

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 March 31, 2021

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.)

3001 Bishop Drive, Suite 350
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:

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
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 April 23, 2021, there were 67,043,033 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, 2020 and Part II, Item 1A, of this Quarterly Report, 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 retain and expand our sales force will 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;
- our growth depends in part on the success of our strategic relationships with third parties and our failure to successfully maintain, 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;
- adverse economic conditions may harm our business;
- the effects of the COVID-19 pandemic have materially affected how we, our clients and business partners are operating, and the duration and extent to which it will impact our future results of operations and overall financial performance remain uncertain;
- 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 our business;
- we may acquire other companies, or technologies or be the target of strategic transactions, or be impacted by transactions by other companies, which could divert our management’s attention, result in additional dilution to our stockholders and otherwise disrupt our operations and harm our operating results;
- 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;
- 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)

	March 31, 2021	December 31, 2020
	(Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 176,326	\$ 220,372
Marketable investments	467,143	383,171
Accounts receivable, net	51,987	48,731
Prepaid expenses and other current assets	19,673	16,149
Deferred contract acquisition costs, net	23,249	20,695
Total current assets	738,378	689,118
Property and equipment, net	58,296	51,213
Operating lease right-of-use assets	44,960	9,010
Intangible assets, net	48,737	51,684
Goodwill	165,420	165,420
Marketable investments	—	42,127
Other assets	3,135	3,236
Deferred contract acquisition costs, net — less current portion	59,823	51,934
Total assets	\$ 1,118,749	\$ 1,063,742
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 16,056	\$ 17,145
Accrued and other current liabilities	52,960	44,450
Operating lease liabilities	5,478	3,912
Accrued federal fees	5,024	3,745
Sales tax liabilities	1,168	1,714
Finance lease liabilities	156	612
Deferred revenue	32,835	31,983
Total current liabilities	113,677	103,561
Convertible senior notes	782,241	643,316
Sales tax liabilities — less current portion	862	857
Operating lease liabilities — less current portion	45,135	5,379
Other long-term liabilities	32,628	31,465
Total liabilities	974,543	784,578
Commitments and contingencies (Note 10)		
Stockholders' equity:		
Common stock	67	67
Additional paid-in capital	331,528	476,941
Accumulated other comprehensive income	379	335
Accumulated deficit	(187,768)	(198,179)
Total stockholders' equity	144,206	279,164
Total liabilities and stockholders' equity	\$ 1,118,749	\$ 1,063,742

See accompanying notes to the unaudited condensed consolidated financial statements.

FIVE9, INC.**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
AND COMPREHENSIVE LOSS**

(Unaudited, in thousands, except per share data)

	Three Months Ended	
	March 31, 2021	March 31, 2020
Revenue	\$ 137,882	\$ 95,088
Cost of revenue	59,803	40,037
Gross profit	78,079	55,051
Operating expenses:		
Research and development	22,121	15,189
Sales and marketing	44,799	30,160
General and administrative	22,245	14,658
Total operating expenses	89,165	60,007
Loss from operations	(11,086)	(4,956)
Other (expense) income, net:		
Interest expense	(1,938)	(3,484)
Interest income and other	175	1,072
Total other (expense) income, net	(1,763)	(2,412)
Loss before income taxes	(12,849)	(7,368)
(Benefit from) provision for income taxes	(517)	69
Net loss	\$ (12,332)	\$ (7,437)
Net loss per share:		
Basic and diluted	\$ (0.18)	\$ (0.12)
Shares used in computing net loss per share:		
Basic and diluted	66,721	61,705
Comprehensive Loss:		
Net loss	\$ (12,332)	\$ (7,437)
Other comprehensive income	44	1,054
Comprehensive loss	\$ (12,288)	\$ (6,383)

See accompanying notes to the unaudited condensed consolidated financial statements.

FIVE9, INC.
CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY
(Unaudited, in thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance as of December 31, 2019	61,544	\$ 61	\$ 351,870	\$ 576	\$ (156,049)	\$ 196,458
Issuance of common stock upon exercise of stock options	160	1	2,596	—	—	2,597
Issuance of common stock upon vesting of restricted stock units	288	—	—	—	—	—
Stock-based compensation	—	—	13,794	—	—	13,794
Other comprehensive income	—	—	—	1,054	—	1,054
Net loss	—	—	—	—	(7,437)	\$ (7,437)
Balance as of March 31, 2020	<u>61,992</u>	<u>\$ 62</u>	<u>\$ 368,260</u>	<u>\$ 1,630</u>	<u>\$ (163,486)</u>	<u>\$ 206,466</u>
Balance as of December 31, 2020	66,496	\$ 67	\$ 476,941	\$ 335	\$ (198,179)	\$ 279,164
Cumulative effect adjustment due to adoption of ASU 2020-06 ⁽¹⁾	—	—	(168,412)	—	22,743	(145,669)
Issuance of common stock upon partial conversion of the 2023 convertible senior notes	143	—	(143)	—	—	(143)
Partial unwind of capped calls and retirement of common stock related to the 2023 convertible senior notes	(19)	—	19	—	—	19
Issuance of common stock upon exercise of stock options	123	—	2,215	—	—	2,215
Issuance of common stock upon vesting of restricted stock units	286	—	—	—	—	—
Stock-based compensation	—	—	20,908	—	—	20,908
Other comprehensive income	—	—	—	44	—	44
Net loss	—	—	—	—	(12,332)	(12,332)
Balance as of March 31, 2021	<u>67,029</u>	<u>\$ 67</u>	<u>\$ 331,528</u>	<u>\$ 379</u>	<u>\$ (187,768)</u>	<u>\$ 144,206</u>

⁽¹⁾ Effective January 1, 2021, the Company adopted ASU 2020-06. Accordingly, the Company recorded a net reduction to opening accumulated deficit of \$22.7 million and a net reduction to opening additional paid-in capital of \$168.4 million as of January 1, 2021 due to the cumulative impact of adopting this new standard. See Note 1 for more information.

See accompanying notes to the unaudited condensed consolidated financial statements.

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

	Three Months Ended	
	March 31, 2021	March 31, 2020
Cash flows from operating activities:		
Net loss	\$ (12,332)	\$ (7,437)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization	8,763	4,970
Amortization of operating lease right-of-use assets	2,389	1,394
Amortization of commission costs	5,540	3,471
Amortization of premium on marketable investments	1,682	177
Provision for doubtful accounts	160	255
Stock-based compensation	20,908	13,794
Amortization of discount and issuance costs on convertible senior notes	974	3,320
Change in fair value of contingent consideration	2,500	—
Other	186	147
Changes in operating assets and liabilities:		
Accounts receivable	(3,543)	(2,620)
Prepaid expenses and other current assets	(3,524)	(2,754)
Deferred contract acquisition costs	(15,983)	(8,166)
Other assets	101	(2,132)
Accounts payable	351	(1,121)
Accrued and other current liabilities	5,299	4,802
Accrued federal fees and sales tax liabilities	738	(707)
Deferred revenue	322	3,378
Other liabilities	(766)	(377)
Net cash provided by operating activities	13,765	10,394
Cash flows from investing activities:		
Purchases of marketable investments	(163,683)	(62,339)
Proceeds from maturities of marketable investments	120,182	134,610
Purchases of property and equipment	(8,229)	(6,045)
Cash paid to acquire substantially all of the assets of Whendu	—	(100)
Net cash (used in) provided by investing activities	(51,730)	66,126
Cash flows from financing activities:		
Repurchase of a portion of 2023 convertible senior notes, net of costs	(7,840)	—
Proceeds from exercise of common stock options	2,215	2,596
Payments of finance leases	(456)	(1,229)
Net cash (used in) provided by financing activities	(6,081)	1,367
Net (decrease) increase in cash and cash equivalents	(44,046)	77,887
Cash and cash equivalents:		
Beginning of period	220,372	77,976
End of period	\$ 176,326	\$ 155,863
Supplemental disclosures of cash flow data:		
Cash paid for interest	\$ 13	\$ 82
Cash paid for income taxes	\$ 73	\$ 109
Non-cash investing and financing activities:		
Equipment purchased and unpaid at period-end	\$ 7,515	\$ 2,280
Capitalization of leasehold improvements and furniture and fixtures through non-cash lease incentive	\$ 4,815	\$ —

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, Asia and Australia, 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, 2020. 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 within operating activities in the condensed consolidated statements of cash flows have been reclassified to conform to the current period presentation. The condensed consolidated balance sheet and the consolidated statement of stockholders' equity included in this Quarterly Report as of March 31, 2021 differ from the Form 10-K for the year ended December 31, 2020 as it reflects an immaterial error correction due to the reclassification of \$2.3 million from treasury stock to additional paid-in-capital. This reclassification was from the shares received for the partial unwind of capped calls related to the 2023 convertible senior notes.

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, as well as the fair value of liabilities assumed through business combinations. 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, 2020.

