38,146	138,937	108,611
Income from operations	472	979	235	1,023
Other income (expense), net:				
Interest expense	(3,486)	(3,595)	(10,288)	(6,783)
Interest income and other	1,460	1,352	4,695	1,956
Total other income (expense), net	(2,026)	(2,243)	(5,593)	(4,827)
Loss before income taxes	(1,554)	(1,264)	(5,358)	(3,804)
Provision for income taxes	50	41	30	150
Net loss	\$ (1,604)	\$ (1,305)	\$ (5,388)	\$ (3,954)
Net loss per share:				
Basic and diluted	\$ (0.03)	\$ (0.02)	\$ (0.09)	\$ (0.07)
Shares used in computing net loss per share:				
Basic and diluted	60,781	58,454	60,074	57,790
<b>Comprehensive Loss:</b>				
Net loss	\$ (1,604)	\$ (1,305)	\$ (5,388)	\$ (3,954)
Other comprehensive income (loss)	81	(189)	320	(147)
Comprehensive loss	\$ (1,523)	\$ (1,494)	\$ (5,068)	\$ (4,101)

See accompanying notes to the unaudited condensed consolidated financial statements.

**FIVE9, INC.**
**CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY**

(In thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
<b>Balance as of June 30, 2018</b>	58,276	\$ 58	\$ 273,331	\$ 42	\$ (153,925)	\$ 119,506
Issuance of common stock upon exercise of stock options and warrants	210	—	1,262	—	—	1,262
Issuance of common stock upon vesting of restricted stock units	263	1	—	—	—	1
Stock-based compensation	—	—	8,869	—	—	8,869
Shares held for tax withholdings	—	—	(260)	—	—	(260)
Other comprehensive loss	—	—	—	(189)	—	(189)
Net loss	—	—	—	—	(1,305)	(1,305)
<b>Balance as of September 30, 2018</b>	<u>58,749</u>	<u>\$ 59</u>	<u>\$ 283,202</u>	<u>\$ (147)</u>	<u>\$ (155,230)</u>	<u>\$ 127,884</u>
<b>Balance as of June 30, 2019</b>	60,619	\$ 61	\$ 321,644	\$ 146	\$ (155,281)	\$ 166,570
Issuance of common stock upon exercise of stock options	165	—	1,849	—	—	1,849
Issuance of common stock upon vesting of restricted stock units	272	—	—	—	—	—
Stock-based compensation	—	—	11,075	—	—	11,075
Other comprehensive income	—	—	—	81	—	81
Net loss	—	—	—	—	(1,604)	(1,604)
<b>Balance as of September 30, 2019</b>	<u>61,056</u>	<u>\$ 61</u>	<u>\$ 334,568</u>	<u>\$ 227</u>	<u>\$ (156,885)</u>	<u>\$ 177,971</u>

See accompanying notes to the unaudited condensed consolidated financial statements.

**FIVE9, INC.**
**CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY**

(In thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
<b>Balance as of December 31, 2017</b>	56,632	\$ 57	\$ 222,202	\$ —	\$ (175,421)	\$ 46,838
Net reduction to opening accumulated deficit due to adoption of ASC 606	—	—	—	—	24,145	24,145
Equity component of issuance of convertible senior notes	—	—	30,346	—	—	30,346
Issuance of common stock upon exercise of stock options and warrants	1,184	1	7,039	—	—	7,040
Issuance of common stock upon vesting of restricted stock units	797	1	—	—	—	1
Issuance of common stock under ESPP	136	—	2,884	—	—	2,884
Stock-based compensation	—	—	20,991	—	—	20,991
Shares held for tax withholdings	—	—	(260)	—	—	(260)
Other comprehensive loss	—	—	—	(147)	—	(147)
Net loss	—	—	—	—	(3,954)	(3,954)
<b>Balance as of September 30, 2018</b>	<u>58,749</u>	<u>\$ 59</u>	<u>\$ 283,202</u>	<u>\$ (147)</u>	<u>\$ (155,230)</u>	<u>\$ 127,884</u>
<b>Balance as of December 31, 2018</b>	59,210	\$ 59	\$ 294,279	\$ (93)	\$ (151,497)	\$ 142,748
Issuance of common stock upon exercise of stock options	825	2	6,096	—	—	6,098
Issuance of common stock upon vesting of restricted stock units	912	—	—	—	—	—
Issuance of common stock under ESPP	109	—	3,996	—	—	3,996
Stock-based compensation	—	—	30,197	—	—	30,197
Other comprehensive income	—	—	—	320	—	320
Net loss	—	—	—	—	(5,388)	(5,388)
<b>Balance as of September 30, 2019</b>	<u>61,056</u>	<u>\$ 61</u>	<u>\$ 334,568</u>	<u>\$ 227</u>	<u>\$ (156,885)</u>	<u>\$ 177,971</u>

See accompanying notes to the unaudited condensed consolidated financial statements.

**FIVE9, INC.**  
**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(Unaudited, in thousands)

	Nine Months Ended	
	September 30, 2019	September 30, 2018
<b>Cash flows from operating activities:</b>		
Net loss	\$ (5,388)	\$ (3,954)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization	10,050	7,436
Amortization of operating lease right-of-use assets	3,420	—
Amortization of premium on marketable investments	(1,036)	(317)
Provision for doubtful accounts	78	81
Stock-based compensation	30,197	20,991
Gain on sale of convertible note held for investment	(217)	(312)
Amortization of discount and issuance costs on convertible senior notes	9,484	4,782
Others	2	74
Changes in operating assets and liabilities:		
Accounts receivable	(6,677)	(4,931)
Prepaid expenses and other current assets	(3,172)	(2,755)
Deferred contract acquisition costs	(9,035)	(5,094)
Other assets	(264)	68
Accounts payable	100	307
Accrued and other current liabilities	3,522	2,575
Accrued federal fees and sales tax liability	233	366
Deferred revenue	4,391	3,910
Other liabilities	(33)	(75)
Net cash provided by operating activities	35,655	23,152
<b>Cash flows from investing activities:</b>		
Purchases of marketable investments	(274,401)	(203,953)
Proceeds from maturities of marketable investments	285,281	4,047
Purchases of property and equipment	(12,776)	(4,503)
Proceeds from sale of convertible note held for investment	217	1,923
Net cash used in investing activities	(1,679)	(202,486)
<b>Cash flows from financing activities:</b>		
Proceeds from issuance of convertible senior notes, net of issuance costs paid of \$8,036	—	250,714
Payments for capped call transactions	—	(31,412)
Proceeds from exercise of common stock options	6,097	7,111
Proceeds from sale of common stock under ESPP	3,996	2,884
Repayments on revolving line of credit	—	(32,594)
Payments of notes payable	—	(318)
Payments of finance leases	(5,408)	(6,379)
Net cash provided by financing activities	4,685	190,006
Net increase in cash and cash equivalents	38,661	10,672
<b>Cash and cash equivalents:</b>		
Beginning of period	81,912	68,947
End of period	\$ 120,573	\$ 79,619
<b>Supplemental disclosures of cash flow data:</b>		
Cash paid for interest	\$ 746	\$ 1,850
Cash paid for income taxes	\$ 204	\$ 151
<b>Non-cash investing and financing activities:</b>		
Equipment obtained under capital lease	\$ —	\$ 4,981
Equipment purchased and unpaid at period-end	\$ 862	\$ 779
Capitalization of leasehold improvement through non-cash lease incentive	\$ 42	\$ —

See accompanying notes to the unaudited condensed consolidated financial statements.

**FIVE9, INC.****Notes to Condensed Consolidated Financial Statements (Unaudited)****1. Description of Business and Summary of Significant Accounting Policies**

Five9, Inc. and its wholly-owned subsidiaries (the “Company”) is a provider of cloud software for contact centers. The Company was incorporated in Delaware in 2001 and is headquartered in San Ramon, California. The Company has offices in Europe and Asia, which primarily provide research, development, sales, marketing, and client support services.

**Basis of Presentation**

The accompanying condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States (“GAAP”) and applicable rules and regulations of the Securities and Exchange Commission (“SEC”) regarding interim financial reporting. Certain information and note disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to such rules and regulations. Therefore, these condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2018. In the opinion of management, the condensed consolidated financial statements reflect all adjustments, which are normal and recurring in nature, necessary for fair financial statement presentation. All intercompany transactions and balances have been eliminated in consolidation.

Certain prior period amounts included in the condensed consolidated financial statements have been reclassified to conform to the current period presentation.

**Use of Estimates**

The preparation of condensed consolidated financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. The significant estimates made by management affect revenue and related reserves. Management periodically evaluates such estimates and they are adjusted prospectively based upon such periodic evaluation. Actual results could differ from those estimates.

**Significant Accounting Policies**

The Company’s significant accounting policies are disclosed in its Annual Report on Form 10-K for the year ended December 31, 2018. Other than the accounting policies discussed in Note 12 related to the adoption of Accounting Standards Codification (“ASC”) 842, *Leases*, there has been no material change to the Company’s significant accounting policies during the nine months ended September 30, 2019. See Note 12 for the updated accounting policies.

**Recently Adopted Accounting Pronouncements**

In February 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standard Update (“ASU”) No. 2016-02, *Leases (Topic 842)* and issued subsequent amendments to the initial guidance in 2017, 2018 and 2019 (collectively “ASC 842”). Under the new guidance, a lessee is required to recognize assets and liabilities for both finance, previously known as capital, and operating leases with lease terms of more than 12 months. The ASU also requires disclosures to help investors and other financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. Lessor accounting remained largely unchanged from previous GAAP. In transition, the Company was required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach that included a number of optional practical expedients that the Company elected to apply. The Company adopted ASC 842 using the modified retrospective method on January 1, 2019. See Note 12 for disclosure on the impact of adopting this standard.

In August 2018, the FASB issued ASU 2018-15, *Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* (ASU 2018-15), which clarifies the accounting for implementation costs in cloud computing arrangements. The Company early adopted ASU 2018-15 prospectively effective January 1, 2019, to align the requirements for capitalizing implementation costs in a hosting arrangement that is a service contract with

the requirements for capitalization costs incurred to develop or obtain internal-use software and hosting arrangements that include an internal-use software license. The adoption of ASU 2018-15 did not have a material impact on the Company's consolidated financial position, operating results or cash flows.

