UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2019

or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from ____________________ to ____________________

Commission file number: 000-30141

LIVEPERSON, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**13-3861628**
(State or Other Jurisdiction of Incorporation or Organization)	(IRS Employer Identification No.)
475 Tenth Avenue, 5th Floor **New York , New York**	**10018**
(Address of Principal Executive Offices)	(Zip Code)

(212) 609-4200
(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	LPSN	The Nasdaq Stock Market LLC

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

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

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

Large Accelerated Filer	☒	Accelerated Filer	☐
Non-accelerated Filer	☐	Smaller Reporting Company	☐
		Emerging Growth Company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

On July 30, 2019, 65,527,788 shares of the registrant's common stock were outstanding.

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FORWARD-LOOKING STATEMENTS

STATEMENTS IN THIS QUARTERLY REPORT ON FORM 10-Q ABOUT LIVEPERSON, INC. ("LIVEPERSON") THAT ARE NOT HISTORICAL FACTS ARE FORWARD-LOOKING STATEMENTS BASED ON OUR CURRENT EXPECTATIONS, ASSUMPTIONS, ESTIMATES AND PROJECTIONS ABOUT LIVEPERSON AND OUR INDUSTRY. THESE FORWARD-LOOKING STATEMENTS ARE SUBJECT TO RISKS AND UNCERTAINTIES THAT COULD CAUSE ACTUAL FUTURE EVENTS OR RESULTS TO DIFFER MATERIALLY FROM SUCH STATEMENTS. ANY SUCH FORWARD-LOOKING STATEMENTS ARE MADE PURSUANT TO THE SAFE HARBOR PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995. IT IS ROUTINE FOR OUR INTERNAL PROJECTIONS AND EXPECTATIONS TO CHANGE AS THE YEAR OR EACH QUARTER IN THE YEAR PROGRESSES, AND THEREFORE IT SHOULD BE CLEARLY UNDERSTOOD THAT THE INTERNAL PROJECTIONS AND BELIEFS UPON WHICH WE BASE OUR EXPECTATIONS MAY CHANGE PRIOR TO THE END OF EACH QUARTER OR THE YEAR. ALTHOUGH THESE EXPECTATIONS MAY CHANGE, WE ARE UNDER NO OBLIGATION TO INFORM YOU IF THEY DO. OUR POLICY IS GENERALLY TO PROVIDE OUR EXPECTATIONS ONLY ONCE PER QUARTER, AND NOT TO UPDATE THAT INFORMATION UNTIL THE NEXT QUARTER. ACTUAL EVENTS OR RESULTS MAY DIFFER MATERIALLY FROM THOSE CONTAINED IN THE PROJECTIONS OR FORWARD-LOOKING STATEMENTS. FACTORS THAT COULD CAUSE OR CONTRIBUTE TO SUCH DIFFERENCES INCLUDE THOSE DISCUSSED IN PART II, ITEM 1A, "RISK FACTORS."

Part I. Financial Information

Item 1. Financial Statements

LIVEPERSON, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS
(IN THOUSANDS)
(UNAUDITED)

	June 30, 2019	December 31, 2018
		(Note 1)
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 224,727	$ 66,449
Accounts receivable, net of allowance for doubtful accounts of $2,914 and $2,276 as of June 30, 2019 and December 31, 2018, respectively	51,467	46,023
Prepaid expenses and other current assets	35,317	22,613
Total current assets	311,511	135,085
Operating lease right of use asset	15,956	—
Property and equipment, net	58,294	43,735
Intangibles, net	12,652	13,832
Goodwill	95,016	95,031
Deferred tax assets	710	713
Other assets	1,880	1,707
Total assets	$ 496,019	$ 290,103
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$ 8,320	$ 8,174
Accrued expenses and other current liabilities	45,208	50,662
Deferred revenue	69,359	55,015
Operating lease liability	6,442	—
Total current liabilities	129,329	113,851
Deferred revenue	710	222
Convertible senior notes, net	173,817	—
Other liabilities	198	4,205
Operating lease liability, net of current portion	13,443	—
Deferred tax liability	1,206	1,096
Total liabilities	318,703	119,374
Commitments and contingencies (see note 11 in the notes to the Condensed Consolidated Financial Statement)		
STOCKHOLDERS' EQUITY:		
Common stock	65	64
Additional paid-in capital	412,253	362,590
Treasury stock	(3)	(3)
Accumulated deficit	(230,368)	(187,491)
Accumulated other comprehensive loss	(4,631)	(4,431)
Total stockholders' equity	177,316	170,729
Total liabilities and stockholders' equity	$ 496,019	$ 290,103

See Notes to Condensed Consolidated Financial Statements (unaudited).

LIVEPERSON, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA)
(UNAUDITED)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	**2018**	**2019**	**2018**
Revenue	$ 70,959	$ 61,660	$ 137,361	$ 119,901
Costs and expenses [(1)] [(2)]				
Cost of revenue [(3)]	18,049	16,036	36,698	29,990
Sales and marketing	39,343	25,392	72,379	49,523
General and administrative	13,763	11,499	27,930	21,622
Product development	20,182	14,219	38,355	27,471
Restructuring costs	205	1,906	484	2,084
Amortization of purchased intangibles	438	424	899	848
Total costs and expenses	91,980	69,476	176,745	131,538
Loss from operations	(21,021)	(7,816)	(39,384)	(11,637)
Other (expense) income , net	(2,267)	31	(2,201)	160
Loss before provision for income taxes	(23,288)	(7,785)	(41,585)	(11,477)
Provision for income taxes	699	536	1,292	47
Net loss	$ (23,987)	$ (8,321)	$ (42,877)	$ (11,524)
Net loss per share of common stock:				
Basic	$ (0.38)	$ (0.14)	$ (0.69)	$ (0.20)
Diluted	$ (0.38)	$ (0.14)	$ (0.69)	$ (0.20)
Weighted-average shares used to compute net loss per share:				
Basic	62,350,787	58,648,195	61,889,072	57,982,648
Diluted	62,350,787	58,648,195	61,889,072	57,982,648
[(1)] Amounts include stock-based compensation expense, as follows:				
Cost of revenue	$ 528	$ 230	$ 1,148	$ 384
Sales and marketing	2,095	1,373	3,694	2,259
General and administrative	2,825	1,182	5,391	2,022
Product development	3,857	1,041	6,238	1,599
[(2)] Amounts include depreciation expense, as follows:				
Cost of revenue	$ 1,954	$ 1,931	$ 3,981	$ 3,847
Sales and marketing	429	371	786	727
General and administrative	225	274	456	520
Product development	1,154	852	2,420	1,692
[(3)] Amounts include amortization of purchased intangibles, as follows:				
Cost of revenue	$ 285	$ 287	$ 570	$ 574

See Notes to Condensed Consolidated Financial Statements (unaudited).