Recently Adopted Accounting Pronouncements

In August 2020, the FASB issued ASU No. 2020-06, Debt-Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging-Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity ("ASU 2020-06"), which simplifies the accounting for convertible instruments by removing the separation models for (1) convertible debt with a cash conversion feature and (2) convertible instruments with a beneficial conversion feature. The Company elected to early adopt ASU 2020-06 as of January 1, 2021 using a modified retrospective transition method. Applying the transition guidance, the Company was required to apply the guidance to all impacted financial instruments that were outstanding as of January 1, 2021 with the cumulative effect recognized as an adjustment to the opening balance of accumulated deficit. As a result of early adopting ASU 2020-06, the Company made certain adjustments to its accounting for the outstanding 0.125% convertible senior notes due 2023 (the "2023 convertible senior notes") and the outstanding 0.500% convertible senior notes due 2025 (the "2025 convertible senior notes", and, together with the 2023 convertible senior notes, the "convertible senior notes"). The adoption of ASU 2020-06 resulted in the re-combination of the liability and equity components of the convertible senior notes into a single liability instrument, which required the Company to record a \$168.4 million decrease in additional paid in capital from the derecognition

of the separated equity components of these notes, a \$145.7 million increase in debt from the derecognition of the discount associated with the separated equity components of the convertible senior notes, and a \$22.7 million cumulative effect decrease to the opening balance of its accumulated deficit as of January 1, 2021 upon transition. Interest expense recognized in future periods will be reduced as a result of accounting for the convertible senior notes as a single liability instrument. Since the Company had a net loss for the three months ended March 31, 2021, the convertible senior notes were determined to be anti-dilutive and therefore had no impact to basic or diluted net loss per share for the period as a result of adopting ASU 2020-06.

In December 2019, the FASB issued ASU No. 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes (“ASU 2019-12”), which amends its guidance to simplify the accounting for income taxes by, among other things, removing exceptions to certain general principles in Topic 740, Income Taxes. The standard is effective for the Company beginning in the first quarter of 2021. The Company has adopted ASU 2019-12 and concluded that the impact on its condensed consolidated financial statements was immaterial.

Recent Accounting Pronouncements Not Yet Effective

The Company has reviewed or is in the process of evaluating all 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 condensed 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, net, contract assets and contract liabilities from contracts with customers (in thousands):

	March 31, 2021	December 31, 2020
Accounts receivable, net	\$ 51,987	\$ 48,731
Deferred contract acquisition costs, net:		
Current	\$ 23,249	\$ 20,695
Non-current	59,823	51,934
Total deferred contract acquisition costs, net	\$ 83,072	\$ 72,629
Contract assets and contract liabilities:		
Contract assets (included in prepaid expenses and other current assets)	\$ 1,463	\$ 1,297
Contract liabilities (deferred revenue)	32,835	31,983
Contract liabilities (deferred revenue) (included in other long-term liabilities)	2,842	3,373
Net contract liabilities	\$ (34,214)	\$ (34,059)

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 an estimated 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 months ended March 31, 2021, the Company recognized revenue of \$20.3 million related to its contract liabilities at December 31, 2020.

Remaining Performance Obligations

As of March 31, 2021, 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 \$369.8 million. The Company expects to recognize revenue on approximately three-fourths 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 March 31, 2021 and December 31, 2020 were as follows (in thousands):

	March 31, 2021			
	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
<u>Short-Term Marketable Investments</u>				
Certificates of deposit	\$ 3,481	\$ —	\$ —	\$ 3,481
U.S. treasury	359,453	78	(1)	359,530
U.S. agency and government sponsored securities	65,416	11	—	65,427
Commercial paper	11,290	—	—	11,290
Municipal bonds	14,599	—	(6)	14,593
Corporate bonds	12,824	—	(2)	12,822
Total	\$ 467,063	\$ 89	\$ (9)	\$ 467,143

	December 31, 2020			
	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
<u>Short-Term Marketable Investments</u>				
Certificates of deposit	\$ 3,479	\$ 1	\$ —	\$ 3,480
U.S. treasury	287,315	41	(4)	287,352
U.S. agency securities	67,227	12	(6)	67,233
Commercial paper	5,093	—	—	5,093
Municipal bonds	2,684	1	(1)	2,684
Corporate bonds	17,323	6	—	17,329
Total	\$ 383,121	\$ 61	\$ (11)	\$ 383,171

	December 31, 2020			
	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
<u>Long-term Marketable Investments</u>				
U.S. treasury	\$ 10,189	\$ —	\$ —	\$ 10,189
U.S. agency securities	31,469	9	(1)	31,477
Municipal bonds	461	—	—	461
Total	\$ 42,119	\$ 9	\$ (1)	\$ 42,127

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 March 31, 2021 and December 31, 2020 (in thousands):

	March 31, 2021		December 31, 2020	
	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value
U.S. treasury	\$ (1)	\$ 20,200	\$ (4)	\$ 78,549
U.S. agency securities	—	—	(7)	39,443
Municipal bonds	(6)	12,828	(1)	1,201
Corporate bonds	(2)	11,058	(1)	1,347
Total	\$ (9)	\$ 44,086	\$ (13)	\$ 120,540

Although the Company had certain available-for-sale debt securities in an unrealized loss position as of March 31, 2021, no impairment loss was recorded since it did not intend to sell them, did not anticipate a need to sell them, and the decline in fair value was not due to any credit-related factors.

The amortized cost and fair values of the Company's marketable investments by contractual maturity as of March 31, 2021 and December 31, 2020 were as follows (in thousands):

	March 31, 2021		December 31, 2020	
	Cost	Fair Value	Cost	Fair Value
Due within one year	\$ 467,063	\$ 467,143	\$ 383,121	\$ 383,171
Due after one year through two years	—	—	42,119	42,127
Total	\$ 467,063	\$ 467,143	\$ 425,240	\$ 425,298

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):

	March 31, 2021			
	Level 1	Level 2	Level 3	Total
Assets				
Cash equivalents				
Money market funds	\$ 58,228	\$ —	\$ —	\$ 58,228
Municipal bonds	—	3,161	—	3,161
Total cash equivalents	\$ 58,228	\$ 3,161	\$ —	\$ 61,389
Marketable investments (Short term)				
Certificates of deposit	\$ —	\$ 3,481	\$ —	\$ 3,481
U.S. treasury	359,530	—	—	359,530
U.S. agency securities and government sponsored securities	—	65,427	—	65,427
Commercial paper	—	11,290	—	11,290
Municipal bonds	—	14,593	—	14,593
Corporate bonds	—	12,822	—	12,822
Total marketable investments	\$ 359,530	\$ 107,613	\$ —	\$ 467,143
Liabilities				
Contingent consideration	\$ —	\$ —	\$ 20,600	\$ 20,600

	December 31, 2020			
	Level 1	Level 2	Level 3	Total
Assets				
Cash equivalents				
Money market funds	\$ 89,888	\$ —	\$ —	\$ 89,888
U.S. treasury	39,997	—	—	39,997
Total cash equivalents	\$ 129,885	\$ —	\$ —	\$ 129,885
Marketable investments (Short and Long-term)				
Certificates of deposit	\$ —	\$ 3,480	\$ —	\$ 3,480
U.S. treasury	297,540	—	—	297,540
U.S. agency securities	—	98,711	—	98,711
Commercial paper	—	5,093	—	5,093
Municipal bonds	—	3,145	—	3,145
Corporate bonds	—	17,329	—	17,329
Total marketable investments	\$ 297,540	\$ 127,758	\$ —	\$ 425,298
Liabilities				
Contingent consideration	\$ —	\$ —	\$ 18,100	\$ 18,100

As of March 31, 2021 and December 31, 2020, the estimated fair value of the Company's outstanding 2023 convertible senior notes was \$194.7 million and \$253.1 million, respectively. As of March 31, 2021 and December 31, 2020, the estimated fair value of the Company's outstanding 2025 convertible senior notes was \$1,001.0 million and \$1,098.5 million, respectively. The fair values were 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 have been classified as Level 2 in the fair value hierarchy. See Note 6 for further information on the Company's convertible senior notes.

As part of the agreement to acquire Inference Solutions Inc. ("Inference") in November 2020, the Company may be obligated to pay contingent earn out consideration of up to \$24.0 million based upon achievement of certain milestones and relative thresholds during the earn out measurement period which ends on December 31, 2021. The fair value of the contingent consideration arrangement, estimated to be \$20.6 million as of March 31, 2021, is classified within Level 3 and is determined using a probability-based scenario analysis approach. The resulting probability-weighted contingent consideration amounts were discounted based on the Company's estimated cost of debt. Future changes in the achievement of certain milestones and relative thresholds could result in a material change to the fair value of the contingent consideration, and such changes will be recorded in general and administrative expense in the consolidated statements of operations and comprehensive loss. During the first quarter of 2021, the Company recognized \$2.5 million of contingent consideration expense due to an increase in fair value of the contingent consideration as a result of the estimated achievement of the forecast (and reduced uncertainty about receiving a payment), the shorter time to payment, and a decrease in the cost of debt.

A reconciliation of the beginning and ending balance for contingent consideration consisted of the following (in thousands):

	Three Months Ended March 31, 2021
Beginning of the period, December 31, 2020	\$ 18,100
Change in fair value of contingent consideration	2,500
End of the period, March 31, 2021	<u>\$ 20,600</u>

There were no assets or liabilities measured at fair value on a non-recurring basis as of March 31, 2021 and December 31, 2020.

The Company's other financial instruments' fair value, including accounts receivable, accounts payable and other current liabilities, approximate its carrying value due to the relatively short maturity of those instruments. The carrying amounts of the Company's operating and finance leases approximate their fair value, which is the present value of expected future cash payments based on assumptions about current interest rates and the creditworthiness of the Company.