### Recent Accounting Pronouncements Not Yet Effective

The Company has reviewed or is in the process of evaluating all other issued, but not yet effective, accounting pronouncements and does not believe the future adoption of any such accounting pronouncements will cause a material impact on its consolidated financial position, operating results or cash flows.

## 2. Revenue

### Contract Balances

The following table provides information about accounts receivable, net, deferred contract acquisition costs, contract assets and contract liabilities from contracts with customers (in thousands):

	September 30, 2019	December 31, 2018
Accounts receivable, net	\$ 31,407	\$ 24,797
Deferred contract acquisition costs:		
Current	\$ 11,947	\$ 9,372
Non-current	27,975	21,514
Total deferred contract acquisition costs	\$ 39,922	\$ 30,886
Contract assets and contract liabilities:		
Contract assets (included in prepaid expenses and other current assets)	\$ 745	\$ 330
Contract liabilities (deferred revenue)	21,858	17,391
Net contract assets (liabilities)	\$ (21,113)	\$ (17,061)

The Company receives payments from customers based upon billing cycles. Invoice payment terms are usually 30 days or less. Accounts receivable are recorded when the right to consideration becomes unconditional.

Deferred contract acquisition costs are recorded when incurred and are amortized over a customer benefit period of five years.

The Company's contract assets consist of unbilled amounts typically resulting from professional services revenue recognition when it exceeds the total amounts billed to the customer. The Company's contract liabilities consist of advance payments and billings in excess of revenue recognized.

In the three and nine months ended September 30, 2019, the Company recognized revenue of \$1.2 million and \$15.3 million, respectively, related to its contract liabilities at December 31, 2018.

### Remaining Performance Obligations

As of September 30, 2019, the aggregate amount of the total transaction price allocated in contracts with original duration of greater than one year to the remaining performance obligations was \$162.1 million. The Company expects to recognize revenue on approximately four-fifths of the remaining performance obligation over the next 24 months, with the balance recognized thereafter. The Company has elected the optional exemption, which allows for the exclusion of the amounts for remaining performance obligations that are part of contracts with an original expected duration of one year or less. Such remaining performance obligations represent unsatisfied or partially unsatisfied performance obligations pursuant to ASC 606.

### 3. Investments and Fair Value Measurements

#### Marketable Investments

The Company's marketable investments have been classified and accounted for as available-for-sale. The Company's marketable investments as of September 30, 2019 and December 31, 2018 were as follows (in thousands):

	September 30, 2019			
	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Certificates of deposit	\$ 407	\$ 1	\$ —	\$ 408
U.S. treasury	36,209	17	—	36,226
U.S. agency securities	134,246	100	(4)	134,342
Commercial paper	13,023	—	—	13,023
Municipal bonds	3,013	4	—	3,017
Corporate bonds	13,341	28	—	13,369
<b>Total</b>	<b>\$ 200,239</b>	<b>\$ 150</b>	<b>\$ (4)</b>	<b>\$ 200,385</b>

	December 31, 2018			
	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Certificates of deposit	\$ 4,259	\$ —	\$ —	\$ 4,259
U.S. treasury	637	—	—	637
U.S. agency securities and government sponsored securities	154,314	1	(111)	154,204
Commercial paper	3,475	—	—	3,475
Municipal bonds	6,090	—	(4)	6,086
Corporate bonds	41,307	—	(61)	41,246
<b>Total</b>	<b>\$ 210,082</b>	<b>\$ 1</b>	<b>\$ (176)</b>	<b>\$ 209,907</b>

The following table presents the gross unrealized losses and the fair value for those marketable investments that were in an unrealized loss position for less than 12 months as of September 30, 2019 and December 31, 2018 (in thousands):

	September 30, 2019		December 31, 2018	
	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value
U.S. treasury	\$ —	\$ 9,987	\$ —	\$ 637
U.S. agency securities and government sponsored securities	(4)	19,946	(111)	153,212
Municipal bonds	—	—	(4)	6,086
Corporate bonds	—	—	(61)	41,246
<b>Total</b>	<b>\$ (4)</b>	<b>\$ 29,933</b>	<b>\$ (176)</b>	<b>\$ 201,181</b>

The contractual maturities of the Company's marketable investments as of September 30, 2019 and December 31, 2018 were less than one year.

## Fair Value Measurements

The Company carries cash equivalents and marketable investments at fair value. Fair value is based on the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is estimated by applying the following hierarchy, which prioritizes the inputs used to measure fair value into three levels and bases the categorization within the hierarchy upon the lowest level of input that is available and significant to the fair value measurement:

*Level 1* — Observable inputs, which include unadjusted quoted prices in active markets for identical assets or liabilities.

*Level 2* — Observable inputs other than Level 1 inputs, such as quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

*Level 3* — Unobservable inputs that are supported by little or no market activity and that are based on management's assumptions, including fair value measurements determined by using pricing models, discounted cash flow methodologies or similar techniques.

The Company determined the fair value of its Level 1 financial instruments, which are traded in active markets, using quoted market prices for identical instruments.

Marketable investments classified within Level 2 of the fair value hierarchy are valued based on other observable inputs, including broker or dealer quotations or alternative pricing sources. When quoted prices in active markets for identical assets or liabilities are not available, the Company relies on non-binding quotes from its investment managers, which are based on proprietary valuation models of independent pricing services. These models generally use inputs such as observable market data, quoted market prices for similar instruments, historical pricing trends of a security as relative to its peers. To validate the fair value determination provided by its investment managers, the Company reviews the pricing movement in the context of overall market trends and trading information from its investment managers. The Company performs routine procedures such as comparing prices obtained from independent source to ensure that appropriate fair values are recorded.

The following tables set forth the Company's assets measured at fair value by level within the fair value hierarchy (in thousands):

	September 30, 2019			
	Level 1	Level 2	Level 3	Total
<b>Assets</b>				
<b>Cash equivalents</b>				
Money market funds	\$ 34,463	\$ —	\$ —	\$ 34,463
U.S. treasury	9,965	—	—	9,965
Commercial paper	—	1,797	—	1,797
Total cash equivalents	<u>\$ 44,428</u>	<u>\$ 1,797</u>	<u>\$ —</u>	<u>\$ 46,225</u>
<b>Marketable investments</b>				
Certificates of deposit	\$ —	\$ 408	\$ —	\$ 408
U.S. treasury	36,226	—	—	36,226
U.S. agency securities	—	134,342	—	134,342
Commercial paper	—	13,023	—	13,023
Municipal bonds	—	3,017	—	3,017
Corporate bonds	—	13,369	—	13,369
Total marketable investments	<u>\$ 36,226</u>	<u>\$ 164,159</u>	<u>\$ —</u>	<u>\$ 200,385</u>

	December 31, 2018			
	Level 1	Level 2	Level 3	Total
<b>Assets</b>				
Cash equivalents				
Money market funds	\$ 10,833	\$ —	\$ —	\$ 10,833
U.S. treasury	638	—	—	638
U.S. agency securities	—	50	—	50
Commercial paper	—	498	—	498
<b>Total cash equivalents</b>	<b>\$ 11,471</b>	<b>\$ 548</b>	<b>\$ —</b>	<b>\$ 12,019</b>
Marketable investments				
Certificates of deposit	\$ —	\$ 4,259	\$ —	\$ 4,259
U.S. treasury	637	—	—	637
U.S. agency securities and government sponsored securities	—	154,204	—	154,204
Commercial paper	—	3,475	—	3,475
Municipal bonds	—	6,086	—	6,086
Corporate bonds	—	41,246	—	41,246
<b>Total marketable investments</b>	<b>\$ 637</b>	<b>\$ 209,270</b>	<b>\$ —</b>	<b>\$ 209,907</b>

As of September 30, 2019 and December 31, 2018, the estimated fair value of the Company's outstanding 0.125% convertible senior notes due 2023 was \$373.8 million and \$316.1 million, respectively. The fair value was determined based on the quoted price of the convertible senior notes in an inactive market on the last trading day of the reporting period and has been classified as Level 2 in the fair value hierarchy. See Note 6 for further information on the Company's 0.125% convertible senior notes due 2023.

There were no assets or liabilities measured at fair value on a non-recurring basis as of September 30, 2019 and December 31, 2018.

#### 4. Financial Statement Components

Cash and cash equivalents consisted of the following (in thousands):

	September 30, 2019	December 31, 2018
Cash	\$ 74,348	\$ 69,893
Money market funds	34,463	10,833
U.S. treasury	9,965	638
U.S. agency securities	—	50
Commercial paper	1,797	498
<b>Total cash and cash equivalents</b>	<b>\$ 120,573</b>	<b>\$ 81,912</b>

Accounts receivable, net consisted of the following (in thousands):

	September 30, 2019	December 31, 2018
Trade accounts receivable	\$ 29,001	\$ 23,068
Unbilled trade accounts receivable, net of advance client deposits	2,418	1,741
Allowance for doubtful accounts	(12)	(12)
<b>Accounts receivable, net</b>	<b>\$ 31,407</b>	<b>\$ 24,797</b>

Prepaid expenses and other current assets consisted of the following (in thousands):

	September 30, 2019	December 31, 2018
Prepaid expenses	\$ 6,453	\$ 5,005
Other current assets	3,942	2,679
Contract assets	745	330
Prepaid expenses and other current assets	<u>\$ 11,140</u>	<u>\$ 8,014</u>

Property and equipment, net consisted of the following (in thousands):

	September 30, 2019	December 31, 2018
Computer and network equipment	\$ 62,833	\$ 54,452
Computer software	12,334	10,064
Internal-use software development costs	500	500
Furniture and fixtures	2,247	1,491
Leasehold improvements	1,059	855
Property and equipment	78,973	67,362
Accumulated depreciation and amortization	(50,574)	(41,477)
Property and equipment, net	<u>\$ 28,399</u>	<u>\$ 25,885</u>

Depreciation and amortization expense associated with property and equipment was \$3.4 million and \$9.8 million for the three and nine months ended September 30, 2019, respectively, and \$2.6 million and \$7.1 million for the three and nine months ended September 30, 2018, respectively.