LIVEPERSON, INC.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(IN THOUSANDS)
(UNAUDITED)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net loss	$ (23,987)	$ (8,321)	$ (42,877)	$ (11,524)
Foreign currency translation adjustment	(7)	1,486	200	927
Comprehensive loss	$ (23,994)	$ (6,835)	$ (42,677)	$ (10,597)

See Notes to Condensed Consolidated Financial Statements (unaudited).

LIVEPERSON, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (IN THOUSANDS)

Three Months Ended June 30,

	2019								2018							
	Common Stock		Treasury Stock						Common Stock		Treasury Stock					
	Shares	Amount	Shares	Amount	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total	Shares	Amount	Shares	Amount	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total
Balance at March 31	64,748	$ 65	(2,705)	$ (3)	$ 401,996	$ (206,381)	$ (4,638)	$ 191,039	60,538	$ 60	(2,681)	$ (3)	$ 313,698	$ (165,662)	$ (1,976)	$ 146,117
Common stock issued upon exercise of stock options	263	—	—	—	2,604	—	—	2,604	1,663	2	—	—	18,974	—	—	18,976
Common stock issued upon vesting of restricted stock units	339	—	—	—	—	—	—	—	121	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	6,501	—	—	6,501	—	—	—	—	3,827	—	—	3,827
Common stock issued under Employee Stock Purchase Plan	49	—	—	—	1,152	—	—	1,152	45	—	—	—	739	—	—	739
Net loss	—	—	—	—	—	(23,987)	—	(23,987)	—	—	—	—	—	(8,321)	—	(8,321)
Other comprehensive income (loss)		—	—	—	—	—	7	7		—	—	—	—	—	(1,486)	(1,486)
Balance at June 30	65,399	$ 65	(2,705)	$ (3)	$ 412,253	$ (230,368)	$ (4,631)	$ 177,316	62,367	$ 62	(2,681)	$ (3)	$ 337,238	$ (173,983)	$ (3,462)	$ 159,852

Six Months Ended June 30,

	2019								2018							
	Common Stock		Treasury Stock						Common Stock		Treasury Stock					
	Shares	Amount	Shares	Amount	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total	Shares	Amount	Shares	Amount	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total
Balance at December 31, 2018 and 2017	63,676	$ 64	(2,681)	$ (3)	$ 362,590	$ (187,491)	$ (4,431)	$ 170,729	59,664	$ 60	(2,588)	$ (3)	$ 305,676	$ (163,135)	$ (2,535)	$ 140,063
Common stock issued upon exercise of stock options	890	1	—	—	9,080	—	—	9,081	2,308	2	—	—	24,414	—	—	24,416
Common stock issued upon vesting of restricted stock units	754	—	—	—	—	—	—	—	224	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	11,689	—	—	11,689	—	—	—	—	6,264	—	—	6,264
Common stock issued under Employee Stock Purchase Plan	79	—	—	—	1,873	—	—	1,873	85	—	—	—	1,229	—	—	1,229
Common stock repurchase	—	—	(23)	—	(709)	—	—	(709)	—	—	(94)	—	(1,345)	—	—	(1,345)
ASC 606 prior period adjustment (see note 1)	—	—	—	—	—	—	—	—	—	—	—	—	—	676	—	676
Issuance of common stock in connection with acquisitions (see note 9)	—	—	—	—	—	—	—	—	86	—	—	—	1,000	—	—	1,000
Equity component of convertible senior notes	—	—	—	—	52,900	—	—	52,900	—	—	—	—	—	—	—	—
Equity component of convertible senior notes issuance costs	—	—	—	—	(1,986)	—	—	(1,986)	—	—	—	—	—	—	—	—
Purchase of capped call option	—	—	—	—	(23,184)	—	—	(23,184)	—	—	—	—	—	—	—	—
Net loss	—	—	—	—	—	(42,877)	—	(42,877)	—	—	—	—	—	(11,524)	—	(11,524)
Other comprehensive loss	—	—	—	—	—	—	(200)	(200)	—	—	—	—	—	—	(927)	(927)
Balance at June 30	65,399	$ 65	(2,705)	$ (3)	$ 412,253	$ (230,368)	$ (4,631)	$ 177,316	62,367	$ 62	(2,681)	$ (3)	$ 337,238	$ (173,983)	$ (3,462)	$ 159,852

See Notes to Condensed Consolidated Financial Statements (unaudited).

LIVEPERSON, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(IN THOUSANDS)
(UNAUDITED)

	Six Months Ended June 30, 2019	Six Months Ended June 30, 2018
OPERATING ACTIVITIES:		
Net loss	$ (42,877)	$ (11,524)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation expense	16,471	6,264
Depreciation	7,643	6,786
Amortization of purchased intangibles	1,469	1,422
Amortization of debt issuance costs	376	—
Accretion of debt discount on convertible senior notes	2,990	—
Amortization of tenant allowance	(258)	(83)
Deferred income taxes	114	41
Provision for doubtful accounts	938	862
Changes in operating assets and liabilities:		
Accounts receivable	(6,383)	(1,045)
Prepaid expenses and other current assets	(12,704)	(9,531)
Other assets	(169)	(187)
Accounts payable	(418)	34
Accrued expenses and other current liabilities	(11,114)	(8,771)
Deferred revenue	14,832	13,943
Other liabilities	178	(218)
Net cash used in operating activities	(28,912)	(2,007)
INVESTING ACTIVITIES:		
Purchases of property and equipment, including capitalized software	(21,382)	(9,664)
Cash held as collateral for foreign exchange forward contracts	—	1,235
Payments for acquisitions and intangible assets, net of cash acquired	(293)	(392)
Net cash used in investing activities	(21,675)	(8,821)
FINANCING ACTIVITIES:		
Proceeds from issuance of convertible senior notes	230,000	—
Payment of issuance costs in connection with convertible senior notes	(7,587)	—
Purchase of capped call option	(23,184)	—
Payments related to contingent consideration	(487)	—
Proceeds from issuance of common stock in connection with the exercise of options	10,953	25,667
Repurchase of common stock	(709)	(1,345)
Net cash provided by financing activities	208,986	24,322
EFFECT OF FOREIGN EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	(121)	138
CHANGE IN CASH AND CASH EQUIVALENTS	158,278	13,632
CASH AND CASH EQUIVALENTS - Beginning of the period	66,449	56,115
CASH AND CASH EQUIVALENTS - End of the period	$ 224,727	$ 69,747
SUPPLEMENTAL DISCLOSURE OF OTHER CASH FLOW INFORMATION:		
Cash paid for income taxes	$ 1,606	$ 5,553
SUPPLEMENTAL DISCLOSURE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:		
Purchase of property and equipment recorded in accounts payable	$ 861	$ 774
Issuance of 85,861 shares of common stock in connection with the BotCentral transaction on January 22, 2018	$ —	$ 1,000
Debt offering costs, accrued but not paid	$ 1,048	$ —

1. Description of Business and Basis of Presentation

LivePerson, Inc. (the "Company" or "LivePerson") was incorporated in the State of Delaware in November 1995 and the LivePerson service was introduced in November 1998. In April 2000, the Company completed an initial public offering and is currently traded on the NASDAQ Global Select Market and the Tel Aviv Stock Exchange. LivePerson is headquartered in New York City with U.S. offices in Alpharetta (Georgia), Austin (Texas), Mountain View (California) and Seattle (Washington), and international offices in Amsterdam (Netherlands), Berlin (Germany), London (United Kingdom), Mannheim (Germany), Melbourne (Australia), Milan (Italy), Paris (France), Ra'anana (Israel), Reading (United Kingdom), Sydney (Australia), Tel Aviv (Israel), and Tokyo (Japan).