4. Financial Statement Components

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

	March 31, 2021	December 31, 2020
Cash	\$ 114,937	\$ 90,487
Money market funds	58,228	89,888
U.S. treasury	—	39,997
Municipal bonds	3,161	—
Total cash and cash equivalents	<u>\$ 176,326</u>	<u>\$ 220,372</u>

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

	March 31, 2021	December 31, 2020
Trade accounts receivable	\$ 47,268	\$ 42,366
Unbilled trade accounts receivable, net of advance client deposits	4,859	6,492
Allowance for doubtful accounts	(140)	(127)
Accounts receivable, net	<u>\$ 51,987</u>	<u>\$ 48,731</u>

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

	March 31, 2021	December 31, 2020
Prepaid expenses	\$ 11,431	\$ 9,816
Other current assets	6,779	5,036
Contract assets	1,463	1,297
Prepaid expenses and other current assets	<u>\$ 19,673</u>	<u>\$ 16,149</u>

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

	March 31, 2021	December 31, 2020
Computer and network equipment	\$ 95,056	\$ 89,763
Computer software	27,256	25,888
Internal-use software development costs	500	500
Furniture and fixtures	3,965	3,372
Leasehold improvements	6,195	2,335
Property and equipment	132,972	121,858
Accumulated depreciation and amortization	(74,676)	(70,645)
Property and equipment, net	<u>\$ 58,296</u>	<u>\$ 51,213</u>

Depreciation and amortization expense associated with property and equipment was \$5.8 million and \$3.9 million, respectively, for the three months ended March 31, 2021 and 2020, respectively.

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

	March 31, 2021	December 31, 2020
Gross	\$ 44,064	\$ 45,021
Less: accumulated depreciation and amortization	(41,667)	(41,908)
Total	<u>\$ 2,397</u>	<u>\$ 3,113</u>

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

	March 31, 2021	December 31, 2020
Accrued expenses	18,724	\$ 15,217
Accrued compensation and benefits	34,236	29,233
Accrued and other current liabilities	<u>\$ 52,960</u>	<u>\$ 44,450</u>

Other long-term liabilities consisted of the following (in thousands):

	March 31, 2021	December 31, 2020
Deferred revenue	\$ 2,842	\$ 3,373
Deferred tax liabilities	3,817	4,438
Other long-term liabilities	5,369	5,554
Contingent consideration	20,600	18,100
Other long-term liabilities	<u>\$ 32,628</u>	<u>\$ 31,465</u>

5. Goodwill and Intangible Assets

Goodwill

There was no activity in the Company's goodwill balance during the three months ended March 31, 2021.

Intangible Assets

The following table summarizes the activity in the Company's intangible assets balance during the three months ended March 31, 2021 (in thousands):

	Intangible Assets
Beginning of the period, December 31, 2020	\$ 51,684
Amortization	(2,947)
End of the period, March 31, 2021	\$ 48,737

The components of intangible assets were as follows (in thousands):

	March 31, 2021				December 31, 2020			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Remaining Amortization period (Years)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Remaining Amortization period (Years)
Developed technology	\$ 56,214	\$ (9,526)	\$ 46,688	4.7	\$ 56,214	\$ (6,761)	\$ 49,453	4.9
Acquired workforce	470	(216)	254	1.7	470	(177)	293	1.9
Customer relationships	1,600	(181)	1,419	4.5	1,600	(101)	1,499	4.7
Trademarks	500	(124)	376	1.6	500	(61)	439	1.8
Total	\$ 58,784	\$ (10,047)	\$ 48,737	4.6	\$ 58,784	\$ (7,100)	\$ 51,684	4.9

Amortization expense for intangible assets was \$2.9 million and \$1.1 million during the three months ended March 31, 2021 and 2020, respectively. The increase in amortization expense during the three months ended March 31, 2021 was due to the acquisition of intangible assets from Inference in November 2020 and Virtual Observer in April 2020.

As of March 31, 2021, the expected future amortization expense for intangible assets was as follows (in thousands):

Period	Expected Future Amortization Expense
Remaining 2021	\$ 8,840
2022	11,704
2023	10,870
2024	7,527
2025	5,596
Thereafter	4,200
Total	\$ 48,737

6. Debt

2025 Convertible Senior Notes and Related Capped Call Transactions

In May and June 2020, the Company issued \$747.5 million aggregate principal amount of the 2025 convertible senior notes in a private offering, which aggregate principal amount included the exercise in full of the initial purchasers' option to purchase up to an additional \$97.5 million principal amount of the 2025 convertible senior notes. The 2025 convertible senior notes mature on June 1, 2025 and bear interest at a fixed rate of 0.500% per annum, payable semiannually in arrears on June 1 and December 1 of each year, beginning on December 1, 2020. The total net proceeds from the issuance of the 2025 convertible senior notes, after deducting initial purchasers' discounts and commissions and estimated debt issuance costs, were approximately \$728.8 million.

Each \$1,000 principal amount of the 2025 convertible senior notes is initially convertible into 7.4437 shares of the Company's common stock (the "2025 Conversion Option"), which is equivalent to an initial conversion price of approximately \$134.34 per share of common stock, subject to adjustment upon the occurrence of specified events. The initial conversion price represents a premium of approximately 30% to the \$103.34 per share closing price of the Company's common stock on The Nasdaq Global Market on May 21, 2020. The 2025 convertible senior notes are convertible, in multiples of \$1,000 principal amount, at the option of the holders prior to the close of business on the business day immediately preceding March 1, 2025, only under the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on September 30, 2020 (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 conversion price on each applicable trading day; (2) during the five business day period after any five consecutive trading day period (the "2025 Measurement Period") in which the trading price (as defined in the 2025 Indenture governing the 2025 convertible senior notes) per \$1,000 principal amount of the 2025 convertible senior notes for each trading day of the 2025 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 2025 convertible senior 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 March 1, 2025 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 2025 convertible senior 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 2025 convertible senior notes), subject to certain conditions, holders may require the Company to repurchase for cash all or any portion of their 2025 convertible senior 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 2025 convertible senior 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 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.

There have been no changes to the initial conversion price of the 2025 convertible senior notes since issuance. The closing market price of the Company's common stock of \$156.33 per share on March 31, 2021, the last trading day during the three months ended March 31, 2021, was below \$174.64 per share, which represents 130% of the initial conversion price of \$134.34 per share. Additionally, 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, March 31, 2021, was not greater than or equal to 130% of the initial conversion price. As such, during the three months ended March 31, 2021, the conditions allowing holders of the 2025 convertible senior notes to convert were not met. The 2025 convertible senior notes are therefore not convertible during the three months ended June 30, 2021.

The Company may not redeem the 2025 convertible senior notes prior to June 6, 2023. The Company may redeem for cash all or any portion of the 2025 convertible senior notes, at its option, on or after June 6, 2023 and prior to March 1, 2025 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 2025 convertible senior notes to be redeemed, plus accrued and unpaid interest, if any, to, but excluding, the redemption date. No sinking fund is provided for the 2025 convertible senior notes.

The 2025 convertible senior notes are the Company's senior unsecured obligations and rank senior in right of payment to any of the Company's indebtedness that is expressly subordinated in right of payment to the 2025

convertible senior notes; equal in right of payment to any of the Company's unsecured indebtedness that is not so subordinated (including the 2023 convertible senior notes); 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.

Prior to the adoption of ASU 2020-06 on January 1, 2021 and in accounting for the issuance of the 2025 convertible senior notes, the 2025 convertible senior 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 2025 Conversion Option was \$158.3 million and was determined by deducting the fair value of the liability component from the par value of the 2025 convertible senior notes. The equity component was recorded in additional paid-in-capital and was not re-measured as long as it continued to meet the conditions for equity classification. The excess of the principal amount of the liability component over its carrying amount (the "Debt Discount") was amortized to interest expense over the contractual term of the 2025 convertible senior notes at an effective interest rate of 5.76%.

Prior to the adoption of ASU 2020-06 on January 1, 2021 and in accounting for the debt issuance costs of \$18.7 million related to the 2025 convertible senior notes, the Company allocated the total amount incurred to the liability and equity components of the 2025 convertible senior notes based on their relative values. Issuance costs attributable to the liability component were \$14.7 million and were amortized to interest expense using the effective interest method over the contractual term of the 2025 convertible senior notes. Issuance costs attributable to the equity component were netted with the equity component in additional paid-in-capital.

On January 1, 2021, the Company elected to early adopt ASU 2020-06 based on a modified retrospective transition method. Under such transition, prior-period information has not been retrospectively adjusted.

In accounting for the 2025 convertible senior notes after adoption of ASU 2020-06, the 2025 convertible senior notes are accounted for as a single liability, and the carrying amount of the 2025 convertible senior notes is \$731.9 million as of March 31, 2021, with principal of \$747.5 million, net of issuance cost of \$15.6 million. The 2025 senior convertible notes were classified as long term liabilities as of March 31, 2021. The issuance cost related to the 2025 convertible senior notes is being amortized to interest expense over the contractual term of the 2025 convertible senior notes at an effective interest rate 1.0%.