Property and equipment capitalized under finance lease obligations consists primarily of computer and network equipment and was as follows (in thousands):

	September 30, 2019	December 31, 2018
Gross	\$ 46,740	\$ 47,383
Less: accumulated depreciation and amortization	(37,817)	(33,547)
Total	<u>\$ 8,923</u>	<u>\$ 13,836</u>

Accrued and other current liabilities consisted of the following (in thousands):

	September 30, 2019	December 31, 2018
Accrued compensation and benefits	\$ 16,016	\$ 10,277
Accrued expenses	4,125	3,494
Accrued and other current liabilities	<u>\$ 20,141</u>	<u>\$ 13,771</u>

## 5. Intangible Assets

The component of intangible assets was as follows (in thousands):

	September 30, 2019			December 31, 2018		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Developed technology	\$ 2,460	\$ (2,093)	\$ 367	\$ 2,460	\$ (1,829)	\$ 631

Amortization expense for intangible assets was \$88 thousand and \$264 thousand for the three and nine months ended September 30, 2019, respectively, and \$117 thousand and \$349 thousand for the three and nine months ended September 30, 2018, respectively.

As of September 30, 2019, the expected future amortization expense for intangible assets was as follows (in thousands):

Period	Expected Future Amortization Expense
2019	87
2020	280
Total	\$ 367

## 6. Debt

### 0.125% Convertible Senior Notes and Capped Call

In May 2018, the Company issued \$258.8 million aggregate principal amount of 0.125% convertible senior notes (“Notes”) due May 1, 2023 in a private offering. The Notes are the Company’s senior unsecured obligations and bear interest at a fixed rate of 0.125% per annum, payable semiannually in arrears on May 1 and November 1 of each year, beginning on November 1, 2018. The total net proceeds from the offering, after deducting initial purchase discounts and debt issuance costs, were approximately \$250.8 million.

Each \$1,000 principal amount of the Notes is initially convertible into 24.4978 shares of the Company’s common stock (the “Conversion Option”), which is equivalent to an initial conversion price of approximately \$40.82 per share of common stock, subject to adjustment upon the occurrence of specified events. The Notes are initially convertible, in multiples of \$1,000 principal amount, at the option of the holders at any time prior to the close of business on the business day immediately preceding November 1, 2022, only under the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ended on September 30, 2018 (and only during such calendar quarter), if the last reported sale price of the Company’s common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the initial conversion price on each applicable trading day; (2) during the five business day period after any five consecutive trading day period (the “Measurement Period”) in which the trading price (as defined in the indenture governing the Notes) per \$1,000 principal amount of Notes for each trading day of the Measurement Period was less than 98% of the product of the last reported sale price of the Company’s common stock and the conversion rate in effect on each such trading day; (3) if the Company calls any or all of the Notes for redemption, at any time prior to the close of business on the second scheduled trading day immediately preceding the redemption date; or (4) upon the occurrence of specified corporate events. On or after November 1, 2022 until the close of business on the second scheduled trading day immediately preceding the maturity date, holders may convert all or any portion of their Notes, in multiples of \$1,000 principal amount, at the option of the holder regardless of the foregoing circumstances.

Upon conversion, the Company will pay or deliver, as the case may be, cash, shares of the Company’s common stock or a combination of cash and shares of the Company’s common stock, at the Company’s election. If the Company undergoes a fundamental change (as defined in the indenture governing the Notes), subject to certain conditions, holders may require the Company to repurchase for cash all or any portion of their Notes, in principal amounts of \$1,000 or a multiple thereof, at a fundamental change repurchase price equal to 100% of the principal amount of the Notes to be repurchased, plus accrued and unpaid interest, if any, to, but excluding, the fundamental change repurchase date. In addition, following certain corporate events that occur prior to the maturity date or if the Company issues a notice of redemption, it will, under certain circumstances, increase the conversion rate for holders who elect to convert their Notes in connection with such corporate event or during the relevant redemption period.

During the three months ended September 30, 2019, one of the conversion features of the Notes was triggered as the last reported sale price of the Company’s common stock was greater than \$53.07 per share, which represents 130% of the initial conversion price of \$40.82 per share, for at least 20 trading days in the period of 30 consecutive trading days ended on September 30, 2019 (the last trading day of the calendar quarter), and therefore, the Notes are convertible, in multiples of \$1,000 principal amount, at the option of the Notes holders between October 1, 2019 to

December 31, 2019. Whether the Notes will be convertible after December 31, 2019 will depend on the continued satisfaction of this condition or other conversion conditions in the future. As of November 5, 2019, the date of this filing, the Company had not received any requests for conversion from its Notes holders.

The Company may not redeem the Notes prior to May 5, 2021. The Company may redeem for cash all or any portion of the Notes, at its option, on or after May 5, 2021 if the last reported sale price of its common stock has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading day period (including the last trading day of such period) ending not more than two trading days immediately preceding the date on which the Company provides notice of redemption at a redemption price equal to 100% of the principal amount of the Notes to be redeemed, plus accrued and unpaid interest, if any, to, but excluding, the redemption date. No sinking fund is provided for the Notes.

The Notes are the Company's senior unsecured obligations and will rank senior in right of payment to any of the Company's indebtedness that is expressly subordinated in right of payment to the Notes; equal in right of payment to any of the Company's unsecured indebtedness that is not so subordinated; effectively junior in right of payment to any of the Company's secured indebtedness to the extent of the value of the assets securing such indebtedness; and structurally junior to all indebtedness and other liabilities (including trade payables) of the Company's subsidiaries.

In accounting for the transaction, the Notes were separated into liability and equity components. The carrying amount of the liability component was calculated by measuring the fair value of a similar debt instrument that does not have an associated conversion feature. The carrying amount of the equity component representing the conversion option was \$63.8 million and was determined by deducting the fair value of the liability component from the par value of the Notes. The equity component was recorded in additional paid-in-capital and is not remeasured as long as it continues to meet the conditions for equity classification. The excess of the principal amount of the liability component over its carrying amount (the "Debt Discount") is being amortized to interest expense over the contractual term of the Notes at an effective interest rate of 6.39%.

In accounting for the debt issuance cost of \$8.0 million related to the Notes, the Company allocated the total amount incurred to the liability and equity components of the Notes based on their relative values. Issuance costs attributable to the liability component were \$6.0 million and are being amortized to interest expense using the effective interest method over the contractual term of the Notes. Issuance costs attributable to the equity component were netted with the equity component in additional paid-in-capital.

The net carrying amount of the liability component of the Notes was as follows (in thousands):

	September 30, 2019	December 31, 2018
Principal	\$ 258,750	\$ 258,750
Unamortized debt discount	(47,898)	(56,564)
Unamortized issuance costs	(4,551)	(5,423)
Net carrying amount	<u>\$ 206,301</u>	<u>\$ 196,763</u>

There was no change to net carrying amount of the equity component of the Notes since it continued to meet the conditions for equity classification as presented below (in thousands):

	September 30, 2019	December 31, 2018
Debt discount for conversion option	\$ 63,756	\$ 63,756
Issuance costs	(1,998)	(1,998)
Net carrying amount	<u>\$ 61,758</u>	<u>\$ 61,758</u>

Interest expense related to the Notes was as follows (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Contractual interest expense	\$ 81	\$ 81	\$ 243	\$ 129
Amortization of debt discount	2,968	2,782	8,666	4,364
Amortization of issuance costs	282	267	818	418
<b>Total interest expense</b>	<b>\$ 3,331</b>	<b>\$ 3,130</b>	<b>\$ 9,727</b>	<b>\$ 4,911</b>

In connection with the pricing of the Notes, the Company entered into privately negotiated capped call transactions (the “Capped Call Transactions”) with certain financial institutions. The Capped Call Transactions are expected generally to reduce the potential dilution to the Company’s common stock upon any conversion of the Notes and/or offset any cash payments the Company is required to make in excess of the principal amount of converted Notes, as the case may be, with such reduction and/or offset subject to a cap based on the cap price. The initial cap price of the Capped Call Transactions is \$62.80 per share, and is subject to certain adjustments under the terms of the Capped Call Transactions. The Capped Call Transactions cover, subject to anti-dilution adjustments, approximately 6.3 million shares of the Company’s common stock. For accounting purposes, the Capped Call Transactions are separate transactions, and not part of the terms of the Notes. As these transactions meet certain accounting criteria, the Capped Call Transactions are recorded in stockholders’ equity and are not accounted for as derivatives. The cost of \$31.4 million incurred in connection with the Capped Call Transactions was recorded as a reduction to additional paid-in capital.

The net impact to the Company’s stockholders’ equity, included in additional paid-in capital, relating to the issuance of the Notes in May 2018 was as follows (in thousands):

	September 30, 2019	December 31, 2018
Conversion option	\$ —	\$ 63,756
Payments for capped call transactions	—	(31,412)
Issuance costs	—	(1,998)
<b>Total</b>	<b>\$ —</b>	<b>\$ 30,346</b>

Maturity of the Company’s outstanding debt as of September 30, 2019 was as follows (in thousands):

Period	Amount to Mature
2023	\$ 258,750
<b>Total</b>	<b>\$ 258,750</b>

## 7. Stockholders’ Equity

### Capital Structure

#### Common Stock

The Company is authorized to issue 450,000,000 shares of common stock with a par value of \$0.001 per share. As of September 30, 2019 and December 31, 2018, the Company had 61,055,898 and 59,210,496 shares of common stock issued and outstanding, respectively.

#### Preferred Stock

The Company is also authorized to designate and issue up to 5,000,000 shares of preferred stock with a par value of \$0.001 per share in one or more series without stockholder approval and to fix the rights, preferences, privileges and restrictions thereof. As of September 30, 2019 and December 31, 2018, the Company had no shares of preferred stock issued and outstanding.

### Common Stock Reserved for Future Issuance

Shares of common stock reserved for future issuance related to outstanding equity awards and employee equity incentive plans were as follows (in thousands):

	September 30, 2019
Stock options outstanding	2,621
Restricted stock units outstanding	2,508
Shares available for future grant under 2014 Plan	9,986
Shares available for future issuance under ESPP	2,174
<b>Total shares of common stock reserved</b>	<b>17,289</b>

### Stock Options

A summary of the Company's stock option activity during the nine months ended September 30, 2019 is as follows (in thousands, except years and per share data):

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding as of December 31, 2018	3,122	\$ 12.52		
Options granted (weighted average grant date fair value of \$23.93 per share)	337	50.94		
Options exercised	(825)	7.40		
Options forfeited or expired	(13)	30.18		
<b>Outstanding as of September 30, 2019</b>	<b>2,621</b>	<b>\$ 18.97</b>	6.2	<b>\$ 91,370</b>

The aggregate intrinsic value disclosed in the above table is computed based on the difference between the exercise price of the stock options and the fair market value of the Company's common stock of \$53.74 per share as of September 30, 2019 for all in-the-money stock options outstanding.