LivePerson makes life easier by transforming how people communicate with brands. During the past decade, the consumer has made the mobile device the center of their digital lives, and they have made mobile messaging the center of communication with friends, family and peers. The Company's technology enables consumers to connect with businesses through these same preferred conversational interfaces, including Facebook Messenger, WhatsApp, Apple Business Chat, Google Rich Business Messenger and Alexa. These messaging conversations harness human agents, bots and Artificial Intelligence (AI) to power convenient, personalized and content-rich journeys across the entire consumer lifecycle, from discovery and research, to sales, service and support, and even marketing and brick and mortar engagements. For example, consumers can look up product info like ratings, images and pricing, search for stores, see products in the store, schedule appointments, apply for credit, approve repairs, make purchases or payments - all without ever leaving the messaging channel. LivePerson calls these AI and human-assisted conversational experiences over messaging Conversational Commerce.

LiveEngage, the Company's enterprise-class, cloud-based platform, was designed for Conversational Commerce, enabling businesses to securely deploy messaging, coupled with bots and AI, at scale for brands with tens of millions of customers and many thousands of customer care agents. LiveEngage powers conversations across each of a brand's primary digital channels, including mobile apps, mobile and desktop web browsers, short message service (SMS), social media and third-party consumer messaging platforms. Brands can also use LiveEngage to message consumers when they dial a 1-800 number instead of having them navigate interactive voice response systems (IVRs) and wait on hold.

The robust, cloud-based suite of rich mobile messaging and real-time chat offerings features intelligent routing and capacity mapping, queue prioritization, customer sentiment, real-time analytics and reporting, content delivery, Payment Card Industry (PCI) compliance, cobrowsing and a sophisticated proactive targeting engine. With LiveEngage, agents can manage all conversations with consumers through a single console interface, regardless of which disparate messaging endpoints the consumers originate from: i.e., WhatsApp, Line, Apple Business Chat, IVR, or Google Home. An extensible application programming interface (API) stack facilitates a lower cost of ownership by facilitating robust integration into back-end systems, as well as enabling developers to build their own programs and services on top of the platform. More than three dozen APIs are available on LiveEngage.

LiveEngage also features Maven, a robust AI engine that was custom designed for Conversational Commerce. Maven, announced in December 2018, puts the power of bot development, training and management into the hands of the contact center and its agents, the teams most familiar with how to structure sales and service conversations to drive successful outcomes. The platform enables what the Company calls "the tango" of humans, AI and bots, whereby human agents act as bot managers, overseeing AI-powered conversations and seamlessly stepping into the flow when a personal touch is needed. Through Maven Assist, agents become ultra-efficient, leveraging the AI engine to serve up relevant content, define next-best actions and take over repetitive transactional work, so that the agent can focus on relationship building. By seamlessly integrating LiveEngage with Maven, as well as third-party bots, the platform provides businesses with a comprehensive view of all AI-based and human-based conversations from a single console.

Complementing LiveEngage are teams of technical, solutions and consulting professionals that have developed deep domain expertise in Conversational Commerce across industries and messaging endpoints. The Company is positioned as an authority in Conversational Commerce, publishing a proprietary Conversational Quotient™ Index that measures each customer across multiple key indicators to ascertain the sophistication and breadth of their conversational commerce capabilities. Each business is then benchmarked against industry peers to determine their relative progression. The Company has developed a Transformation Model that is introduced to existing and prospective customers to help guide them on their journeys from legacy and oftentimes inefficient legacy voice, email and chat solutions to modern conversational ones powered by messaging and AI. LivePerson's products, coupled with our domain knowledge, industry expertise and professional services, have been proven to maximize the effectiveness of Conversational Commerce and deliver measurable return on investment.

As a "cloud computing" or software-as-a-service (SaaS) provider, LivePerson provides solutions on a hosted basis. This model offers significant benefits over premise-based software, including lower up-front costs, faster implementation, lower total cost of ownership, scalability, cost predictability, and simplified upgrades. Organizations that adopt a fully-hosted, multi-tenant architecture that is maintained by LivePerson eliminate the majority of the time, server infrastructure costs, and IT resources required to implement, maintain, and support traditional on-premise software.

The Company's consumer services offering is an online marketplace that connects independent service providers (Experts) who provide information and knowledge for a fee via mobile and online messaging with individual consumers (Users). Users seek assistance and advice in various categories including personal counseling and coaching, computers and programming, education and tutoring, spirituality and religion, and other topics.

Basis of Presentation

The accompanying condensed consolidated financial statements as of June 30, 2019 and for the three and six months ended June 30, 2019 and 2018 are unaudited. In the opinion of management, the unaudited condensed consolidated financial statements have been prepared on the same basis as the annual financial statements and reflect all adjustments, which include only normal recurring adjustments, necessary to present fairly the consolidated financial position of LivePerson as of June 30, 2019, and the consolidated results of operations, comprehensive loss and cash flows for the interim periods ended June 30, 2019 and 2018. The financial data and other information disclosed in these notes to the condensed consolidated financial statements related to these periods are unaudited. The results of operations for any interim period are not necessarily indicative of the results of operations for any other future interim period or for a full fiscal year. The condensed consolidated balance sheet at December 31, 2018 has been derived from audited consolidated financial statements at that date.

Certain information and note disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles in the United States (“GAAP”) have been condensed or omitted pursuant to the rules and regulations of the Securities and Exchange Commission (the “SEC”). These unaudited interim condensed consolidated financial statements should be read in conjunction with the Company’s audited consolidated financial statements and notes thereto for the year ended December 31, 2018 included in the Company’s Annual Report on Form 10-K filed with the SEC on February 25, 2019.

Principles of Consolidation

The condensed consolidated financial statements include the Company and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated.

Use of Estimates

The preparation of the Company’s condensed consolidated financial statements in conformity 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 income and expenses during the reporting period. These estimates are based on information available as of the date of the condensed consolidated financial statements; therefore, actual results could differ from management’s estimates.

Recently Issued Accounting Standards

In August 2018, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update ("ASU") No. 2018-15 , "Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract; Disclosures for Implementation Costs Incurred for Internal-Use Software and Cloud Computing Arrangements" (“ASU 2018-15”). This standard aligns the accounting for implementation costs incurred in a hosting arrangement that is a service contract with the accounting for implementation costs incurred to develop or obtain internal-use software under Accounting Standards Codification ("ASC") 350-40, in order to determine which costs to capitalize and recognize as an asset. ASU 2018-15 is effective for annual reporting periods, and interim periods within those years, beginning after December 15, 2019, and can be applied either prospectively to implementation costs incurred after the date of adoption or retrospectively to all arrangements. The Company is currently in the process of evaluating the impact of the adoption of ASU 2018-230 on its consolidated financial statements.