The net carrying amount of the 2025 convertible senior notes as of March 31, 2021 (post-ASU 2020-06 adoption) and as of December 31, 2020 (pre-ASU 2020-06 adoption) was as follows (in thousands):

	March 31, 2021	December 31, 2020
Principal	\$ 747,500	\$ 747,500
Unamortized debt discount	—	(141,792)
Unamortized issuance costs	(15,619)	(13,192)
Net carrying amount	<u>\$ 731,881</u>	<u>\$ 592,516</u>

The net carrying amount of the equity component of the 2025 convertible senior notes as of March 31, 2021 (post-ASU 2020-06 adoption) and as of December 31, 2020 (pre-ASU 2020-06 adoption) was as follows (in thousands):

	March 31, 2021	December 31, 2020
Equity component	\$ —	\$ 158,321
Issuance costs	—	(3,958)
Net carrying amount	<u>\$ —</u>	<u>\$ 154,363</u>

Interest expense related to the 2025 convertible senior notes was as follows (in thousands):

	Three Months Ended March 31, 2021
Contractual interest expense	\$ 934
Amortization of debt discount	—
Amortization of issuance costs	890
Total interest expense	<u>\$ 1,824</u>

In connection with the issuance of the 2025 convertible senior notes, the Company entered into privately negotiated capped call transactions (the "2025 Capped Call Transactions") with certain financial institutions. The 2025 Capped Call Transactions are expected generally to reduce the potential dilution to the Company's common stock in connection with any conversion of the 2025 convertible senior notes and/or offset any cash payments the Company is required to make in excess of the principal amount of converted 2025 convertible senior 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 2025 Capped Call Transactions was \$206.68 per share, and is subject to certain adjustments under the terms of the 2025 Capped Call Transactions. The 2025 Capped Call Transactions cover, subject to anti-dilution adjustments, approximately 5.6 million shares of the Company's common stock. For accounting purposes, the 2025 Capped Call Transactions are separate transactions, and not integrated with the issuance of the 2025 convertible senior notes. As these transactions meet certain accounting criteria, the 2025 Capped Call Transactions are recorded in stockholders' equity and are not accounted for as derivatives. The cost to the Company of the 2025 Capped Call Transactions was \$90.5 million, which was recorded as a reduction to additional paid-in capital.

Maturity of the Company's 2025 convertible senior notes as of March 31, 2021 was as follows (in thousands):

Period	Amount to Mature
2025 (Maturity date of June 1, 2025)	\$ 747,500
Total	\$ 747,500

2023 Convertible Senior Notes and Related Capped Call Transactions

In May 2018, the Company issued \$258.8 million aggregate principal amount of 2023 convertible senior notes in a private offering. The 2023 convertible senior notes mature on May 1, 2023 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. The total net proceeds from the offering, after deducting initial purchasers' discounts and commissions and estimated debt issuance costs, was approximately \$250.8 million.

In May 2020, the Company used part of the net proceeds from the issuance of the 2025 convertible senior notes to repurchase, exchange or otherwise retire approximately \$181.0 million aggregate principal amount of the 2023 convertible senior notes in privately-negotiated transactions for aggregate consideration of \$449.6 million, consisting of \$181.0 million in cash and 2,723,581 shares of the Company's common stock (the "2023 Note Repurchase Transactions").

As of March 31, 2021, after giving effect to the 2023 Note Repurchase Transactions and other settlements upon conversion requests, approximately \$51.0 million aggregate principal amount of 2023 convertible senior notes remained outstanding.

The 2023 Note Repurchase Transactions were accounted for as a debt extinguishment. Pursuant to ASC Subtopic 470-20 under existing accounting rules prior to ASU 2020-06 adoption, total consideration for the 2023 Note Repurchase Transactions was separated into liability and equity components by estimating the fair value of a similar liability without a conversion option and assigning the residual value to the equity component. The gain or loss on extinguishment of the debt was subsequently determined by comparing the repurchase consideration allocated to the liability component to the sum of the carrying value of the liability component, net of the proportionate amounts of unamortized debt discount and the remaining unamortized debt issuance costs. Of the \$449.6 million in aggregate consideration paid by the Company in connection with the 2023 Note Repurchase Transactions, \$155.8 million and \$293.8 million were allocated to the debt and equity components, respectively, using an effective interest rate of 5.32% to determine the fair value of the liability component. This interest rate was based on the income and market-based approaches used to determine the effective interest rate of the 2023 convertible senior notes, adjusted for the remaining term of the 2023 convertible senior notes. As of the settlement of the 2023 Note Repurchase Transactions, the carrying value of the 2023 convertible senior notes subject to the 2023 Note Repurchase Transactions, net of unamortized debt discount and issuance costs, was \$150.4 million. The Company also incurred approximately \$0.5 million in third party transaction costs related to the 2023 Note Repurchase Transactions. These costs were allocated to the liability and equity components in proportion to the allocation of consideration transferred at settlement and accounted for as debt extinguishment costs and equity reacquisition costs, respectively. The 2023 Note Repurchase Transactions resulted in a \$5.8 million loss on early debt extinguishment in the second quarter of fiscal 2020, of which \$2.7 million consisted of unamortized debt issuance costs.

Each \$1,000 principal amount of the 2023 convertible senior notes was initially convertible into 24.4978 shares of the Company's common stock (the "2023 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 2023 convertible senior notes are 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 conversion price on each applicable trading day; (2) during the five business day period after any five consecutive trading day period (the "2023 Measurement Period") in which the trading price (as defined in the indenture governing the 2023 convertible senior notes) per \$1,000 principal amount of the 2023 convertible senior notes for each trading day of the 2023 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 2023 convertible senior 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 2023 convertible senior 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 2023 convertible senior notes), subject to certain conditions, holders may require the Company to repurchase for cash all or any portion of their 2023 convertible senior 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 2023 convertible senior 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 2023 convertible senior notes in connection with such corporate event or during the relevant redemption period.

There have been no changes to the initial conversion price of the 2023 convertible senior notes since issuance. During each of the quarters from the third quarter of 2019 through the first quarter of 2021, one of the triggers for convertibility of the 2023 convertible senior 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, and including, the last trading day of the quarter for each quarter of 2020 and for the first quarter of 2021. As a result, the 2023 convertible senior notes were convertible, in multiples of \$1,000 principal amount, at the option of the 2023 convertible senior note holders between October 1, 2019 to March 31, 2021, and are currently convertible between April 1, 2021 to June 30, 2021. Whether the 2023 convertible senior notes will be convertible after June 30, 2021 will depend on the continued satisfaction of this condition or other conversion conditions in the future. During the three months ended March 31, 2021, the Company paid \$7.8 million in cash and issued 143,015 shares of its common stock to settle aggregate principal amount of \$7.8 million of its 2023 convertible senior notes. As of March 31, 2021, approximately \$51.0 million aggregate principal amount of our 2023 convertible senior notes remained outstanding. The conversions that occurred prior to January 1, 2021 resulted in a \$1.2 million loss on early debt extinguishment. The conversions that occurred during the three months ended March 31, 2021 were subject to ASU 2020-06 and such conversions were accounted for as contractual conversions, which did not result in any gain or loss upon their settlement.

During 2020, the Company received 15,714 shares from the partial unwind of capped calls resulting from the settlement of its 2023 convertible senior notes. The receipt of the 15,714 shares reduced the number of common shares outstanding. During the three months ended March 31, 2021, the Company received an additional 18,786 shares from the partial unwind of capped calls resulting from the settlement of its 2023 convertible senior notes. The receipt of the 18,786 shares reduced the number of common shares outstanding.

In addition, on or prior to March 31, 2021, the Company received elections to convert aggregate principal amount of \$9.8 million of its 2023 convertible senior notes that remain unsettled as of the end of the first quarter of 2021. The Company has settled, or expects to settle, these conversions in cash or a combination of cash and shares during the first half of 2021. The Company has the option to settle any future election conversion notices in cash, shares, or a combination of cash and shares.

The Company may not redeem the 2023 convertible senior notes prior to May 5, 2021. The Company may redeem for cash all or any portion of the 2023 convertible senior 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 2023 convertible senior notes to be redeemed, plus accrued and unpaid interest, if any, to, but excluding, the redemption date. No sinking fund is provided for the 2023 convertible senior notes.

The 2023 convertible senior notes are the Company's senior unsecured obligations and rank senior in right of payment to any of the Company's indebtedness that is expressly subordinated in right of payment to the 2023 convertible senior notes; equal in right of payment to any of the Company's unsecured indebtedness that is not so subordinated (including the 2025 convertible senior notes); 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.

Prior to the adoption of ASU 2020-06 on January 1, 2021 and in accounting for the issuance of the 2023 convertible senior notes, the 2023 convertible senior 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 equity component was recorded in additional paid-in-capital and was not re-measured as long as it continued to meet the conditions for equity classification. The excess of the principal amount of the liability component over its carrying amount (the "Debt Discount") was amortized to interest expense over the contractual term of the 2023 convertible senior notes at an effective interest rate of 6.39%.

Prior to the adoption of ASU 2020-06 on January 1, 2021 and in accounting for the debt issuance costs of \$8.0 million related to the 2023 convertible senior notes, the Company allocated the total amount incurred to the liability and equity components of the 2023 convertible senior notes based on their relative values. Issuance costs attributable to the liability component were \$6.0 million and were amortized to interest expense using the effective interest method over the contractual term of the 2023 convertible senior notes. Issuance costs attributable to the equity component were netted with the equity component in additional paid-in-capital.

After the adoption of ASU 2020-06, the 2023 convertible senior notes are accounted for as a single liability, and the carrying amount of the 2023 convertible senior notes was \$50.4 million as of March 31, 2021, with principal of \$51.0 million, net of issuance cost of \$0.7 million. The 2023 senior convertible notes were classified as long term liabilities during the three months ended on March 31, 2021. The issuance cost related to the 2023 convertible senior notes is being amortized to interest expense over the contractual term of the 2023 convertible senior notes at an effective interest rate 0.76%.