### Restricted Stock Units

A summary of the Company's restricted stock unit, or RSU, activity during the nine months ended September 30, 2019 is as follows (in thousands, except per share data):

	Number of Shares	Weighted Average Grant Date Fair Value Per Share
Outstanding as of December 31, 2018	2,325	\$ 25.36
RSUs granted	1,272	52.18
RSUs vested and released	(912)	25.08
RSUs forfeited	(177)	31.92
<b>Outstanding as of September 30, 2019</b>	<b>2,508</b>	<b>\$ 38.59</b>

## Stock-Based Compensation

Stock-based compensation expenses were as follows (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Cost of revenue	\$ 1,702	\$ 860	\$ 4,589	\$ 2,391
Research and development	2,022	2,352	5,399	4,293
Sales and marketing	3,017	1,613	8,015	4,560
General and administrative	4,334	4,044	12,194	9,747
Total stock-based compensation	\$ 11,075	\$ 8,869	\$ 30,197	\$ 20,991

As of September 30, 2019, unrecognized stock-based compensation expense by award type and their expected weighted-average recognition periods are summarized in the following table (in thousands, except years).

	Stock Option	RSU	ESPP
Unrecognized stock-based compensation expense	\$ 14,710	\$ 90,759	\$ 333
Weighted-average amortization period	2.9 years	3.0 years	0.1 years

The weighted-average assumptions used to value stock options granted during the periods presented were as follows:

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Expected term (years)	6.1	6.1	6.1	6.0
Volatility	46%	44%	46%	45%
Risk-free interest rate	1.8%	2.8%	2.3%	2.7%
Dividend yield <sup>(1)</sup>	—	—	—	—

(1) The Company has not paid, and does not anticipate paying, cash dividends on its shares of common stock. Accordingly, the expected dividend yield is zero.

## 8. Net Loss Per Share

Basic net loss per share is calculated by dividing net loss by the weighted average number of shares of common stock outstanding during the period, and excludes any dilutive effects of employee stock-based awards and warrants. Diluted net loss per share is computed giving effect to all potentially dilutive shares of common stock, including common stock issuable upon exercise of stock options and warrants, vesting of restricted stock units and shares of common stock issuable upon conversion of convertible senior notes.

The following table presents the calculation of basic and diluted net loss per share (in thousands, except per share data):

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Net loss	\$ (1,604)	\$ (1,305)	\$ (5,388)	\$ (3,954)
Weighted-average shares of common stock outstanding	60,781	58,454	60,074	57,790
Basic and diluted net loss per share	\$ (0.03)	\$ (0.02)	\$ (0.09)	\$ (0.07)

The following securities were excluded from the calculation of diluted net loss per share because their effect would have been anti-dilutive (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Stock options	2,621	3,051	2,621	3,051
Restricted stock units	2,508	2,408	2,508	2,408
Convertible senior notes	1,739	—	1,424	—
Total	6,868	5,459	6,553	5,459

The Company expects to settle the principal amount of its Notes outstanding at September 30, 2019 in cash and, therefore, uses the treasury stock method for calculating any potential dilutive effect of the conversion spread. The conversion spread had a dilutive impact during the three and nine months ended September 30, 2019, since the average market price of the Company's common stock during the period exceeded the initial conversion price of \$40.82 per share for the Notes. However, the potential shares of common stock issuable upon the conversion of the Notes were excluded from the calculation of diluted net loss per share because their effect would have been anti-dilutive.

## 9. Income Taxes

The provision for income taxes for the three and nine months ended September 30, 2019 was approximately \$50 thousand and \$30 thousand, respectively. The provision for income taxes for the three and nine months ended September 30, 2018 was approximately \$41 thousand and \$150 thousand, respectively. The provision for income taxes for the nine months ended September 30, 2019 consisted primarily of foreign income taxes, state minimum taxes, as well as a benefit for a true-up to foreign income taxes.

For the three and nine months ended September 30, 2019 and 2018, the provision for income taxes differed from the statutory amount primarily due to the Company realizing no benefit for current year losses due to maintaining a full valuation allowance against its domestic net deferred tax assets.

The realization of tax benefits of deferred tax assets is dependent upon future levels of taxable income, of an appropriate character, in the periods the items are expected to be deductible or taxable. Based on the available objective evidence, the Company does not believe it is more likely than not that the net deferred tax assets will be realizable. Accordingly, the Company has provided a full valuation allowance against the domestic net deferred tax assets as of September 30, 2019 and December 31, 2018. The Company intends to maintain the remaining valuation allowance until sufficient positive evidence exists to support a reversal of, or decrease in, the valuation allowance. During the three and nine months ended September 30, 2019, there were no material changes to the total amount of unrecognized tax benefits.

## 10. Commitments and Contingencies

### Commitments

The Company's principal commitments consist of future payment obligations under finance leases to finance data centers and other computer and networking equipment purchases, debt (see Note 6), operating leases agreements for office space, and agreements with third parties to provide co-location hosting, telecommunication usage and equipment maintenance services. These commitments as of December 31, 2018 are disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2018, and did not change materially during the three months ended September 30, 2019, except for certain hosting and telecommunications agreements.

As of September 30, 2019, \$258.8 million of the Notes were outstanding. The Notes are due May 1, 2023. For more information concerning the Notes, see Note 6.

As of September 30, 2019, the Company's commitment under various hosting and telecommunications agreements totaled \$6.1 million for terms ranging up to 36 months. These agreements require the Company to make monthly payments over the service term in exchange for certain network services.

## Legal Matters

The Company is involved in various legal and regulatory matters arising in the normal course of business. In management's opinion, resolution of these matters is not expected to have a material impact on the Company's consolidated results of operations, cash flows, or its financial position. However, due to the uncertain nature of legal matters, an unfavorable resolution of a matter could materially affect the Company's future consolidated results of operations, cash flows or financial position in a particular period. The Company expenses legal fees as incurred.

## Indemnification Agreements

In the ordinary course of business, the Company enters into agreements of varying scope and terms pursuant to which it agrees to indemnify clients, vendors, lessors, business partners and other parties with respect to certain matters, including, but not limited to, losses arising out of breach of such agreements, services to be provided by the Company or from intellectual property infringement claims made by third parties. In addition, the Company has entered into indemnification agreements with its directors, officers and certain employees that will require it, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors, officers or employees. Other than as described below, there are no claims that it is aware of that could have a material effect on the consolidated balance sheet, consolidated statement of operations and comprehensive loss, or consolidated statements of cash flows.

On October 27, 2016, the Company received notice from Lance Fried, a former officer and director of Face It, Corp., of his claim for indemnification by the Company (as successor in interest to Face It), and for advancement of all legal fees and expenses he incurs in connection with the defense of the lawsuit captioned *Melcher, et al. v. Five9, Inc., et al.*, No. 16-cv-02440, in the U.S. District Court for the Southern District of California ("the Melcher Litigation"). In the lawsuit, plaintiff Carl Melcher, a purported former stockholder of Face It, and his related investment entity, Melcher Family Limited Partnership, alleged that Face It repurchased the plaintiffs' stock in September 2013 before the Company acquired Face It, and that in connection with the repurchase, Fried made material misstatements or omissions to Melcher by failing to disclose that Face It allegedly was in concurrent discussions about a potential sale of its company to the Company. The lawsuit alleged violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 and Rule 10b-5 promulgated thereunder, as well as various claims under state law and common law. On January 9, 2018, Mr. Fried initiated an arbitration against the Company in which he alleged that the Company breached advancement obligations to him. The Company asserted counterclaims in the arbitration against both Mr. Fried and the representative of the former Face It stockholders, seeking to recoup all losses incurred by the Company in connection with the Melcher Litigation, including any amounts incurred to indemnify or advance the legal fees and expenses of Mr. Fried pursuant to his indemnification claim.

On June 11, 2018, the arbitrator ordered the Company to advance the fees Mr. Fried incurred in connection with the defense of the Melcher Litigation, and ordered the Company's counterclaims stayed pending the resolution of the Melcher litigation.

In June 2019, Mr. Fried reached a settlement in the Melcher Litigation. Pursuant to a separate June 2019 settlement agreement between the Company, Mr. Fried, and the representative of the former Face It stockholders, the Company agreed to contribute a portion of the amount Mr. Fried agreed to pay the Melcher parties. Specifically, the Company agreed to pay \$0.4 million to the Melcher parties on Mr. Fried's behalf in light of Mr. Fried's asserted indemnity obligations against the Company. As a result of the settlements, all claims against the Company, including claims for indemnification, have been released by Mr. Fried and the former Face It stockholders. The Company also released claims it asserted against Mr. Fried and the former Face It stockholders. The Melcher Litigation and the arbitration have been dismissed. The Company incurred a total of approximately \$1.4 million in fees and expenses including legal fees advanced on Mr. Fried's behalf and settlement contributions for the Melcher Litigation. These amounts were included in general and administrative expenses.

## 11. Geographical Information

The following table is a summary of revenues by geographic region based on client billing address and has been estimated based on the amounts billed to clients during the periods (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
United States	\$ 77,366	\$ 60,315	\$ 217,598	\$ 172,376
International	6,403	4,989	18,145	12,953
Total revenue	\$ 83,769	\$ 65,304	\$ 235,743	\$ 185,329

The following table summarizes total property and equipment, net in the respective locations (in thousands):

	September 30, 2019	December 31, 2018
United States	\$ 26,557	\$ 23,931
International	1,842	1,954
Property and equipment, net	\$ 28,399	\$ 25,885

## 12. ASC 842 Adoption Impact

The Company has leases for offices, data centers and other computer and networking equipment that expire at various dates through 2024. The Company's leases have remaining terms of one to five years, some of the leases include a Company option to extend the leases for up to three to five years, and some of the leases include the option to terminate the leases upon 30-days notice.