In January 2017, FASB issued ASU No. 2017-04, "Intangibles -Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment" (“ASU 2017-04”). This update addresses concerns over the cost and complexity of the two-step goodwill impairment test. The amendments in this update remove the second step of the test. An entity will apply a one-step quantitative test and record the amount of goodwill impairment as the excess of a reporting unit's carrying amount over its fair value, not to exceed the total amount of goodwill allocated to the reporting unit. The new guidance does not amend the optional qualitative assessment of goodwill impairment. ASU 2017-04 is effective for financial statements issued for annual periods beginning after December 15, 2019, and interim periods within those annual periods. The Company does not expect the adoption of ASU 2017-04 will have a material effect on its financial position, results of operations or cash flows.

Recently Adopted Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, “Leases” (“ASU 2016-02”). ASU 2016-02 requires lessees to recognize the following for all leases (with the exception of short-term leases) at the commencement date: a lease liability, which is a lessee‘s obligation to make lease payments arising from a lease, measured on a discounted basis; and a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. Under the new guidance, lessor accounting is largely unchanged. Lessees (for capital and operating leases) and lessors (for sales-type, direct financing, and operating leases) may apply a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The modified retrospective approach would not require any transition accounting for leases that expired before the earliest comparative period presented.

The Company adopted ASU No. 2016-02, "Leases" (Topic 842), as of January 1, 2019 using the modified transition approach. The modified transition approach provides a method for recording existing leases at adoption. As a result, the Company was not required to adjust its comparative period financial information for effects of the standard or make the new required lease disclosures for periods before the date of adoption (i.e. January 1, 2019). For its long-term operating lease, the Company recognized a right-of-use asset and a lease liability on its balance sheet. The lease liability is determined as the present value of future lease payments using an estimated rate of interest that the Company would have to pay to borrow equivalent funds on a collateralized basis at the lease commencement date. The right-of-use asset is based on the liability adjusted for any prepaid or deferred rent. The lease term at the commencement date is determined by considering whether renewal options and termination options are reasonably assured of exercise. Rent expense for the operating lease is recognized on a straight-line basis over the lease term and is included in operating expenses on the statements of operations. Variable lease payments include lease operating expenses. Adoption of the new standard resulted in the recording of additional net lease assets and lease liabilities of approximately $16.0 million and $19.9 million, respectively, as of June 30, 2019. The standard did not materially impact the Company's consolidated net earnings and had no impact on cash flows.

In June 2018, the FASB issued ASU No. 2018-07, "Compensation -Stock Compensation (Topic 718) - Improvements to Nonemployee Share-Based Payment Accounting" ("ASU 2018-07"). This new standard expands the scope of Topic 718, Compensation-Stock Compensation (which currently only includes share-based payments to employees) to include share-based payments issued to non-employees for goods or services. Consequently, the accounting for share-based payments to non-employees and employees will be substantially aligned. ASU 2018-07 is effective for public companies for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year. The standard did not materially impact the Company's consolidated net earnings and had no impact on cash flows.

2. Revenue Recognition

The majority of the Company's revenue is generated from monthly service revenues and related professional services from the sale of the LivePerson services. Revenues are recognized when control of these services is transferred to the Company's customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for those services.

The Company determines revenue recognition through the following steps:

- Identification of the contract, or contracts, with a customer;
- Identification of the performance obligations in the contract;
- Determination of the transaction price;
- Allocation of the transaction price to the performance obligations in the contract; and
- Recognition of revenue when, or as, the Company satisfies a performance obligation.

Total revenue of $71.0 million and $61.7 million recognized during the three months ended June 30, 2019 and 2018 and $137.4 million and $119.9 million recognized during the six months ended June 30, 2019 and 2018, respectively, under Topic 606, was not materially different from what would have been recognized under Topic 605.

Hosted Services- Business Revenue

Hosted Services Business revenue is reported at the amount that reflects the ultimate consideration expected to be received and primarily consist of fees that provide customers access to LiveEngage, the Company's enterprise-class, cloud-based platform. The Company has determined such access represents a stand-ready service provided continually throughout the contract term. As such, control and satisfaction of this stand-ready performance obligation is deemed to occur over time. The Company recognizes this revenue over time on a ratable basis over the contract term, beginning on the date that access to the LiveEngage platform is made available to the customer. The passage of time is deemed to be the most faithful depiction of the transfer of control of the services as the customer simultaneously receives and consumes the benefit provided by the Company's performance. Subscription contracts are generally one year or longer in length, billed, monthly, quarterly or annually in advance. There is no significant variable consideration related to these arrangements. Additionally, for certain of the Company's larger customers, the Company may provide call center labor through an arrangement with one or more of several qualified vendors. For most of these customers, the Company passes the fee it incurs with the labor provider and its fee for the hosted services through to its customers in the form of a fixed fee for each order placed via the Company's online engagement solutions. For these Gainshare (formerly Pay for Performance) arrangements in accordance with ASC-606, "Principal Agent Considerations", the Company acts as a principal in a transaction if it controls the specified goods or services before they are transferred to the customer.

Professional Services Revenues

Professional services revenue primarily consists of fees for deployment and optimization services, as well as training delivered on an on-demand basis which is deemed to represent a distinct stand-ready performance obligation. Professional Services Revenues are reported at the amount that reflects the ultimate consideration the Company expects to receive in exchange for such services. Control for the majority of the Company's Professional Services contracts passes over time to the customer and is recognized ratably over the contracted period, as the passage of time is deemed to be the most faithful depiction of the transfer of control. For certain deployment services, which are not deemed to represent a distinct performance obligation, revenue will be recognized in the same manner as the fee for access to the LiveEngage platform, and as such will be recognized on a straight-line basis over the contract term. For services billed on a fixed price basis, revenue is recognized over time based on the proportion performed using inputs as the measure of progress toward complete satisfaction of the performance obligation. Professional service contracts are generally one year or longer in length, billed, monthly, quarterly or annually in advance. There is no significant variable consideration related to these arrangements.

Contracts with Multiple Performance Obligations

Some of the Company's contracts with customers contain multiple performance obligations. For these contracts, the Company accounts for individual performance obligations separately if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price basis. The Company determines the standalone selling prices based on its overall pricing objectives, taking into consideration market conditions and other factors, including the value of its contracts, the cloud applications sold, and the number and types of users within its contracts.