The net carrying amount of the 2023 convertible senior notes as of March 31, 2021 (post-ASU 2020-06 adoption) and as of December 31, 2020 (pre-ASU 2020-06 adoption) was as follows (in thousands):

	March 31, 2021	December 31, 2020
Principal	\$ 51,037	\$ 58,867
Unamortized debt discount	—	(7,367)
Unamortized issuance costs	(677)	(700)
Net carrying amount	<u>\$ 50,360</u>	<u>\$ 50,800</u>

The net carrying amount of the equity component of the 2023 convertible senior notes as of March 31, 2021 (post-ASU 2020-06 adoption) and as of December 31, 2020 (pre-ASU 2020-06 adoption) was as follows (in thousands):

	March 31, 2021	December 31, 2020
Equity component	\$ —	\$ 14,505
Issuance costs	—	(455)
Net carrying amount	<u>\$ —</u>	<u>\$ 14,050</u>

Interest expense related to the 2023 convertible senior notes was as follows (in thousands):

	Three Months Ended	
	March 31, 2021	March 31, 2020
Contractual interest expense	\$ 17	\$ 81
Amortization of debt discount	—	3,032
Amortization of issuance costs	84	288
Total interest expense	<u>\$ 101</u>	<u>\$ 3,401</u>

In connection with the issuance of the 2023 convertible senior notes, the Company entered into privately negotiated capped call transactions (the “2023 Capped Call Transactions”) with certain financial institutions. The 2023 Capped Call Transactions are expected generally to reduce the potential dilution to the Company’s common stock upon any conversion of the 2023 convertible senior notes and/or offset any cash payments the Company is required to make in excess of the principal amount of converted 2023 convertible senior 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 2023 Capped Call Transactions was \$62.80 per share, and is subject to certain adjustments under the terms of the 2023 Capped Call Transactions. The 2023 Capped Call Transactions cover, subject to anti-dilution adjustments, approximately 6.3 million shares of the Company’s common stock. For accounting purposes, the 2023 Capped Call Transactions are separate transactions, and not integrated with the issuance of the 2023 convertible senior notes. As these transactions meet certain accounting criteria, the 2023 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 2023 Capped Call Transactions was recorded as a reduction to additional paid-in capital.

In connection with the 2023 Note Repurchase Transactions, the Company amended the 2023 Capped Call Transactions such that the portion associated with the 2023 convertible senior notes subject to the 2023 Note Repurchase Transactions would remain outstanding notwithstanding the retirement of \$181.0 million aggregate principal amount of 2023 convertible senior notes. Following such amendment, the 2023 Capped Call Transactions continue to meet the accounting criteria to be recorded in stockholders’ equity and are not accounted for as derivatives.

Maturity of the Company’s 2023 convertible senior notes as of March 31, 2021 was as follows (in thousands):

Period	Amount to Mature
2023 (Maturity date of May 1, 2023)	\$ 51,037
Total	<u>\$ 51,037</u>

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 March 31, 2021 and December 31, 2020, the Company had 67,029,731 and 66,496,060 shares of common stock issued and outstanding, respectively. During the three months ended March 31, 2021, the Company issued 143,015 shares of common stock in connection with 2023 convertible senior note settlements. During the three months ended March 31, 2021, the Company also received 18,786 shares from the partial unwind of capped calls resulting from the settlement of its 2023 convertible senior notes. The receipt of the 18,786 shares reduced the number of common shares outstanding. See Note 6 for further details.

Preferred Stock

The Company is 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 March 31, 2021 and December 31, 2020, there were 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):

	March 31, 2021
Stock options outstanding	2,244
Restricted stock units outstanding	2,515
Shares available for future grant under 2014 Plan	14,241
Shares available for future issuance under ESPP	3,197
Total shares of common stock reserved	22,197

Stock Options

A summary of the Company's stock option activity during the three months ended March 31, 2021 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, 2020	2,255	\$ 26.33		
Options granted (weighted average grant date fair value of \$81.64 per share)	118	181.30		
Options exercised	(123)	17.97		
Options forfeited or expired	(6)	54.31		
Outstanding as of March 31, 2021	2,244	\$ 34.86	5.5	\$ 275,656

The aggregate intrinsic value amounts are 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 \$156.33 per share as of March 31, 2021 for all in-the-money stock options outstanding.

Restricted Stock Units

A summary of the Company's restricted stock unit ("RSU"), activity during the three months ended March 31, 2021 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, 2020	2,267	\$ 65.42
RSUs granted	566	182.81
RSUs vested and released	(286)	46.77
RSUs forfeited	(32)	80.52
Outstanding as of March 31, 2021	<u>2,515</u>	<u>93.25</u>

Stock-Based Compensation

Stock-based compensation expense was as follows (in thousands):

	Three Months Ended	
	March 31, 2021	March 31, 2020
Cost of revenue	\$ 3,105	\$ 1,989
Research and development	4,763	2,806
Sales and marketing	6,771	4,106
General and administrative	6,269	4,893
Total stock-based compensation	<u>\$ 20,908</u>	<u>\$ 13,794</u>

As of March 31, 2021, 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	\$ 29,204	\$ 221,911	\$ 684
Weighted-average amortization period	2.9 years	3.2 years	0.1 years

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

<u>Stock Options</u>	Three Months Ended	
	March 31, 2021	March 31, 2020
Expected term (years)	6.0	6.0
Volatility	47 %	47 %
Risk-free interest rate	1.0 %	1.2 %
Dividend yield ⁽¹⁾	—	—

(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 potential shares upon conversion of the convertible senior notes. 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, vesting of restricted stock units and shares of common stock issuable upon conversion of convertible senior notes. As the Company had net losses for the quarters ended March 31, 2021 and 2020, all potentially issuable shares of common stock were determined to be anti-dilutive.

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

	Three Months Ended	
	March 31, 2021	March 31, 2020
Net loss	\$ (12,332)	\$ (7,437)
Weighted-average shares used in computing basic and diluted net loss per share	66,721	61,705
Basic and diluted net loss per share	\$ (0.18)	\$ (0.12)

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	
	March 31, 2021	March 31, 2020
Stock options	2,244	2,557
Restricted stock units	2,515	2,962
Convertible senior notes ⁽¹⁾	6,884	2,709
Total	11,643	8,228

⁽¹⁾ Anti-dilutive convertible senior notes were calculated under the if-converted method for the three months ended March 31, 2021 due to the adoption of ASU 2020-06 and under the treasury stock method for the three months ended March 31, 2020.

Prior to the adoption of ASU 2020-06, the Company used the treasury stock method for calculating any potential dilutive effect of the conversion spread of its convertible senior notes. The conversion spread had a dilutive impact for the 2023 convertible senior notes during the three months ended March 31, 2020 since the average market price of the Company's common stock during the period exceeded the initial conversion price of \$40.82 per share. However, the potential shares of common stock issuable upon the conversion of the 2023 convertible senior notes were excluded from the calculation of diluted net loss per share because their effect would have been anti-dilutive.

After the adoption of ASU 2020-06, the Company used the if-converted method for calculating any potential dilutive effect of its convertible senior notes for the three months ended March 31, 2021. Under this method, the Company calculates diluted earnings per share under both the cash and share settlement assumptions to determine which is more dilutive. If share settlement is more dilutive, the Company calculates diluted earnings per share assuming that all the convertible senior notes were converted solely into shares of common stock at the beginning of the reporting period. The potential impact upon the conversion of the convertible senior notes were excluded from the calculation of diluted net loss per share for the three months ended March 31, 2021 because their effect would have been anti-dilutive.

9. Income Taxes

The (benefit from) provision for income taxes for the three months ended March 31, 2021 and 2020 was approximately \$(517) thousand and \$69 thousand, respectively. The benefit from income taxes for the three months ended March 31, 2021 consisted primarily of foreign income tax benefit offset by domestic state minimum taxes. The provision for income taxes for the three months ended March 31, 2020 consisted primarily of foreign income taxes, domestic state minimum taxes, as well as a benefit for a true-up to foreign income taxes.

For the three months ended March 31, 2021, the benefit from income taxes differed from the statutory amount primarily due to state and foreign income taxes and the Company realizing no benefit for current year losses due to maintaining a full valuation allowance against its domestic net deferred tax assets. For the three months ended March 31, 2020, 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 March 31, 2021 and December 31, 2020. 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 months ended March 31, 2021, 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 its convertible senior notes, finance leases to finance data centers and other computer and networking equipment purchases, operating leases for office facilities, cloud services agreement, and agreements with third parties to provide co-location hosting, telecommunication usage and equipment maintenance services. These commitments as of December 31, 2020 are disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2020, and did not change materially during the three months ended March 31, 2021, except for certain hosting and telecommunications agreements, the cloud service agreement, the convertible senior notes, and the operating leases which are described in Note 12.

As of March 31, 2021, the Company's commitment under various hosting and telecommunications agreements totaled \$6.5 million for terms ranging up to 60 months. These agreements require the Company to make monthly payments over the service term in exchange for certain network services.

In September 2020, the Company entered into a cloud services agreement for a term of three years and a total commitment of \$12.5 million. As of March 31, 2021, the total remaining commitment was approximately \$9.6 million, of which approximately \$7.0 million and \$2.6 million is expected to be paid for the remainder of 2021 and 2022, respectively.

As of March 31, 2021, \$798.5 million of aggregate principal of the convertible senior notes were outstanding. The 2023 convertible senior notes and the 2025 convertible senior notes are due on May 1, 2023 and June 1, 2025, respectively. See Note 6 for more information concerning the convertible senior notes.