The Company adopted ASC 842 using the modified retrospective method on January 1, 2019. The Company elected the available practical expedients, implemented internal controls, and a lease accounting system to enable the preparation of financial information upon adoption. The most significant impact of the adoption of ASC 842 was the recognition of right-of-use, or ROU, assets and lease liabilities for operating leases of \$8.4 million and \$8.4 million, respectively, and a reversal of deferred rent of \$0.6 million on January 1, 2019. The Company's accounting for finance leases remained substantially unchanged. The adoption of ASC 842 did not have any impact on the Company's operating results or cash flows.

The components of lease expenses were as follows (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Operating lease cost	\$ 1,390	\$ —	\$ 3,730	\$ —
Finance lease cost:				
Amortization of right-of-use assets	\$ 1,552	\$ 1,871	\$ 4,912	\$ 5,446
Interest on lease liabilities	155	337	578	1,059
Total finance lease cost	\$ 1,707	\$ 2,208	\$ 5,490	\$ 6,505

Supplemental cash flow information related to leases was as follows (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
<b>Cash paid for amounts included in the measurement of lease liabilities:</b>				
Operating cash used in operating leases	\$ (1,399)	\$ —	\$ (3,808)	\$ —
Financing cash used in finance leases	(1,706)	(1,976)	(5,408)	(6,379)
<b>Right of use assets obtained in exchange for lease obligations:</b>				
Operating leases	—	—	4,608	—
Finance leases	—	85	—	6,133

Supplemental balance sheet information related to leases was as follows (in thousands):

	September 30, 2019	December 31, 2018
<b>Operating leases</b>		
Operating lease right-of-use assets	\$ 8,933	\$ —
Operating lease liabilities	\$ 5,010	\$ —
Operating lease liabilities — less current portion	4,530	—
Total operating lease liabilities	\$ 9,540	\$ —
<b>Finance leases</b>		
Property and equipment, gross	\$ 46,740	\$ 47,383
Less: accumulated depreciation and amortization	(37,817)	(33,547)
Property and equipment, net	\$ 8,923	\$ 13,836
Finance leases	\$ 4,457	\$ 6,647
Finance lease liabilities — less current portion	1,516	4,509
Total finance lease liabilities	\$ 5,973	\$ 11,156

Weighted average remaining terms were as follows (in years):

	September 30, 2019	December 31, 2018
<b>Weighted average remaining lease term</b>		
Operating leases	2.5	2.0
Finance leases	1.9	2.6

Weighted average discount rates were as follows:

	September 30, 2019	December 31, 2018
<b>Weighted average discount rate</b>		
Operating leases	4.7%	—%
Finance leases	8.8%	9.0%

Maturities of lease liabilities were as follows:

Year Ending December 31,	Operating Leases	Finance Leases
2019	\$ 1,469	\$ 1,245
2020	5,103	4,387
2021	1,799	754
2022	650	—
2023	582	—
Thereafter	498	—
Total lease payments	10,101	6,386
Less: imputed interest	(561)	(413)
Total	\$ 9,540	\$ 5,973

As of September 30, 2019, the Company had one additional operating lease for office space that had not yet commenced, representing a total commitment over its term of \$1.3 million. This operating lease is expected to commence in the remainder of 2019 with a lease term of five years.

### Impact on Condensed Consolidated Balance Sheet

The impact of the adoption of ASC 842 on select condensed consolidated balance sheet line items, was as follows:

(in thousands)	September 30, 2019		
	As Reported	Balances without adoption of ASC 842	Effect of Change Higher (Lower)
<b>Assets:</b>			
Operating lease right-of-use-assets	\$ 8,933	\$ —	\$ 8,933
<b>Liabilities:</b>			
Operating lease liabilities	5,010	—	5,010
Operating lease liabilities — less current portion	4,530	—	4,530

### Change in Accounting Policy

#### Leases

The Company determines if an arrangement is or contains a lease at inception. Operating leases are included in operating lease ROU assets and operating lease liabilities in the Company's condensed consolidated balance sheets. Finance leases are included in property and equipment, and finance lease liabilities in the Company's condensed consolidated balance sheets.

ROU assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at the commencement date based on an amount equal to the present value of lease payments over the lease term. As most of the Company's leases do not provide an implicit rate, the Company uses an incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments. The Company uses the implicit rate when it is readily determinable. The operating lease ROU asset also includes any lease payments made and excludes lease incentives. The Company's lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. Operating lease expense for lease payments is recognized on a straight-line basis over the lease term. The Company has lease agreements with lease and non-lease components, which are generally accounted for separately.

## ITEM 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

*You should read the following discussion in conjunction with the condensed consolidated financial statements and notes thereto included elsewhere in this Quarterly Report on Form 10-Q and our Annual Report on Form 10-K for the year ended December 31, 2018.*

### Overview

We are a pioneer and leading provider of cloud software for contact centers, facilitating more than five billion call minutes between our more than 2,000 clients and their customers per year. We believe we achieved this leadership position through our expertise and technology, which has empowered us to help organizations of all sizes transition from legacy on-premise contact center systems to our cloud solution. Our solution, which is comprised of our Virtual Contact Center, or VCC, cloud platform and applications, allows simultaneous management and optimization of customer interactions across voice, chat, email, web, social media and mobile channels, either directly or through our application programming interfaces, or APIs. Our VCC cloud platform matches each customer interaction with an appropriate agent resource and delivers relevant customer data to the agent in real-time through integrations with adjacent enterprise applications, such as customer relationship management, or CRM, software, to optimize the customer experience and improve agent productivity. Unlike legacy on-premise contact center systems, our solution requires minimal up-front investment, can be rapidly deployed and adjusted depending on our client's requirements.

Since founding our business in 2001, we have focused exclusively on delivering cloud contact center software. We initially targeted smaller contact center opportunities with our telesales team and, over time, invested in expanding the breadth and depth of the functionality of our cloud platform to meet the evolving requirements of our clients. In 2009, we made a strategic decision to expand our market opportunity to include larger contact centers. This decision drove further investments in research and development and the establishment of our field sales team to meet the requirements of these larger contact centers. We believe this shift has helped us diversify our client base, while significantly enhancing our opportunity for future revenue growth. To complement these efforts, we have also focused on building client awareness and driving adoption of our solution through marketing activities, which include internet advertising, digital marketing campaigns, social media, trade shows, industry events and telemarketing.

We provide our solution through a SaaS business model with recurring subscriptions. We offer a comprehensive suite of applications delivered on our VCC cloud platform that are designed to enable our clients to manage and optimize interactions across inbound and outbound contact centers. We primarily generate revenue by selling subscriptions and related usage of our VCC cloud platform. We charge our clients monthly subscription fees for access to our solution, primarily based on the number of agent seats, as well as the specific functionalities and applications our clients deploy. We define agent seats as the maximum number of named agents allowed to concurrently access our solution. Our clients typically have more named agents than agent seats, and multiple named agents may use an agent seat, though not simultaneously. Substantially all of our clients purchase both subscriptions and related telephony usage from us. A small percentage of our clients subscribe to our platform but purchase telephony usage directly from wholesale telecommunications service providers. We do not sell telephony usage on a stand-alone basis to any client. The related usage fees are generally based on the volume of minutes for inbound and outbound interactions. We also offer bundled plans, generally for smaller deployments, where the client is charged a single monthly fixed fee per agent seat that includes both subscription and unlimited usage in the contiguous 48 states and, in some cases, Canada. We offer monthly, annual and multiple-year contracts to our clients, generally with 30 days' notice required for reductions in the number of agent seats. Increases in the number of agent seats can be provisioned almost immediately. Our clients, therefore, are able to adjust the number of agent seats used to meet their changing contact center volume needs. Our larger clients typically choose annual contracts, which generally include an implementation and ramp period of several months. Fixed subscription fees, including bundled plans, are generally billed monthly in advance, while related usage fees are billed in arrears. For the three and nine months ended September 30, 2019, subscription and related usage fees accounted for 91% and 92%, respectively, of our revenue. For each of the three and nine months ended September 30, 2018, subscription and related usage fees accounted for 93% of our revenue. The remainder was comprised of professional services revenue from the implementation and optimization of our solution.

**Key GAAP Operating Results**

Our revenue increased to \$83.8 million and \$235.7 million for the three and nine months ended September 30, 2019, respectively, from \$65.3 million and \$185.3 million for the three and nine months ended September 30, 2018, respectively. Revenue growth has primarily been driven by our larger clients. For each of the three and nine months ended September 30, 2019 and 2018, no single client accounted for more than 10% of our total revenue. As of September 30, 2019, we had over 2,000 clients across multiple industries. Our clients' subscriptions generally range in size from fewer than 10 agent seats to approximately 3,500 agent seats. We had a net loss of \$1.6 million and \$5.4 million in the three and nine months ended September 30, 2019, respectively, compared to a net loss of \$1.3 million and \$4.0 million in the three and nine months ended September 30, 2018, respectively.

We have continued to make significant expenditures and investments, including in sales and marketing, research and development and infrastructure. We primarily evaluate the success of our business based on revenue growth and the efficiency and effectiveness of our investments. The growth of our business and our future success depend on many factors, including our ability to continue to expand our client base to include larger opportunities, grow revenue from our existing client base, innovate and expand internationally. While these areas represent significant opportunities for us, they also pose risks and challenges that we must successfully address in order to sustain the growth of our business and improve our operating results. In order to pursue these opportunities, we anticipate that we will continue to expand our operations and headcount in the near term.

Due to our continuing investments to grow our business, increase our sales and marketing efforts, pursue new opportunities, enhance our solution and build our technology, we expect our cost of revenue and operating expenses to increase in absolute dollars in future periods. However, we expect cost of revenue and certain of these operating expenses to decrease as a percentage of revenue as we grow our revenue and gain economies of scale by increasing our client base without direct incremental development costs and by utilizing more of the capacity of our data centers.

**Key Operating and Non-GAAP Financial Performance Metrics**

In addition to measures of financial performance presented in our condensed consolidated financial statements, we monitor the key metrics set forth below to help us evaluate growth trends, establish budgets, measure the effectiveness of our sales and marketing efforts and assess operational efficiencies.