Hosted Services- Consumer Revenue

For revenue from the Company's Consumer segment generated from online transactions between Experts and Users, revenue is recognized at an amount net of Expert fees in accordance with ASC 606, "Principal Agent Considerations," due primarily to the fact that the Expert is the primary obligor. Additionally, the Company performs as an agent without any risk of loss for collection, and is not involved in selecting the Expert or establishing the Expert's fee. The Company collects a fee from the consumer and retains a portion of the fee, and then remits the balance to the Expert. Revenue from these transactions is recognized at the point in time when the transaction is complete and no significant performance obligations remain.

Deferred Revenues

The Company records deferred revenues when cash payments are received or due in advance of its performance. The increase in the deferred revenue balance as of June 30, 2019 is primarily driven by cash payments received or due in advance of satisfying its performance obligations, partially offset by $30.1 million of revenues recognized that were included in the deferred revenue balance as of December 31, 2018.

The following table presents deferred revenue by revenue source (amounts in thousands):

	Deferred Revenue	
	As of June 30, 2019	As of December 31, 2018
Hosted services – Business	$ 63,949	$ 52,232
Professional services – Business	5,410	2,783
Total deferred revenue - short term	$ 69,359	$ 55,015
Hosted services – Business	$ 333	$ 19
Professional services – Business	377	203
Total deferred revenue - long term	$ 710	$ 222

Disaggregated Revenue

The following table presents the Company's revenues disaggregated by revenue source (amounts in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Revenue:				
Hosted services – Business	$ 53,672	$ 48,331	$ 105,209	$ 95,759
Hosted services – Consumer	6,124	4,952	11,531	9,632
Professional services	11,163	8,377	20,621	14,510
Total revenue	$ 70,959	$ 61,660	$ 137,361	$ 119,901

Revenue by Geographic Location

The following table presents the Company’s revenues attributable to domestic and foreign operations for the periods presented (amounts in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
United States	$ 41,315	$ 35,572	$ 79,904	$ 69,643
Other Americas (1)	1,883	2,547	4,652	3,806
Total Americas	43,198	38,119	84,556	73,449
EMEA (2) (4)	19,911	17,519	38,024	34,438
APAC (3)	7,850	6,022	14,781	12,014
Total revenue	$ 70,959	$ 61,660	$ 137,361	$ 119,901

(1) Canada, Latin America and South America
(2) Europe, the Middle East and Africa (“EMEA”)
(3) Asia-Pacific (“APAC”)
(4) Includes revenues from the United Kingdom of $13.0 million and $11.9 million for the three months ended June 30, 2019 and 2018, respectively, and $24.7 million and $23.5 million for the six months ended June 30, 2019 and 2018, respectively, and from the Netherlands of $2.6 million and $2.1 million for the three months ended June 30, 2019 and 2018, respectively, and $5.1 million and $4.0 million for the six months ended June 30, 2019 and 2018, respectively.

Information about Contract Balances

Amounts collected in advance of services being provided are accounted for as deferred revenue. Nearly all of the Company's deferred revenue balance is related to *Hosted Services- Business Revenue.*

In some arrangements, the Company allows customers to pay for access to LiveEngage over the term of the software license. The Company refers to these as subscription transactions. Amounts recognized as revenue in excess of amounts billed are recorded as unbilled receivables. Unbilled receivables, anticipated to be invoiced in the next twelve months, are included in accounts receivable on the consolidated balance sheet. The opening and closing balances of the Company's accounts receivable, unbilled receivables, and deferred revenues are as follows (amounts in thousands):

	Accounts Receivable	Unbilled Receivable	Prepaid Commissions	Deferred Revenue (current)	Deferred Revenue (long term)
Opening Balance as of December 31, 2018	$ 34,211	$ 11,812	$ 13,361	$ 55,015	$ 222
Increase (decrease), net	5,522	(78)	5,458	14,344	488
Ending Balance as of June 30, 2019	$ 39,733	$ 11,734	$ 18,819	$ 69,359	$ 710

As of June 30, 2019, the Company expects to recognize the long term performance obligations in 2020.

3. Net Loss Per Share

The Company calculates earnings per share ("EPS") in accordance with the provisions of ASC 260-10 and the guidance of SEC Staff Accounting Bulletin ("SAB") No. 98. Under ASC 260-10, basic EPS excludes dilution for common stock equivalents and is computed by dividing net income or loss attributable to common shareholders by the weighted average number of common shares outstanding for the period. All options, warrants or other potentially dilutive instruments issued for nominal consideration are required to be included in the calculation of basic and diluted net income attributable to common stockholders. Diluted EPS is calculated using the treasury stock method and reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock and resulted in the issuance of common stock.

Diluted net loss per common share for the three and six months ended June 30, 2019 does not include the effect of 9,286,508 outstanding common stock awards, as the effect of their inclusion is anti-dilutive. Diluted net loss per common share for the three and six months ended June 30, 2018 does not include the effect of 9,784,690 outstanding common stock awards, as the effect of their inclusion is anti-dilutive.

A reconciliation of shares used in calculating basic and diluted net loss per share follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Basic	62,350,787	58,648,195	61,889,072	57,982,648
Effect of assumed exercised options	—	—	—	—
Diluted	62,350,787	58,648,195	61,889,072	57,982,648

The Company expects to settle the principal amount of its outstanding Notes (as defined below) in cash and any excess in shares of the Company's common stock. The Company uses the treasury stock method for calculating any potential dilutive effect of the conversion spread on diluted net income per share, if applicable. The conversion spread will have a dilutive impact on diluted net income per share of common stock when the average market price of the Company's common stock for a given period exceeds the initial conversion price of $38.58 per share for the Notes. See Note 8 of the Notes to Condensed Consolidated Financial Statements for a full description of the Notes.

4. Segment Information

The Company accounts for its segment information in accordance with the provisions of ASC 280-10, "Segment Reporting." ASC 280-10 establishes annual and interim reporting standards for operating segments of a company. ASC 280-10 requires disclosures of selected segment-related financial information about products, major customers, and geographic areas based on the Company's internal accounting methods. The Company is organized into two operating segments for purposes of making operating decisions and assessing performance. The Business segment enables brands to leverage LiveEngage's sophisticated intelligence engine to connect with consumers through an integrated suite of mobile and online business messaging technologies. The Consumer segment facilitates online transactions between independent service providers ("Experts") and individual consumers ("Users") seeking information and knowledge for a fee via mobile and online messaging. Both segments currently generate their revenue primarily in the United States. The chief operating decision maker, who is the chief executive officer, evaluates performance, makes operating decisions, and allocates resources based on the operating income of each segment. The reporting segments follow the same accounting polices used in the preparation of the Company's condensed consolidated financial statements which are described in the summary of significant accounting policies. The Company allocates cost of revenue, sales and marketing and amortization of purchased intangibles to the segments, but it does not allocate product development expenses, general and administrative expenses, restructuring costs and income tax expense because management does not use this information to measure performance of the operating segments. There are currently no inter-segment sales.