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, including breach of security, 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. 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.

11. Geographical Information

The following table summarizes revenues by geographic region based on client billing address (in thousands):

	Three Months Ended	
	March 31, 2021	March 31, 2020
United States	\$ 125,886	\$ 87,431
International	11,996	7,657
Total revenue	<u>\$ 137,882</u>	<u>\$ 95,088</u>

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

	March 31, 2021	December 31, 2020
United States	\$ 50,211	\$ 43,339
International	8,085	7,874
Property and equipment, net	<u>\$ 58,296</u>	<u>\$ 51,213</u>

12. Leases

The Company has leases for offices, data centers and computer and networking equipment that expire at various dates through 2031. The Company's leases have remaining terms of one to ten 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 has elected the practical expedient to not separate lease and non-lease components for real estate operating leases.

The Company's Bishop Ranch Lease commenced on February 1, 2021, has a lease term of 10 years, and has a total commitment over its term of \$46.4 million, which attributes to the primary increase to operating lease costs and to operating lease right-of-use assets and operating lease liabilities for the three months ended March 31, 2021.

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

	Three Months Ended	
	March 31, 2021	March 31, 2020
Operating lease cost	\$ 2,668	\$ 1,516
Finance lease cost:		
Amortization of right-of-use assets	\$ 717	\$ 1,277
Interest on finance lease liabilities	13	82
Total finance lease cost	<u>\$ 730</u>	<u>\$ 1,359</u>

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

	Three Months Ended	
	March 31, 2021	March 31, 2020
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash used in operating leases	\$ (2,038)	\$ (1,584)
Financing cash used in finance leases	(456)	(1,229)
Right of use assets obtained in exchange for lease obligations:		
Operating leases	38,339	3,892
Finance leases	—	—

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

	March 31, 2021	December 31, 2020
Operating leases		
Operating lease right-of-use assets	\$ 44,960	\$ 9,010
Operating lease liabilities	\$ 5,478	\$ 3,912
Operating lease liabilities — less current portion	45,135	5,379
Total operating lease liabilities	\$ 50,613	\$ 9,291
Finance leases		
Property and equipment, gross	\$ 44,064	\$ 45,021
Less: accumulated depreciation and amortization	(41,667)	(41,908)
Property and equipment, net	\$ 2,397	\$ 3,113
Finance lease liabilities:		
Finance leases	\$ 156	\$ 612
Finance lease liabilities — less current portion	—	—
Total finance lease liabilities	\$ 156	\$ 612

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

	March 31, 2021	December 31, 2020
Weighted average remaining lease term		
Operating leases	8.4	2.6
Finance leases	0.4	0.5

Weighted average discount rates were as follows:

	March 31, 2021	December 31, 2020
Weighted average discount rate		
Operating leases	3.2 %	4.5 %
Finance leases	8.6 %	7.9 %

Maturities of lease liabilities were as follows (in thousands):

Year Ending December 31,	Operating Leases	Finance Leases
Remaining 2021	\$ 4,151	\$ 160
2022	8,895	—
2023	7,349	—
2024	5,649	—
2025	4,916	—
Thereafter	27,360	—
Total future minimum lease payments	58,320	160
Less: imputed interest	(7,707)	(4)
Total	\$ 50,613	\$ 156

As of March 31, 2021, the Company had one additional data center operating lease that had not yet commenced, representing a total commitment over its term of \$4.2 million. This operating lease commenced on April 1, 2021 with a lease term of three years.

13. Acquisitions

Inference Solutions

On November 18, 2020, the Company acquired all of the issued and outstanding shares of Inference for total consideration of approximately \$156.7 million. The total consideration comprised of \$137.0 million in cash, net of cash acquired, and \$18.1 million in estimated fair value of contingent earn out consideration. The contingent earn out consideration is up to \$24.0 million and is based upon achievement of certain milestones and relative thresholds during the earn out measurement period which ends on December 31, 2021. The range of amounts that the Company could pay under the contingent consideration arrangement is between \$0.0 million and \$24.0 million. See Note 3 for additional information regarding the contingent consideration arrangement. This acquisition, which was accounted for as a business combination, is intended to accelerate the Company's AI position through the addition of Inference's widely deployed IVA platform.

The excess of the purchase price over identifiable intangible assets and net tangible assets in the amount of \$131.0 million was allocated to goodwill, which is not deductible for tax purposes. The fair values assigned to assets acquired and liabilities assumed are based on management's best estimates and assumptions as of the reporting date and are considered preliminary pending finalization of valuation analyses pertaining to intangible assets acquired, liabilities assumed and tax liabilities assumed including calculation of deferred tax assets and liabilities. During the measurement period, which may be up to one year from the acquisition date, the Company may record adjustments to the fair value of these tangible and intangible assets acquired and liabilities assumed, with the corresponding offset to goodwill. The following table presents the preliminary allocation of the purchase price at the acquisition date (in thousands):

Cash	\$ 1,394
Property and equipment acquired	124
Other assets acquired	2,238
Acquired technology	28,600
Customer relationships	1,100
Trade name and trademarks	400
Goodwill	130,976
Total assets acquired	164,832
Liabilities assumed	(3,525)
Deferred tax liability	(4,616)
Total consideration	\$ 156,691
Total consideration (net of cash acquired)	\$ 155,297

The acquired technology, customer relationships, and trade name will be amortized on a straight-line basis over their assigned useful lives of six years, five years, and two years, respectively. The Company used the income approach to estimate the fair value of intangible assets acquired.

In connection with this acquisition, the Company incurred approximately \$2.9 million of acquisition costs in 2020, and incurred an additional \$0.2 million in the three months ended March 31, 2021, which have been expensed as incurred and included in general and administrative expense in the condensed consolidated statement of operations and comprehensive loss. The results of operations of this acquisition are included in the accompanying condensed consolidated statements of operations from the date of acquisition.

Virtual Observer

On April 1, 2020, the Company acquired all of the issued and outstanding shares of common stock of Virtual Observer, formerly Coordinated Systems, Inc., for cash consideration of approximately \$32.2 million, subject to adjustment, pursuant to a stock purchase agreement by and among the Company and Robert H. Hutcheon, David R. Brower and Daniel J. McGrail, dated January 15, 2020. This acquisition, was accounted for as a business combination, is intended to expand the Company's portfolio to include a cloud-based Workforce Optimization ("WFO") offering as a complement to its ongoing strategic partnerships with leading WFO providers.

The excess of the purchase price over identifiable intangible assets and net tangible assets in the amount of \$22.6 million was allocated to goodwill, which is not deductible for tax purposes. The fair values assigned to assets acquired and liabilities assumed are based on management's best estimates and assumptions as of the reporting date and are considered final. The following table presents the final allocation of the purchase price at the acquisition date (in thousands):

Cash	\$	168
Tangible assets acquired		200
Acquired technology		12,200
Customer relationships		500
Trade name and trademarks		100
Goodwill		22,646
Total assets acquired		35,814
Deferred tax liability		(2,910)
Liabilities assumed		(682)
Total	\$	32,222

The acquired technology, customer relationships, and trade name and trademarks will be amortized on a straight-line basis over their estimated useful lives of five years, five years, and two years, respectively. The Company used the income approach to estimate the fair value of intangible assets acquired.

In connection with this acquisition, the Company incurred total acquisition-related transaction costs of \$0.9 million and \$0.3 million in 2020 and 2019, respectively, that have been expensed as incurred and included in general and administrative expenses in the condensed consolidated statements of operations and comprehensive loss.

The results of operations of this acquisition are included in the accompanying condensed consolidated statements of operations from the date of acquisition.

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, 2020.

Overview

We are a pioneer and leading provider of intelligent cloud software for contact centers, facilitating more than seven 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, 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, telemarketing and out of home campaigns.

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 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 months ended March 31, 2021 and 2020, subscription and related usage fees accounted for 92% and 91%, respectively, of our revenue. The remainder was comprised of professional services revenue from the implementation and optimization of our solution.

Effects of COVID-19

In December 2019, a novel coronavirus disease known as COVID-19 was reported and on March 11, 2020, the World Health Organization, or WHO, characterized COVID-19 as a pandemic. This pandemic has resulted in a

widespread health crisis that has significantly harmed the U.S. and global economies and caused significant fluctuation in financial markets, including those on which our common stock and our convertible senior notes trade, and may impact demand for our solution.

In accordance with the various social distancing and other office closure orders and recommendations of applicable government agencies, all of our employees transitioned to work-from-home operations and we have canceled all business travel by our employees except where necessary and properly authorized, which has changed how we operate our business. Some of our employees have now transitioned back to working in the office where permitted by applicable government agencies. Our clients and business partners are also subject to various and changing social distancing and office closure orders and recommendations and travel restrictions and prohibitions, which have changed the way we interact with our clients and business partners.

COVID-19 had a moderately positive impact on our 2020 and three months ended March 31, 2021 financial results due to the shift from brick-and-mortar to virtual. The severity and duration of the COVID-19 pandemic, and its impact on the U.S. and global economy is uncertain, but we believe that there will be a continuing net benefit to us longer term.

Key GAAP Operating Results

Our revenue increased to \$137.9 million for the three months ended March 31, 2021 from \$95.1 million for the three months ended March 31, 2020. Revenue growth was primarily attributable to our larger clients, driven by an increase in our sales and marketing activities and our improved brand awareness. For each of the three months ended March 31, 2021 and 2020, no single client accounted for more than 10% of our total revenue. As of March 31, 2021, we had over 2,000 clients across multiple industries. Our clients' subscriptions generally range in size from fewer than 10 agent seats to approximately 4,000 agent seats. We had a net loss of \$12.3 million in the three months ended March 31, 2021, compared to a net loss of \$7.4 million in the three months ended March 31, 2020.