***Annual Dollar-Based Retention Rate***

We believe that our Annual Dollar-Based Retention Rate provides insight into our ability to retain and grow revenue from our clients, and is a measure of the long-term value of our client relationships. Our Annual Dollar-Based Retention Rate is calculated by dividing our Retained Net Invoicing by our Retention Base Net Invoicing on a monthly basis, which we then average using the rates for the trailing twelve months for the period being presented. We define Retention Base Net Invoicing as recurring net invoicing from all clients in the comparable prior year period, and we define Retained Net Invoicing as recurring net invoicing from that same group of clients in the current period. We define recurring net invoicing as subscription and related usage revenue excluding the impact of service credits, reserves and deferrals. Historically, the difference between recurring net invoicing and our subscription and related usage revenue has been within 10%.

The following table shows our Annual Dollar-Based Retention Rate for the periods presented:

	Twelve Months Ended	
	September 30, 2019	September 30, 2018
Annual Dollar-Based Retention Rate	107%	101%

Our Dollar-Based Retention Rate improved year over year primarily due to our larger clients increasing their number of agent seats.

***Adjusted EBITDA***

We monitor adjusted EBITDA, a non-GAAP financial measure, to analyze our financial results and believe that it is useful to investors, as a supplement to U.S. GAAP measures, in evaluating our ongoing operational performance and enhancing an overall understanding of our past financial performance. We believe that adjusted EBITDA helps illustrate underlying trends in our business that could otherwise be masked by the effect of the income or expenses that

we exclude from adjusted EBITDA. Furthermore, we use this measure to establish budgets and operational goals for managing our business and evaluating our performance. We also believe that adjusted EBITDA provides an additional tool for investors to use in comparing our recurring core business operating results over multiple periods with other companies in our industry.

Adjusted EBITDA should not be considered in isolation from, or as a substitute for, financial information prepared in accordance with U.S. GAAP, and our calculation of adjusted EBITDA may differ from that of other companies in our industry. We compensate for the inherent limitations associated with using adjusted EBITDA through disclosure of these limitations, presentation of our financial statements in accordance with U.S. GAAP and reconciliation of adjusted EBITDA to the most directly comparable U.S. GAAP measure, net loss. We calculate adjusted EBITDA as net loss before (1) depreciation and amortization, (2) stock-based compensation, (3) interest income, expense and other, (4) provision for income taxes, and (5) other items that do not directly affect what we consider to be our core operating performance.

The following table shows a reconciliation of net loss to adjusted EBITDA for the periods presented (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Net loss	\$ (1,604)	\$ (1,305)	\$ (5,388)	\$ (3,954)
Non-GAAP adjustments:				
Depreciation and amortization <sup>(1)</sup>	3,497	2,667	10,050	7,436
Stock-based compensation <sup>(2)</sup>	11,075	8,869	30,197	20,991
Interest expense	3,486	3,595	10,288	6,783
Interest income and other	(1,460)	(1,352)	(4,695)	(1,956)
Legal settlement <sup>(3)</sup>	—	—	420	—
Legal and indemnification fees related to settlement <sup>(4)</sup>	—	258	356	499
Provision for income taxes	50	41	30	150
Adjusted EBITDA	\$ 15,044	\$ 12,773	\$ 41,258	\$ 29,949

(1) Depreciation and amortization expenses included in our results of operations are as follows (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Cost of revenue	\$ 2,602	\$ 2,021	\$ 7,472	\$ 5,679
Research and development	450	278	1,340	705
Sales and marketing	2	30	4	89
General and administrative	443	338	1,234	963
Total depreciation and amortization	\$ 3,497	\$ 2,667	\$ 10,050	\$ 7,436

(2) See Note 7 to the condensed consolidated financial statements for stock-based compensation expense included in our results of operations for the periods presented.

(3) Represents settlement amount related to the Melcher litigation.

(4) Represents legal and indemnification fees related to the Melcher litigation.

## Key Components of Our Results of Operations

### Revenue

Our revenue consists of subscription and related usage as well as professional services. We consider our subscription and related usage to be recurring revenue. This recurring revenue includes fixed subscription fees for the delivery and support of our VCC cloud platform, as well as related usage fees. The related usage fees are generally based on the volume of minutes for inbound and outbound client interactions. We also offer bundled plans, generally

for smaller deployments, where the client is charged a single monthly fixed fee per agent seat that includes both subscription and unlimited usage in the contiguous 48 states and, in some cases, Canada. We offer monthly, annual and multiple-year contracts for our clients, generally with 30 days' notice required for reductions in the number of agent seats. Increases in the number of agent seats can be provisioned almost immediately. Our clients, therefore, are able to adjust the number of agent seats used to meet their changing contact center volume needs. Our larger clients typically choose annual contracts, which generally include an implementation and ramp period of several months.

Fixed subscription fees, including bundled plans, are generally billed monthly in advance, while variable usage fees are billed in arrears. Fixed subscription fees are recognized on a straight-line basis over the applicable term, predominantly the monthly contractual billing period. Support activities include technical assistance for our solution and upgrades and enhancements on a when and if available basis, which are not billed separately. Variable subscription related usage fees for non-bundled plans are billed in arrears based on client-specific per minute rate plans and are recognized as actual usage occurs. We generally require advance deposits from clients based on estimated usage. All fees, except usage deposits, are non-refundable.

In addition, we generate professional services revenue from assisting clients in implementing our solution and optimizing use. These services include application configuration, system integration and education and training services. Professional services are primarily billed on a fixed-fee basis and are typically performed by us directly. In limited cases, our clients choose to perform these services themselves or engage their own third-party service providers to perform such services. Professional services are recognized as the services are performed using the proportional performance method, with performance measured based on labor hours, provided all other criteria for revenue recognition are met.

### ***Cost of Revenue***

Our cost of revenue consists primarily of personnel costs, including stock-based compensation, fees that we pay to telecommunications providers for usage, USF contributions and other regulatory costs, depreciation and related expenses of the servers and equipment, costs to build out and maintain co-location data centers, and allocated office and facility costs and amortization of acquired technology. Cost of revenue can fluctuate based on a number of factors, including the fees we pay to telecommunications providers, which vary depending on our clients' usage of our VCC cloud platform, the timing of capital expenditures and related depreciation charges and changes in headcount. We expect to continue investing in our network infrastructure and operations and client support function to maintain high quality and availability of service, resulting in absolute dollar increases in cost of revenue. As our business grows, we expect to realize economies of scale in network infrastructure, personnel and client support.

### ***Operating Expenses***

We classify our operating expenses as research and development, sales and marketing, and general and administrative expenses.

***Research and Development.*** Our research and development expenses consist primarily of salary and related expenses, including stock-based compensation, for personnel related to the development of improvements and expanded features for our services, as well as quality assurance, testing, product management and allocated overhead. We expense research and development expenses as they are incurred except for internal use software development costs that qualify for capitalization. We believe that continued investment in our solution is important for our future growth, and we expect our research and development expenses to increase as a percentage of revenue in the near term.

***Sales and Marketing.*** Sales and marketing expenses consist primarily of salaries and related expenses, including stock-based compensation, for personnel in sales and marketing, sales commissions, as well as advertising, marketing, corporate communications, travel costs and allocated overhead. We believe it is important to continue investing in sales and marketing to continue to generate revenue growth, and we expect sales and marketing expenses to increase in absolute dollars and fluctuate as a percentage of revenue as we continue to support our growth initiatives.

***General and Administrative.*** General and administrative expenses consist primarily of salary and related expenses, including stock-based compensation, for management, finance and accounting, legal, information systems and human resources personnel, professional fees, compliance costs, other corporate expenses and allocated overhead. We expect that general and administrative expenses will fluctuate in absolute dollars from period to period, but decline as a percentage of revenue over time.

## Results of Operations for the Three and Nine Months Ended September 30, 2019 and 2018

Based on the condensed consolidated statements of operations and comprehensive loss set forth in this Quarterly Report on Form 10-Q, the following table sets forth our operating results as a percentage of revenue for the periods indicated:

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Revenue	100 %	100 %	100 %	100 %
Cost of revenue	41 %	40 %	41 %	41 %
Gross profit	59 %	60 %	59 %	59 %
Operating expenses:				
Research and development	14 %	15 %	14 %	14 %
Sales and marketing	30 %	27 %	30 %	28 %
General and administrative	14 %	17 %	15 %	16 %
Total operating expenses	58 %	59 %	59 %	58 %
Income from operations	1 %	1 %	— %	1 %
Other income (expense), net:				
Interest expense	(4)%	(6)%	(4)%	(4)%
Interest income and other	1 %	3 %	2 %	1 %
Total other income (expense), net	(3)%	(3)%	(2)%	(3)%
Loss before income taxes	(2)%	(2)%	(2)%	(2)%
Provision for income taxes	— %	— %	— %	— %
Net loss	(2)%	(2)%	(2)%	(2)%

### Revenue

	Three Months Ended				Nine Months Ended			
	September 30, 2019	September 30, 2018	\$ Change	% Change	September 30, 2019	September 30, 2018	\$ Change	% Change
(in thousands, except percentages)								
Revenue	\$ 83,769	\$ 65,304	\$ 18,465	28%	\$ 235,743	\$ 185,329	\$ 50,414	27%

The increase in revenue for the three and nine months ended September 30, 2019 compared to the same periods of 2018 was primarily attributable to our larger clients, driven by an increase in our sales and marketing activities and our improved brand awareness.

### Cost of Revenue

	Three Months Ended				Nine Months Ended			
	September 30, 2019	September 30, 2018	\$ Change	% Change	September 30, 2019	September 30, 2018	\$ Change	% Change
(in thousands, except percentages)								
Cost of revenue	\$ 34,472	\$ 26,179	\$ 8,293	32%	\$ 96,571	\$ 75,695	\$ 20,876	28%
% of Revenue	41%	40%			41%	41%		

The increase in cost of revenue for the three and nine months ended September 30, 2019 compared to the same periods of 2018 was primarily due to a \$2.7 million and \$7.9 million increase in personnel costs including stock-based compensation costs, driven mainly by increased headcount and a higher fair value of employee equity awards due primarily to our increased stock price, a \$1.3 million and \$3.4 million increase in third party hosted software costs driven by increased client activities, a \$1.3 million and \$3.2 million increase in facilities and related costs, a \$1.5

million and \$2.6 million increase in USF contributions and other federal telecommunication service fees due primarily to increased client usage and a significant increase in the USF contribution rate, and a \$0.6 million and \$1.6 million increase in depreciation and data center costs, driven by increased capital expenditures to support our growing capacity needs and continuing expansion of our existing data center facilities.