Summarized financial information by segment for the three months ended June 30, 2019, based on the Company's internal financial reporting system utilized by the Company's chief operating decision maker, follows (amounts in thousands):

	Business	Consumer	Corporate	Consolidated
Revenue:				
Hosted services – Business	$ 53,672	$ —	$ —	$ 53,672
Hosted services – Consumer	—	6,124	—	6,124
Professional services	11,163	—	—	11,163
Total revenue	64,835	6,124	—	70,959
Cost of revenue	16,960	1,089	—	18,049
Sales and marketing	35,568	3,775	—	39,343
Amortization of purchased intangibles	438	—	—	438
Unallocated corporate expenses	—	—	34,150	34,150
Operating income (loss)	$ 11,869	$ 1,260	$ (34,150)	$ (21,021)

Summarized financial information by segment for the three months ended June 30, 2018, based on the Company's internal financial reporting system utilized by the Company's chief operating decision maker, follows (amounts in thousands):

	Business	Consumer	Corporate	Consolidated
Revenue:				
Hosted services – Business	$ 48,331	$ —	$ —	$ 48,331
Hosted services – Consumer	—	4,952	—	4,952
Professional services	8,377	—	—	8,377
Total revenue	56,708	4,952	—	61,660
Cost of revenue	15,086	950	—	16,036
Sales and marketing	23,339	2,053	—	25,392
Amortization of purchased intangibles	424	—	—	424
Unallocated corporate expenses	—	—	27,624	27,624
Operating income (loss)	$ 17,859	$ 1,949	$ (27,624)	$ (7,816)

Summarized financial information by segment for the six months ended June 30, 2019, based on the Company's internal financial reporting system utilized by the Company's chief operating decision maker, follows (amounts in thousands):

	Business	Consumer	Corporate	Consolidated
Revenue:				
Hosted services – Business	$ 105,209	$ —	$ —	$ 105,209
Hosted services – Consumer	—	11,531	—	11,531
Professional services	20,621	—	—	20,621
Total revenue	125,830	11,531	—	137,361
Cost of revenue	34,622	2,076	—	36,698
Sales and marketing	65,660	6,719	—	72,379
Amortization of purchased intangibles	899	—	—	899
Unallocated corporate expenses	—	—	66,769	66,769
Operating income (loss)	$ 24,649	$ 2,736	$ (66,769)	$ (39,384)

Summarized financial information by segment for the six months ended June 30, 2018, based on the Company's internal financial reporting system utilized by the Company's chief operating decision maker, follows (amounts in thousands):

	Business	Consumer	Corporate	Consolidated
Revenue:				
Hosted services – Business	$ 95,759	$ —	$ —	$ 95,759
Hosted services – Consumer	—	9,632	—	9,632
Professional services	14,510	—	—	14,510
Total revenue	110,269	9,632	—	119,901
Cost of revenue	28,004	1,986	—	29,990
Sales and marketing	45,062	4,461	—	49,523
Amortization of purchased intangibles	848	—	—	848
Unallocated corporate expenses	—	—	51,177	51,177
Operating income (loss)	$ 36,355	$ 3,185	$ (51,177)	$ (11,637)

Geographic Information

The Company is domiciled in the United States and has international operations in Israel, the United Kingdom, Asia-Pacific and Australia, Latin America and Western Europe, particularly France, Germany and the Netherlands. The following table presents the Company's long-lived assets by geographic region as of the dates presented (amounts in thousands):

	June 30, 2019	December 31, 2018
United States	$ 142,116	$ 121,894
Israel	16,347	13,598
Australia	9,429	8,970
Netherlands	7,561	7,426
Other [(1)]	9,055	3,130
Total long-lived assets	$ 184,508	$ 155,018

[(1)] United Kingdom, Germany, Japan, France and Italy

No individual customer accounted for 10% or more of consolidated revenue for any of the periods presented. No individual customer accounted for 10% or more of accounts receivable as of June 30, 2019. One customer exceeded 10% of our total accounts receivable as of December 31, 2018.

5. Goodwill and Intangible Assets

Goodwill

The changes in the carrying amount of goodwill for the six months ended June 30, 2019 are as follows (amounts in thousands):

	Business	Consumer	Consolidated
Balance as of December 31, 2018	$ 87,007	$ 8,024	$ 95,031
Adjustments to goodwill:			
Foreign exchange adjustment	(15)	—	(15)
Balance as of June 30, 2019	$ 86,992	$ 8,024	$ 95,016

Intangible Assets

Intangible assets are summarized as follows (amounts in thousands):

	As of June 30, 2019			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Amortization Period
Amortizing intangible assets:				
Technology	$ 30,425	$ (24,405)	$ 6,020	5.3 years
Customer relationships	16,967	(12,370)	4,597	8.4 years
Trade names	1,286	(1,286)	—	2.1 years
Non-compete agreements	1,436	(1,436)	—	2.3 years
Patents	2,634	(626)	2,008	12.7 years
Other	262	(235)	27	2.7 years
Total	$ 53,010	$ (40,358)	$ 12,652	

	As of December 31, 2018			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Amortization Period
Amortizing intangible assets:				
Technology	$ 30,447	$ (23,615)	$ 6,832	5.3 years
Customer relationships	17,219	(11,786)	5,433	8.4 years
Trade names	1,286	(1,286)	—	2.1 years
Non-compete agreements	1,436	(1,436)	—	2.3 years
Patents	2,074	(534)	1,540	12.4 years
Other	262	(235)	27	2.7 years
Total	$ 52,724	$ (38,892)	$ 13,832	

Amortization expense is calculated over the estimated useful life of the asset. Aggregate amortization expense for intangible assets was $0.7 million for the three months ended June 30, 2019 and 2018, respectively, and $1.5 million and $1.4 million for the six months ended June 30, 2019 and 2018, respectively. For the three and six months ended June 30, 2019 and 2018, respectively, a portion of this amortization is included in cost of revenue. Estimated amortization expense for the next five years is as follows (amounts in thousands):

	Estimated Amortization Expense
Remaining 2019	$ 1,451
2020	2,714
2021	2,502
2022	2,143
2023	897
Thereafter	2,945
Total	$ 12,652

6. Property and Equipment

The following table presents the detail of property and equipment for the periods presented (amounts in thousands):

	June 30, 2019	December 31, 2018
Computer equipment and software	$ 82,550	$ 79,161
Internal-use software development costs	36,048	19,240
Furniture, equipment and building improvements	16,067	14,132
	134,665	112,533
Less: accumulated depreciation	(76,371)	(68,798)
Total	$ 58,294	$ 43,735

7. Accrued Expenses and Other Current Liabilities

The following table presents the detail of accrued expenses and other current liabilities for the periods presented (amounts in thousands):

	June 30, 2019	December 31, 2018
Payroll and other employee related costs	$ 16,545	$ 19,014
Professional services and consulting and other vendor fees	16,485	17,461
Unrecognized tax benefits	1,938	1,913
Sales commissions	4,454	6,239
Contingent earn-out (see Note 9)	1,885	2,372
Restructuring (see Note 13)	—	977
Other	3,901	2,686
Total	$ 45,208	$ 50,662

8. Convertible Senior Notes and Capped Call Transactions

In March 2019, the Company issued $230.0 million aggregate principal amount of 0.750% Convertible Senior Notes due 2024 in a private placement, which amount includes $30.0 million aggregate principal amount of such Notes pursuant to the exercise in full of the over-allotment options of the initial purchasers (collectively, the “Notes”). The interest on the Notes is payable semi-annually in arrears on March 1 and September 1 of each year, beginning on September 1, 2019.