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 base of larger clients, 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, including the impact of the COVID-19 pandemic.

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 the long term. However, we expect cost of revenue and certain operating expenses to fluctuate as a percentage of revenue in the near term taking into consideration the impact of COVID-19 and the macroeconomic environment.

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. Starting with the fourth quarter of 2020, we revised our Annual Dollar-Based Retention Rate calculation to be based on Net Revenue, rather than Net Invoicing. Our Annual Dollar-Based Retention Rate is calculated by dividing our Retained Net Revenue by our Retention Base Net Revenue 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 Revenue as recurring net revenue from all clients in the comparable prior year period, and we define Retained Net Revenue as recurring net revenue from that same group of clients in the current period. We define recurring net revenue as net subscription and related usage revenue.

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

	Twelve Months Ended	
	March 31, 2021	March 31, 2020
Annual Dollar-Based Retention Rate	121%	111%

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) acquisition-related transaction costs and one-time integration costs, (5) COVID-19 relief bonus for employees, (6) contingent consideration expense, (7) (benefit from) provision for income taxes, and (8) 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	
	March 31, 2021	March 31, 2020
Net loss	\$ (12,332)	\$ (7,437)
Non-GAAP adjustments:		
Depreciation and amortization ⁽¹⁾	8,763	4,970
Stock-based compensation ⁽²⁾	20,908	13,794
Interest expense	1,938	3,484
Interest income and other	(175)	(1,072)
Acquisition-related transaction costs and one-time integration costs	1,094	329
Contingent consideration expense	2,500	—
(Benefit from) provision for income taxes	(517)	69
Adjusted EBITDA	\$ 22,179	\$ 14,137

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

	Three Months Ended	
	March 31, 2021	March 31, 2020
Cost of revenue	\$ 7,087	\$ 3,940
Research and development	596	465
Sales and marketing	1	2
General and administrative	1,079	563
Total depreciation and amortization	\$ 8,763	\$ 4,970

(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.

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 plans with bundled usage, 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, which is 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, Universal Service Fund, or 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, costs of public cloud-based data centers, 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 services, which investments will result in absolute dollar increases in cost of revenue but percentage of revenue declines in the long-term through economies of scale. In the near-term, however, we expect cost of revenue to increase both in absolute dollars and as a percentage of revenue, primarily due to increased investments in public cloud.

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 in absolute dollars and 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 over the long term 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 and as a percentage of revenue in the near term, due to among other things, the impact of COVID-19 and the resulting macroeconomic conditions, but to increase in absolute dollars and decline as a percentage of revenue over time.

Results of Operations for the Three Months Ended March 31, 2021 and 2020

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	
	March 31, 2021	March 31, 2020
Revenue	100 %	100 %
Cost of revenue	43 %	42 %
Gross profit	57 %	58 %
Operating expenses:		
Research and development	16 %	16 %
Sales and marketing	32 %	32 %
General and administrative	17 %	15 %
Total operating expenses	65 %	63 %
Loss from operations	(8)%	(5)%
Other (expense) income, net:		
Interest expense	(1)%	(4)%
Interest income and other	— %	1 %
Total other (expense) income, net	(1)%	(3)%
Loss before income taxes	(9)%	(8)%
(Benefit from) provision for income taxes	— %	— %
Net loss	(9)%	(8)%

Revenue

	Three Months Ended			
	March 31, 2021	March 31, 2020	\$ Change	% Change
(in thousands, except percentages)				
Revenue	\$ 137,882	\$ 95,088	\$ 42,794	45 %

The increase in revenue for the three months ended March 31, 2021 compared to the same period of 2020 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			
	March 31, 2021	March 31, 2020	\$ Change	% Change
	(in thousands, except percentages)			
Cost of revenue	\$ 59,803	\$ 40,037	\$ 19,766	49 %
% of Revenue	43 %	42 %		

The increase in cost of revenue for the three months ended March 31, 2021 compared to the same period of 2020 was primarily due to a \$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, a \$5.1 million increase in depreciation, data center and public cloud costs to support our growing capacity needs, a \$3.7 million increase in USF contributions and other federal telecommunication service fees due primarily to increased client usage and an increase in the USF contribution rate, a \$2.4 million increase in third-party hosted software costs driven by increased client activities, a \$1.9 million increase in amortization expense due to the acquisitions of Virtual Observer in April 2020 and Inference in November 2020, and a \$0.8 million increase in office, facilities and related costs.

Gross Profit

	Three Months Ended			
	March 31, 2021	March 31, 2020	\$ Change	% Change
	(in thousands, except percentages)			
Gross profit	\$ 78,079	\$ 55,051	\$ 23,028	42 %
% of Revenue	57 %	58 %		

The increase in gross profit for the three months ended March 31, 2021 compared to the same period of 2020 was primarily due to increases in subscription and related revenues. The decrease in gross margin for the three months ended March 31, 2021 compared to the same period of 2020 was primarily due to the increase in amortization expense from the acquisition of certain intangible assets from Virtual Observer and Inference and from an increase in stock-based compensation costs, driven by increased headcount and a higher fair value of employee equity awards primarily due to our increased stock price, increased depreciation and public cloud costs.

Operating Expenses

Research and Development

	Three Months Ended			
	March 31, 2021	March 31, 2020	\$ Change	% Change
	(in thousands, except percentages)			
Research and development	\$ 22,121	\$ 15,189	\$ 6,932	46 %
% of Revenue	16 %	16 %		

The increase in research and development expenses for the three months ended March 31, 2021 compared to the same period of 2020 was primarily due to a \$5.6 million increase in personnel-related 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.

Sales and Marketing

	Three Months Ended			
	March 31, 2021	March 31, 2020	\$ Change	% Change
	(in thousands, except percentages)			
Sales and marketing	\$ 44,799	\$ 30,160	\$ 14,639	49 %
% of Revenue	32 %	32 %		

The increase in sales and marketing expenses for the three months ended March 31, 2021 compared to the same period of 2020 was primarily due to a \$9.1 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, a \$1.8 million increase in sales commission expenses driven by the growth in sales and bookings of our solution, and a \$1.2 million increase in facilities and related costs. 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 increased advertising and other marketing expenses to increase our brand awareness.

General and Administrative

	Three Months Ended			
	March 31, 2021	March 31, 2020	\$ Change	% Change
	(in thousands, except percentages)			
General and administrative	\$ 22,245	\$ 14,658	\$ 7,587	52 %
% of Revenue	17 %	15 %		

The increase in general and administrative expenses for the three months ended March 31, 2021 compared to the same period of 2020 was primarily due to a \$3.8 million increase in personnel costs including stock-based compensation costs, driven mainly by increased headcount and a higher fair value of equity awards due primarily to our increased stock price, a \$2.5 million increase in contingent consideration expense from the Inference acquisition, and a \$1.1 million increase in legal and other professional service costs mainly related to our acquisitions.

Other (Expense) Income, Net

	Three Months Ended			
	March 31, 2021	March 31, 2020	\$ Change	% Change
	(in thousands, except percentages)			
Interest expense	\$ (1,938)	\$ (3,484)	\$ 1,546	(44)%
Interest income and other	175	1,072	(897)	(84)%
Total other (expense) income, net	\$ (1,763)	\$ (2,412)	\$ 649	(27)%
% of Revenue	(1)%	(3)%		

The decrease in interest expense for the three months ended March 31, 2021 compared to the same period of 2020 was primarily due to our adoption of ASU 2020-06, which resulted in the elimination of the debt discounts that were amortized to interest expense over the contractual term of the convertible senior notes prior to January 1, 2021, and due to the 2023 Note Repurchase Transactions and other 2023 convertible senior note settlements, which resulted in the decrease in contractual interest expense due to the reduction in the aggregate outstanding principal amount of our 2023 convertible senior notes. The decrease in interest expense was offset in part by the increase in contractual interest expense due to the issuance of the 2025 convertible senior notes in May and June 2020. See Note 6 to the condensed consolidated financial statements for further details.

The decrease in interest income and other for the three months ended March 31, 2021, compared to the same period of 2020, was primarily from lower interest income on our marketable investments.

Liquidity and Capital Resources

To date, we have financed our operations primarily through sales of our solution, net proceeds from our equity and debt financings, including the issuance of our 2025 convertible senior notes in May and June 2020 and of our 2023 convertible senior notes in May 2018, and lease facilities. As of March 31, 2021, we had \$624.7 million in working capital, which included \$176.3 million in cash and cash equivalents and \$467.1 million in short-term marketable investments.

In May and June 2020, we issued \$747.5 million aggregate principal amount of our 2025 convertible senior notes in a private offering. The 2025 convertible senior notes mature on June 1, 2025 and are our senior unsecured

obligations. The 2025 convertible senior notes bear interest at a fixed rate of 0.50% per annum, payable semiannually in arrears on June 1 and December 1 of each year, beginning December 1, 2020. The total net proceeds from the offering, after deducting initial purchasers' discounts and commissions and estimated debt issuance costs, were approximately \$728.8 million. In May 2018, we issued \$258.8 million aggregate principal amount of our 2023 convertible senior notes in a private offering. The 2023 convertible senior notes mature on May 1, 2023 and are our senior unsecured obligations. The 2023 convertible senior notes bear interest at a fixed rate of 0.125% per annum, payable semiannually in arrears on May 1 and November 1 of each year. The total net proceeds from the offering, after deducting the initial purchasers' discounts and estimated debt issuance costs, were approximately \$250.8 million. As of March 31, 2021, after giving effect to the 2023 Note Repurchase Transactions and other settlements upon conversion requests, approximately \$51.0 million aggregate principal amount of 2023 convertible senior notes remained outstanding. For additional information regarding the convertible senior notes and related transactions, see Note 6 to the condensed consolidated financial statements included in this report.