### Gross Profit

	Three Months Ended				Nine Months Ended			
	September 30, 2019	September 30, 2018	\$ Change	% Change	September 30, 2019	September 30, 2018	\$ Change	% Change
(in thousands, except percentages)								
Gross profit	\$ 49,297	\$ 39,125	\$ 10,172	26%	\$139,172	\$109,634	\$29,538	27%
% of Revenue	59%	60%			59%	59%		

The increase in gross profit for the three and nine months ended September 30, 2019 compared to the same periods of 2018 was primarily due to increases in subscription and usage revenues. The decrease in gross margin for the three months ended September 30, 2019 compared to the same period of 2018 was primarily due to a shift in our revenue growth mix. In the three months ended September 30, 2019, our revenue growth from professional services, which has lower gross margin, was almost at double the rate compared to the same period of 2018. Our gross margin for the nine months ended September 30, 2019 was flat compared to the same period of 2018.

### Operating Expenses

#### Research and Development

	Three Months Ended				Nine Months Ended			
	September 30, 2019	September 30, 2018	\$ Change	% Change	September 30, 2019	September 30, 2018	\$ Change	% Change
(in thousands, except percentages)								
Research and development	\$ 11,665	\$ 9,582	\$ 2,083	22%	\$33,022	\$25,721	\$7,301	28%
% of Revenue	14%	15%			14%	14%		

The increase in research and development expenses for the three and nine months ended September 30, 2019 compared to the same periods of 2018 was primarily due to a \$1.5 million and \$6.0 million increase in personnel costs including stock-based compensation costs, driven mainly by increased headcount and a higher fair value of employee equity awards due primarily to our increased stock price. Stock-based compensation costs for the three and nine months ended September 30, 2018 included an incremental expense due to the modification of certain stock-based awards of a former executive.

#### Sales and Marketing

	Three Months Ended				Nine Months Ended			
	September 30, 2019	September 30, 2018	\$ Change	% Change	September 30, 2019	September 30, 2018	\$ Change	% Change
(in thousands, except percentages)								
Sales and marketing	\$ 25,014	\$ 17,818	\$ 7,196	40%	\$69,965	\$53,208	\$16,757	31%
% of Revenue	30%	27%			30%	28%		

The increase in sales and marketing expenses for the three and nine months ended September 30, 2019 compared to the same periods of 2018 was primarily due to a \$3.8 million and \$9.2 million increase in personnel-related costs including stock-based compensation costs, driven mainly by increased headcount and higher fair value equity awards due primarily to our increased stock price, and a \$1.5 million and \$3.1 million increase in sales commission expenses driven by the growth in sales and bookings of our solution. The remaining net increase in sales and marketing expenses was primarily due to the execution of our growth strategy to acquire new clients, increase the number of agent seats within our existing client base, and establish increased brand awareness.

### General and Administrative

	Three Months Ended				Nine Months Ended			
	September 30, 2019	September 30, 2018	\$ Change	% Change	September 30, 2019	September 30, 2018	\$ Change	% Change
(in thousands, except percentages)								
General and administrative	\$ 12,146	\$ 10,746	\$ 1,400	13%	\$ 35,950	\$ 29,682	\$ 6,268	21%
% of Revenue	14%	17%			15%	16%		

The increase in general and administrative expenses for the three and nine months ended September 30, 2019 compared to the same periods of 2018 was primarily due to a \$1.1 million and \$5.2 million increase in personnel costs including stock-based compensation costs, driven mainly by increased headcount and a higher fair value of employee equity awards, driven by our increased stock price. The increase in stock-based compensation costs in the nine months ended September 30, 2019 also related to an equity award granted to an executive officer in May 2018, which continued to vest. Legal costs in the nine months ended September 30, 2019 compared to the same period in 2018 increased due to a settlement payment of \$0.4 million in the Melcher Litigation in June 2019.

### Other Income (Expense), Net

	Three Months Ended				Nine Months Ended			
	September 30, 2019	September 30, 2018	\$ Change	% Change	September 30, 2019	September 30, 2018	\$ Change	% Change
(in thousands, except percentages)								
Interest expense	\$ (3,486)	\$ (3,595)	\$ 109	3%	\$ (10,288)	\$ (6,783)	\$ (3,505)	(52)%
Interest income and other	1,460	1,352	108	8%	4,695	1,956	2,739	(140)%
Total other income (expense), net	\$ (2,026)	\$ (2,243)	\$ 217	10%	\$ (5,593)	\$ (4,827)	\$ (766)	(16)%
% of Revenue	(3)%	(3)%			(2)%	(3)%		

The favorable change of \$0.2 million in other income (expense), net for the three months ended September 30, 2019 compared to the same period of 2018 was primarily due to \$0.1 million in higher interest income on our marketable investments and lower interest expense relating to our finance leases. The unfavorable change of \$(0.8) million in other income (expense), net for the nine months ended September 30, 2019 compared to the same period of 2018 was primarily due to \$3.5 million in interest expense related to our convertible senior notes issued in May 2018, offset in part by higher interest income on our marketable investments and a \$0.2 million gain from the sale of our convertible note held for investment.

### Liquidity and Capital Resources

To date, we have financed our operations primarily through sales of our solutions, lease facilities and net proceeds from our equity and debt financings, including the issuance of our 0.125% convertible senior notes in May 2018. As of September 30, 2019, we had \$313.8 million in working capital, which included \$120.6 million in cash and cash equivalents and \$200.4 million in marketable investments.

In May 2018, we issued \$258.8 million aggregate principal amount of our 0.125% convertible senior notes, or Notes, due May 1, 2023 in a private offering. The Notes are our senior unsecured obligations and bear interest at a fixed rate of 0.125% per annum, payable semiannually in arrears on May 1 and November 1 of each year, beginning November 1, 2018. The total net proceeds from the offering, after deducting the initial purchasers' discounts and estimated debt issuance costs, were approximately \$250.8 million. For additional information regarding the Notes, see Note 6 to the condensed consolidated financial statements included in this report.

In August 2016, we entered into a loan agreement, which we refer to as the 2016 Loan and Security Agreement, with two lenders for a revolving credit facility of up to \$50.0 million. The revolving credit facility bore a variable annual interest rate of the prime rate plus 0.50%, subject to a 0.25% increase if our adjusted EBITDA was negative at

the end of any fiscal quarter. In May 2018, we paid off the then outstanding principal balance of the revolving line of credit, and in July 2018, we terminated the 2016 Loan and Security Agreement.

We believe our existing cash and cash equivalents will be sufficient to meet our working capital and capital expenditure needs for at least the next 12 months. Our future capital requirements will depend on many factors including our growth rate, continuing market acceptance of our solution, client retention, our ability to gain new clients, the timing and extent of spending to support research and development efforts, the outcome of any pending or future litigation or other claims by third parties or governmental entities, the expansion of sales and marketing activities and personnel and the introduction of new and enhanced offerings. We may also acquire or invest in complementary businesses, technologies and intellectual property rights, which may increase our future capital requirements, both to pay acquisition costs and to support our combined operations. We may raise additional equity or debt financing at any time. We may not be able to raise additional equity or debt financing on terms acceptable to us or at all. If we are unable to raise additional capital when desired or required, our business, operating results, and financial condition would be harmed. In addition, if our operating performance during the next twelve months is below our expectations, our liquidity and ability to operate our business could be harmed.

If we raise additional funds by issuing equity or equity-linked securities, the ownership of our existing stockholders will be diluted. If we raise additional funds through the incurrence of additional indebtedness, we will be subject to increased debt service obligations and could also be subject to restrictive covenants and other operating restrictions that could harm our ability to conduct our business.

### **Cash Flows**

The following table summarizes our cash flows for the periods presented (in thousands, except percentages):

	Nine Months Ended			
	September 30, 2019	September 30, 2018	\$ Change	% Change
Net cash provided by operating activities	\$ 35,655	\$ 23,152	\$ 12,503	54 %
Net cash used in investing activities	(1,679)	(202,486)	200,807	(99)%
Net cash provided by financing activities	4,685	190,006	(185,321)	(98)%
Net increase in cash and cash equivalents	\$ 38,661	\$ 10,672	\$ 27,989	262 %

#### **Cash Flows from Operating Activities**

Cash provided by operating activities is primarily influenced by our personnel-related expenditures, data center and telecommunications carrier costs, office and facility related costs, USF contributions and other regulatory costs and the amount and timing of client payments. If we continue to improve our financial results, we expect net cash provided by operating activities to increase. Our largest source of operating cash inflows is cash collections from our clients for subscription and related usage services. Payments from clients for these services are typically received monthly.

Net cash provided by operating activities was \$35.7 million during the nine months ended September 30, 2019. Net cash provided by operating activities resulted from our net loss of \$5.4 million adjusted for non-cash items of \$52.0 million, primarily consisting of \$30.2 million of stock-based compensation, \$10.1 million of depreciation and amortization and \$9.5 million of amortization of discount and issuance costs on convertible senior notes, offset by use of cash for operating assets and liabilities of \$10.9 million primarily due the timing of cash payments to vendors and cash receipts from customers.

Net cash provided by operating activities was \$23.2 million during the nine months ended September 30, 2018. Net cash provided by operating activities resulted from our net loss of \$4.0 million adjusted for non-cash items of \$32.7 million, primarily consisting of \$21.0 million of stock-based compensation, \$7.4 million of depreciation and amortization and \$4.8 million of amortization of discount and issuance costs on convertible senior notes, offset by use of cash for operating assets and liabilities of \$5.6 million, which was primarily driven by deferred contract acquisition costs of \$5.1 million due to the deferral of incremental sales commissions in connection with adoption of ASC 606.

#### **Cash Flows from Investing Activities**

Net cash used in investing activities in the nine months ended September 30, 2019 was \$1.7 million compared to net cash used in investing activities of \$202.5 million in the nine months ended September 30, 2018.