The Notes will mature on March 1, 2024, unless earlier repurchased or redeemed by the Company or converted pursuant to their terms. The total net proceeds from the debt offering, after deducting debt issuance costs, paid or payable by us, was approximately $221.0 million.

Each $1,000 principal amount of the Notes is initially convertible into 25.9182 shares of the Company’s common stock par value $0.001, which is equivalent to an initial conversion price of approximately $38.58 per share. The conversion rate is subject to adjustment upon the occurrence of certain specified events but will not be adjusted for any accrued and unpaid interest. In addition, following certain corporate events that occur prior to the maturity date, the Company will increase the conversion rate for a holder who elects to convert its Notes in connection with such a corporate event. The Notes are not redeemable prior to the maturity date of the Notes and no sinking fund is provided for the Notes. If we undergo a fundamental change (as defined in the indenture governing the Notes) prior to the maturity date, holders may require us to repurchase for cash all or any portion of their Notes in principal amounts of $1,000 or a multiple thereof at a fundamental change repurchase price equal to 100% of the principal amount of the Notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

Holders of the Notes may convert their Notes at their option at any time prior to the close of business on the business day immediately preceding November 1, 2023, in multiples of $1,000 principal amount, only under the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on June 30, 2019 (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 for the Notes on each applicable trading day as determined by the Company; (2) during the five business day period after any five consecutive trading day period (the “measurement period”) in which the “trading price” (as defined in the indenture governing the Notes) per $1,000 principal amount of Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of the Company’s common stock and the conversion rate for the Notes on each such trading day; or (3) upon the occurrence of specified corporate events. On or after November 1, 2023, holders may convert all or any portion of their Notes at any time prior to the close of business on the second scheduled trading day immediately preceding the maturity date, regardless of the foregoing circumstances. Upon conversion, the Company will pay or deliver, as the case may be, cash, shares of its common stock or a combination of cash and shares of its common stock, at the Company’s election.

It is the Company’s current intent to settle the principal amount of its outstanding Notes in cash and any excess in shares of the Company’s common stock.

During the six months ended June 30, 2019, the conditions allowing holders of the Notes to convert were not met.

The Notes are senior unsecured obligations and will rank senior in right of payment to any of the Company’s indebtedness that is expressly subordinated in right of payment to the Notes; equal in right of payment with the Company’s existing and future liabilities that are not so subordinated; effectively subordinated 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 current or future subsidiaries of the Company.

In accounting for the issuance of the Notes, the Company separated the Notes 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 convertible feature. The carrying amount of the equity component representing the conversion option was $52.9 million and was determined by deducting the fair value of the liability component from the par value of the Notes. The equity component is not remeasured as long as it continues to meet the conditions for equity classification. The excess of the principal amount of the liability component over its carrying amount, or the debt discount, is amortized to interest expense at an effective interest rate over the contractual terms of the Notes.

In accounting for the transaction costs related to the Notes, the Company allocated the total amount incurred of approximately $8.6 million to the liability and equity components of the Notes based on the proportion of the proceeds allocated to the debt and equity components. Issuance costs attributable to the liability component were approximately $6.6 million, were recorded as an additional debt discount and are amortized to interest expense using the effective interest method over the contractual terms of the Notes. Issuance costs attributable to the equity component were approximately $2.0 million and recorded as a reduction of additional paid in capital in stockholders’ equity.

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

	As of June 30, 2019
Principal	$ 230,000
Unamortized discount	(49,910)
Unamortized issuance costs	(6,273)
Net carrying amount	$ 173,817

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

	As of June 30, 2019
Proceeds allocated to the conversion options (debt discount)	$ 52,900
Issuance costs	(1,986)
Net carrying amount	$ 50,914

The following table sets forth the interest expense recognized related to the Notes (in thousands):

	Three months ended June 30, 2019	Six Months Ended June 30, 2019
Contractual interest expense	$ 431	$ 575
Amortization of issuance costs	260	376
Amortization of debt discount	2,263	2,990
Total interest expense	$ 2,954	$ 3,941

The remaining term over which the debt discount and debt issuance costs will be amortized is 4.7 years. The effective interest rate on the debt was 6.89% for the period ended June 30, 2019.

In connection with the offering of the Notes, the Company entered into privately-negotiated capped call option transactions with certain counterparties (the “capped calls”). The capped calls each have an initial strike price of approximately $38.58 per share, subject to certain adjustments, which corresponds to the initial conversion price of the Notes. The capped calls have initial cap prices of $57.16 per share, subject to certain adjustment events. The capped calls cover, subject to anti-dilution adjustments, approximately 5.96 million shares of common stock. The capped calls are generally intended to reduce or offset the potential dilution to the common stock upon any conversion of the Notes with such reduction or offset, as the case may be, subject to a cap based on the cap price. The capped calls expire on March 1, 2024, subject to earlier exercise. The capped calls are subject to either adjustment or termination upon the occurrence of specified extraordinary events affecting the Company, including a merger event, a tender offer, and a nationalization, insolvency or delisting involving the Company. In addition, the capped calls are subject to certain specified additional disruption events that may give rise to a termination of the capped calls, including changes in law, failure to deliver, and hedging disruptions. The capped calls are recorded in stockholders’ equity and are not accounted for as derivatives. The net cost of $23.2 million incurred to purchase the capped calls was recorded as a reduction to additional paid-in capital in the accompanying condensed consolidated balance sheet.

9. Acquisitions

AdvantageTec Inc.

In October 2018, the Company entered into a stock purchase agreement to acquire the outstanding equity interest of AdvantageTec Inc. (“AdvantageTec”), a leading provider of texting solutions for service departments of automotive dealerships that helps enable Conversational Commerce across the entire dealership, including both front end/variable operations (new and used vehicle sales) and back end/fixed operations (parts and services). The purchase agreement was for total consideration of approximately $11.2 million, which includes approximately $6.0 million in cash, approximately $4.3 million in shares of common stock, and approximately $0.9 million of potential earn-out consideration in cash and shares of common stock. The earn-out is contingent upon achieving certain targeted financial, strategic and integration objectives and milestones and is included as part of the purchase price. During the six months ended June 30, 2019, the Company made $0.5 million of payments in earn-out consideration, with potential future earn-out payments of $0.4 million at June 30, 2019.

The purchase price allocation resulted in approximately $9.1 million of goodwill and approximately $2.2 million of intangible assets. The goodwill will not be deductible for tax purposes. The intangible assets are being amortized over their expected period of benefit. A deferred tax liability for the identified intangibles has been recorded.

AdvantageTec Inc. enhances the Company's messaging platform available for the automotive industry and is included in the Company's business segment.