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, the introduction of new and enhanced offerings, and the impact of the COVID-19 pandemic on these or other factors. We may also acquire or invest in complementary businesses, technologies and intellectual property rights, which may increase our use of cash and future capital requirements, both to pay acquisition costs and to support our combined operations. We may raise additional capital through equity or engage in debt financings at any time to fund these or other requirements. However, we may not be able to raise additional capital through equity or debt financings when needed on terms acceptable to us or at all, depending on our financial performance, market conditions and other factors, including the length and severity of the impact of the COVID-19 pandemic on general economic conditions and potential future impacts on the financial markets. If we are unable to raise additional capital as needed, our business, operating results and financial condition could 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 also could be harmed.

If we raise additional funds by issuing equity or equity-linked securities, the ownership of our existing stockholders would 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 negatively impact our ability to operate our business.

Cash Flows

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

	Three Months Ended	
	March 31, 2021	March 31, 2020
Net cash provided by operating activities	\$ 13,765	\$ 10,394
Net cash (used in) provided by investing activities	(51,730)	66,126
Net cash (used in) provided by financing activities	(6,081)	1,367
Net (decrease) increase in cash and cash equivalents	<u>\$ (44,046)</u>	<u>\$ 77,887</u>

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 \$13.8 million during the three months ended March 31, 2021. Net cash provided by operating activities resulted from our net loss of \$12.3 million adjusted for non-cash items of \$43.1 million, primarily consisting of \$20.9 million of stock-based compensation, \$8.8 million of depreciation and amortization, \$5.5 million of amortization of commission costs, \$2.5 million of contingent consideration expense

and \$1.0 million of amortization of issuance costs on our convertible senior notes, offset by use of cash for operating assets and liabilities of \$(17.0) million primarily due to the timing of cash payments to vendors and cash receipts from customers.

Net cash provided by operating activities was \$10.4 million during the three months ended March 31, 2020. Net cash provided by operating activities resulted from our net loss of \$7.4 million adjusted for non-cash items of \$27.5 million, primarily consisting of \$13.8 million of stock-based compensation, \$5.0 million of depreciation and amortization, \$3.5 million of amortization of commission costs and \$3.3 million of amortization of discount and issuance costs on our convertible senior notes, offset by use of cash for operating assets and liabilities of \$9.7 million primarily due to the time of cash payments to vendors and cash receipts from customers.

Cash Flows from Investing Activities

Net cash used in investing activities of \$(51.7) million in the three months ended March 31, 2021 was comprised of \$163.7 million related to purchases of marketable investments and \$8.2 million in capital expenditures, offset in part by \$120.2 million related to cash proceeds from maturities of marketable investments.

Net cash provided by investing activities in the three months ended March 31, 2020 was comprised of \$134.6 million related to cash proceeds from maturities of marketable investments, offset in part by \$62.3 million related to purchases of marketable investments and \$6.0 million in capital expenditures.

Cash Flows from Financing Activities

Net cash used in financing activities of \$(6.1) million in the three months ended March 31, 2021 related to \$7.8 million of cash paid in connection with other 2023 convertible senior note settlements and \$0.5 million of payments related to finance leases, partially offset by cash proceeds of \$2.2 million from exercise of stock options.

Net cash provided by financing activities of \$1.4 million in the three months ended March 31, 2020 related to cash proceeds of \$2.6 million from exercise of stock options, offset in part by payments for finance leases of \$1.2 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 is 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. Revenue generated from telephony usage is presented in revenue and cost of sales on a gross basis, as we are the party that controls the service and are responsible for fulfilling the promise to provide the call service by diverting the calls to selected carriers. 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. When services are included in the contract with the customer and are not sold at their stand-alone selling price, this requires us to estimate the number of seats the customer will use, 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.

Business Combinations, Goodwill, and Acquisition-Related Intangible Assets

Accounting for business combinations requires us to make significant estimates and assumptions. We allocate the purchase consideration to the tangible and intangible assets acquired and liabilities assumed based on their estimated fair value at the acquisition dates, with the excess recorded to goodwill. Critical estimates in valuing certain intangible assets include, but are not limited to, future expected cash flows, expected asset lives, royalty rates, and discount rates. The amounts and useful lives assigned to acquisition-related intangible assets impact the amount and timing of future amortization expense. We use estimates, assumptions, and judgments when performing a goodwill impairment test or assessing the recoverability of acquisition-related finite-lived intangible assets. We test goodwill for impairment on an annual basis in the fourth quarter and more frequently if a significant event or circumstance indicates impairment, and assess the recoverability of acquisition-related intangible assets whenever events or circumstances indicate that the carrying amounts of such assets may not be recoverable. We also evaluate the estimated remaining useful lives of acquisition-related intangible assets for changes in circumstances that warrant a revision to the remaining periods of amortization.

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 March 31, 2021, 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 our convertible senior notes, finance leases to finance data centers and other computer and networking equipment, operating leases for office facilities, cloud services agreement, and agreements with third parties to provide co-location hosting, telecommunication usage and equipment maintenance services. These commitments as of December 31, 2020 are disclosed in our Annual Report on Form 10-K for the year ended December 31, 2020, and did not change materially during the three months ended March 31, 2021 except for certain hosting and telecommunications agreements, the cloud service agreement, the convertible senior notes, and the operating leases which are describe in Note 12 of the condensed consolidated financial statements.

As of March 31, 2021, our commitments under various hosting and telecommunications agreements for terms ranging up to 60 months totaled \$6.5 million. These agreements require us to make monthly payments over the service term in exchange for certain network services.

In September 2020, we entered into a cloud services agreement for a term of three years and a total commitment of \$12.5 million. As of March 31, 2021, the total remaining commitment was approximately \$9.6 million, of which approximately \$7.0 million and \$2.6 million is expected to be paid for the remainder of 2021 and 2022, respectively.

As of March 31, 2021, \$798.5 million of aggregate principal amount of our convertible senior notes was outstanding. The 2023 convertible senior notes are due May 1, 2023 and the 2025 convertible senior notes are due June 1, 2025. For additional information regarding the convertible senior notes, see Note 6 to the condensed consolidated financial statements included in this report.

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, 2020. Our exposure to market risk has not changed materially since December 31, 2020.

We had cash and cash equivalents, and marketable securities totaling \$643.5 million as of March 31, 2021. Cash equivalents and marketable securities were invested primarily in U.S. agency securities, U.S. treasury, municipal bonds, commercial paper, corporate bonds, 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.

As of March 31, 2021, aggregate principal amount outstanding of our 2025 convertible senior notes and 2023 convertible senior notes was \$747.5 million and \$51.0 million, respectively. The fair value of the convertible senior notes are subject to interest rate risk, market risk and other factors due to their conversion features. 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 obligations. 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.

Our convertible senior notes bear fixed interest rates, and therefore, are not subject to interest rate risk. We have not utilized derivative financial instruments, derivative commodity instruments or other market risk sensitive instruments, positions or transactions in any material fashion, except for the privately negotiated capped call transactions entered into in May and June 2020 and May 2018 related to the issuance of our 2025 convertible senior notes and our 2023 convertible senior notes, respectively.

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 March 31, 2021.

Based on management’s evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of March 31, 2021, 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 March 31, 2021, 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. We have not experienced any material impact to our internal control over financial reporting despite the fact that all of our employees are working remotely due to the COVID-19 pandemic. We are continually monitoring

and assessing the impact of the COVID-19 situation on our internal controls to minimize any impact on their design and operating effectiveness.

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, 2020. 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 of operation.

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

Exhibit Number	Description
10.1+	Five9, Inc. Executive Incentive Compensation Plan (filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on February 18, 2021 (File No. 001-36383) and incorporated by reference herein).
31.1*	Certification of Chief Executive Officer of Five9, Inc. Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Chief Financial Officer of Five9, Inc. Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	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.
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
104	Cover Page Interactive Data File, Formatted as inline XBRL and contained in Exhibit 101.

+ Indicates management contract or compensatory plan.

* Filed herewith.

** Furnished herewith.

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002

I, Rowan Trollope, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Five9, Inc. for the quarter ended March 31, 2021;
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: April 29, 2021

By: _____ /s/ Rowan Trollope
Rowan Trollope
Chief Executive Officer
(Principal Executive Officer)

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 March 31, 2021;
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: April 29, 2021

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

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

I, Rowan Trollope, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of Five9, Inc. (the “Company”) on Form 10-Q for the fiscal quarter ended March 31, 2021 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of the Company.

Date: April 29, 2021

By: _____
/s/ Rowan Trollope
Rowan Trollope
Chief Executive Officer

I, Barry Zwarenstein, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of Five9, Inc. (the “Company”) on Form 10-Q for the fiscal quarter ended March 31, 2021 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of the Company.

Date: April 29, 2021

By: _____
/s/ Barry Zwarenstein
Barry Zwarenstein
Chief Financial Officer

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Five9, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.