Net cash used in investing activities in the nine months ended September 30, 2019 was comprised of \$274.4 million related to purchases of marketable investments and \$12.8 million in capital expenditures, offset by \$285.3 million of cash proceeds from maturities of marketable investments and the \$0.2 million cash proceeds related to gain from the sale of convertible notes held for investment.

#### ***Cash Flows from Financing Activities***

Net cash provided by financing activities in the nine months ended September 30, 2019 was \$4.7 million, compared to \$190.0 million in the nine months ended September 30, 2018.

Net cash provided by financing activities of \$4.7 million in the nine months ended September 30, 2019 related to cash proceeds of \$6.1 million from exercises of stock options and \$4.0 million from the sale of common stock under our ESPP, offset by payments of finance leases of \$5.4 million.

#### **Critical Accounting Policies and Estimates**

Our condensed consolidated financial statements are prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses and related disclosures. On an ongoing basis, we evaluate our estimates and assumptions. Our actual results may differ from these estimates under different assumptions or conditions.

We believe our critical accounting policies involve the greatest degree of judgment and complexity and have the greatest potential impact on our condensed consolidated financial statements.

#### ***Revenue Recognition***

Revenue is recognized when control of the promised services are transferred to customers, in an amount that reflects the consideration that we expect to receive in exchange for those services. We generate all of our revenue from contracts with customers. In contracts with multiple performance obligations, we identify each performance obligation and evaluate whether the performance obligations are distinct within the context of the contract at contract inception. Performance obligations that are not distinct at contract inception are combined. We allocate the transaction price to each distinct performance obligation proportionately based on the estimated standalone selling price for each performance obligation. We then look to how services are transferred to the customer in order to determine the timing of revenue recognition. Most services provided under our agreements result in the transfer of control over time.

Our revenue consists of subscription services and related usage as well as professional services. We charge clients subscription fees, usually billed on a monthly basis, for access to our VCC solution. The subscription fees are primarily based on the number of agent seats, as well as the specific VCC functionalities and applications deployed by the client. Agent seats are defined as the maximum number of named agents allowed to concurrently access our VCC cloud platform. Clients typically have more named agents than agent seats. Multiple named agents may use an agent seat, though not simultaneously. Substantially all of our clients purchase both subscriptions and related telephony usage. A small percentage of our clients subscribe to our platform but purchase telephony usage directly from a wholesale telecommunications service provider. We do not sell telephony usage on a stand-alone basis to any client. The related usage fees are based on the volume of minutes used for inbound and outbound client interactions. We also offer bundled plans, generally for smaller deployments, whereby the client is charged a single monthly fixed fee per agent seat that includes both subscription and unlimited usage in the contiguous 48 states and, in some cases, Canada. Professional services revenue is derived primarily from VCC implementations, including application configuration, system integration, optimization, education and training services. Clients are not permitted to take possession of our software.

We offer monthly, annual and multiple-year contracts to our clients, generally with 30 days' notice required for reductions in the number of agent seats. Increases in the number of agent seats can be provisioned almost immediately. Our clients, therefore, are able to adjust the number of agent seats used to meet their changing contact center volume needs. Our larger clients typically choose annual contracts, which generally include an implementation and ramp period of several months. Fixed subscription fees, including bundled plans, are generally billed monthly in advance, while related usage fees are billed in arrears. Support activities include technical assistance for our solution and upgrades and enhancements to our VCC cloud platform on a when-and-if-available basis, which are not billed separately.

Professional services are primarily billed on a fixed-fee basis and are performed by us directly or, alternatively, clients may also choose to perform these services themselves or engage their own third-party service providers. Revenue for professional services is recognized over time, as services are performed.

The estimation of variable consideration for each performance obligation requires us to make subjective judgments. In the early stages of our larger contracts, in order to allocate the overall transaction fee on a relative stand-alone selling price basis to our multiple performance obligations, we estimate variable consideration to be included in the transaction fee to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. This requires the estimate of unit quantities, especially during the initial ramp period of the contract, during which we bill under an 'actual usage' model for subscription-related services.

We recognize revenue on fixed fee professional services performance obligations based on the proportion of labor hours expended compared to the total hours expected to complete the related performance obligation.

The revenue recognition standards include guidance relating to any tax assessed by a governmental authority that is directly imposed on a revenue-producing transaction between a seller and a customer and may include, but is not limited to, sales, use, value added and excise taxes. We record USF contributions and other regulatory costs on a gross basis in our condensed consolidated statements of operations and comprehensive loss and record surcharges and sales, use and excise taxes billed to our clients on a net basis. The cost of gross USF contributions payable to the USAC and suppliers is presented as a cost of revenue in the condensed consolidated statements of operations and comprehensive loss.

### **Recent Accounting Pronouncements**

Refer to Note 1 of the notes to condensed consolidated financial statements included in this report.

### **Off-Balance Sheet Arrangements**

As of September 30, 2019, we did not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K, such as the use of unconsolidated subsidiaries, structured finance, special purpose entities or variable interest entities.

### **Contractual Obligations**

Our principal contractual obligations consist of future payment obligations under finance leases to finance data centers and other computer and networking equipment, debt (see Note 6 to the condensed consolidated financial statements included in this report), operating leases agreements for office space, research and development, and sales and marketing facilities, and agreements with third parties to provide co-location hosting, telecommunication usage and equipment maintenance services.

These commitments as of December 31, 2018 are disclosed in our Annual Report on Form 10-K for the year ended December 31, 2018, and did not change materially during the nine months ended September 30, 2019 except for certain hosting and telecommunications agreements.

As of September 30, 2019, \$258.8 million of convertible senior notes were outstanding. The convertible senior notes are due May 1, 2023. For additional information regarding the convertible senior notes, see Note 6 to the condensed consolidated financial statements included in this report.

As of September 30, 2019, our commitments under various hosting and telecommunications agreements for terms ranging up to 36 months totaled \$6.1 million. These agreements require us to make monthly payments over the service term in exchange for certain network services.

### **ITEM 3. Quantitative and Qualitative Disclosure about Market Risk**

We are exposed to market risk in the ordinary course of our business. Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of fluctuations in interest rates and foreign currency exchange rates. We do not hold or issue financial instruments for trading purposes. For a discussion of market risk, see “Quantitative and Qualitative Disclosure about Market Risk” in Item 7A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2018. Our exposure to market risk has not changed materially since December 31, 2018.

We had cash and cash equivalents, and marketable securities totaling \$321.0 million as of September 30, 2019. Cash equivalents and marketable securities were invested primarily in U.S. agency securities and government sponsored securities, U.S. treasury, municipal bonds, corporate bonds, commercial paper, certificates of deposit and money market funds. Our investment policy is focused on the preservation of capital and supporting our liquidity needs. Under the policy, we invest in highly rated securities, while limiting the amount of credit exposure to any one issuer other than the U.S. government. We do not invest in financial instruments for trading or speculative purposes, nor do we use leveraged financial instruments. We utilize external investment managers who adhere to the guidelines of our investment policy. A hypothetical 100 basis point change in interest rates would not have a material impact on the value of our cash and cash equivalents or marketable investments.

In May 2018, we issued \$258.8 million aggregate principal amount of convertible senior notes. The fair value of the convertible senior notes is subject to interest rate risk, market risk and other factors due to the conversion feature. The fair value of the convertible senior notes will generally increase as our common stock price increases and will generally decrease as our common stock price declines. The interest and market value changes affect the fair value of the convertible senior notes but do not impact our financial position, cash flows or results of operations due to the fixed nature of the debt obligation. Additionally, we carry the convertible senior notes at face value less unamortized discount on our condensed consolidated balance sheets, and we present the fair value for required disclosure purposes only.

### **ITEM 4. Controls and Procedures**

#### ***Evaluation of Disclosure Controls and Procedures***

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of September 30, 2019.

Based on management’s evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of September 30, 2019, our disclosure controls and procedures were designed, and were effective, to provide assurance at a reasonable level that the information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms, and that such information is accumulated and communicated to our management as appropriate to allow timely decisions regarding required disclosures.

In designing and evaluating our disclosure controls and procedures, management recognizes that any disclosure controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

#### ***Changes in Internal Control over Financial Reporting***

During the three months ended September 30, 2019, there was no change in our internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## **PART II. OTHER INFORMATION**

### **ITEM 1. Legal Proceedings**

Information with respect to this Item may be found under the heading “Legal Matters” in Note 10 to the condensed consolidated financial statements in this Quarterly Report on Form 10-Q, which information is incorporated herein by reference.

### **ITEM 1A. Risk Factors**

There have been no material changes from the Risk Factors previously disclosed in Part 1, Item 1A, of our Annual Report on Form 10-K for the fiscal year ended December 31, 2018. In addition to the other information set forth in this report, you should carefully consider the Risk Factors discussed in our Annual Report on Form 10-K as they could materially affect our business, financial condition and future results.

### **ITEM 2. Unregistered Sales of Equity Securities and Use of Proceeds**

Not applicable.

### **ITEM 3. Defaults Upon Senior Securities**

None.

### **ITEM 4. Mine Safety Disclosures**

Not applicable.

### **ITEM 5. Other Information**

None.

**ITEM 6. Exhibits**

<b>Exhibit Number</b>	<b>Description</b>
<a href="#">31.1</a> *	<a href="#">Certification of Chief Executive Officer of Five9, Inc. Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a>
<a href="#">31.2</a> *	<a href="#">Certification of Chief Financial Officer of Five9, Inc. Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a>
<a href="#">32.1</a> **	<a href="#">Certification of Chief Executive Officer and Chief Financial Officer of Five9, Inc. Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</a>
101.INS*	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH*	XBRL Taxonomy Schema Linkbase Document
101.CAL*	XBRL Taxonomy Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Definition Linkbase Document
101.LAB*	XBRL Taxonomy Labels Linkbase Document
101.PRE*	XBRL Taxonomy Presentation Linkbase Document

\* Filed herewith.

\*\* Furnished herewith.





## CERTIFICATION OF CHIEF FINANCIAL OFFICER

PURSUANT TO SECTION 302 OF  
THE SARBANES-OXLEY ACT OF 2002

I, Barry Zwarenstein, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Five9, Inc. for the quarter ended September 30, 2019;
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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) 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
  - (d) 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 5, 2019

By: \_\_\_\_\_ /s/ Barry Zwarenstein  
Barry Zwarenstein  
Chief Financial Officer  
(Principal Financial Officer)