Conversable, Inc.

In September 2018, the Company acquired the employees and technology assets of Conversable, Inc. a SaaS based Artificial Intelligence powered conversational platform, headquartered in Austin, Texas, for an aggregate estimated purchase price of $5.7 million. The estimated purchase price consisted of $1.3 million in cash, approximately $2.9 million in shares of common stock of the Company, and a potential earn-out consideration of $1.5 million in cash, which is based on achieving certain targeted financial, strategic, and integration objectives. This transaction was accounted for under the purchase method of accounting and was based upon the estimated fair value of Conversable, Inc.'s net tangible and identifiable intangible assets as of the date of acquisition.

The purchase price allocation resulted in approximately $5.5 million of goodwill and approximately $0.5 million of intangible assets. The goodwill will be deductible for tax purposes. The intangible assets are being amortized over their expected period of benefit. The allocation of the purchase price to net book value of acquired assets and liabilities resulted in a net liability of $0.3 million, which includes accounts receivable, property and equipment, accrued expenses, and deferred revenue. Transaction costs of $0.3 million were expensed during the six months ended June 30, 2019.

Conversable Inc.'s capabilities will accelerate the ongoing expansion of the Company's Conversational Commerce solutions and enhance the Company's ability to deliver proactive and personalized content and services when and where the customer needs it, helping consumers find immediate service through messaging. Conversable, Inc is included in the Company's business segment.

BotCentral, Inc.

In January 2018, the Company acquired the employees and technology assets of BotCentral, Inc., a Silicon Valley based startup, for a purchase price of approximately $1.0 million in common stock of the Company. The Company incurred an additional $0.2 million related to acquisition costs. This transaction was accounted for as an asset purchase. The aggregate amount of approximately $1.2 million is included in intangibles on the Company's consolidated balance sheet. With the BotCentral team's expertise and knowledge of the LiveEngage platform, the team is bringing valuable insight for the Company's customers and partners, and enabling the company to more rapidly optimize its bot deployment capabilities, and grow the ecosystem. BotCentral, Inc. is included in the Company's business segment.

10. Fair Value Measurements

The Company measures its cash equivalents at fair value based on an expected exit price as defined by the authoritative guidance on fair value measurements, which represents the amount that would be received on the sale of an asset or paid to transfer a liability, as the case may be, in an orderly transaction between market participants. As such, fair value may be based on assumptions that market participants would use in pricing an asset or liability. The authoritative guidance on fair value measurements establishes a consistent framework for measuring fair value on either a recurring or nonrecurring basis whereby inputs, used in valuation techniques, are assigned a hierarchical level. The following are the hierarchical levels of inputs to measure fair value:

- Level 1: Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2: Inputs reflect: quoted prices for identical assets or liabilities in markets that are not active; quoted prices for similar assets or liabilities in active markets; inputs other than quoted prices that are observable for the assets or liabilities; or inputs that are derived principally from or corroborated by observable market data by correlation or other means.
- Level 3: Unobservable inputs reflecting the Company's assumptions incorporated in valuation techniques used to determine fair value. These assumptions are required to be consistent with market participant assumptions that are reasonably available.

Financial Assets and Liabilities

The carrying amount of cash, accounts receivable, and accounts payable approximate their fair value due to their short-term nature. The Company's assets and liabilities that are measured at fair value on a recurring basis, by level, within the fair value hierarchy as of June 30, 2019 and December 31, 2018, are summarized as follows (amounts in thousands).

	June 30, 2019				December 31, 2018			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets:								
Cash equivalents:								
Money market funds	$ 2,867	$ —	$ —	$ 2,867	$ 2,828	$ —	$ —	$ 2,828
Total assets	$ 2,867	$ —	$ —	$ 2,867	$ 2,828	$ —	$ —	$ 2,828
Liabilities:								
Contingent earn-out	$ —	$ —	$ 1,885	$ 1,885	$ —	$ —	$ 2,372	$ 2,372
Total liabilities	$ —	$ —	$ 1,885	$ 1,885	$ —	$ —	$ 2,372	$ 2,372

In determining fair value, the Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible as well as considers counterparty credit risk in its assessment of fair value. Observable or market inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company's assumptions based on the best information available.

The Company's money market funds are measured at fair value on a recurring basis based on quoted market prices in active markets and are classified as level 1 within the fair value hierarchy. The Company's contingent earn-out liability is measured at fair value on a recurring basis and is classified as level 3 within the fair value hierarchy. On a nonrecurring basis, the Company uses fair value measures when analyzing asset impairment. Long-lived tangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If it is determined such indicators are present and the review indicates that the assets will not be fully recoverable, based on undiscounted estimated cash flows over the remaining amortization periods, their carrying values are reduced to estimated fair value. The Company uses an income approach and inputs that constitute level 3. During the third quarter of each year, the Company evaluates goodwill for impairment at the reporting unit level. The Company uses qualitative factors in accordance with ASU No. 2011-08 to determine whether it is "more likely than not" that the fair value of a reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the two-step goodwill impairment test. This measurement is classified based on level 3 input.

As of June 30, 2019, the fair value of the Notes, as further described in Note 8 above, was approximately $184.8 million. The fair value was determined by an independent valuation specialist using the antithetic variable technique and is considered a Level 2 fair value measurement.

The Company recorded a contingent earn-out of $2.4 million in December 2018 in connection with the acquisitions of Conversable, Inc. and AdvantageTec Inc. The contingent earn-out is based on achieving certain targeted financial, strategic, and integration objectives. The unobservable inputs considered are probability factors and the time value of money. During the six months ended June 30, 2019, there were payments of $0.5 million. As a result, the contingent earn-out balance was $1.9 million as of June 30, 2019. See Note 9 of the Notes to Condensed Consolidated Financial Statements for a full description of the acquisition.

The changes in fair value of the Level 3 liabilities are as follows (amounts in thousands):

	Contingent Earn-Out	
	June 30, 2019	December 31, 2018
Balance, Beginning of period	$ 2,372	$ —
Conversable, Inc. addition (see Note 9)	—	1,496
AdvantageTec Inc. addition (see Note 9)	—	876
Cash payment	(487)	—
Balance, End of period	$ 1,885	$ 2,372

Derivative Financial Instruments

The Company is exposed to foreign exchange risks that in part are managed by using derivative financial instruments. The Company entered into foreign currency forward contracts related to risks associated with foreign operations. The Company does not use derivatives for trading purposes. Derivatives are recorded at their estimated fair values based upon Level 2 inputs. Derivatives designated and effective as cash flow hedges are reported as a component of other comprehensive income and reclassified to earnings in the same periods in which the hedged transactions impact earnings. Gains and losses related to derivatives not meeting the requirements of hedge accounting and the portion of derivatives related to hedge ineffectiveness are recognized in current earnings. As of June 30, 2019, the Company is not party to any foreign currency forward contracts and does not have any restricted cash balance.

The following summarizes certain information regarding the Company's derivatives that are not designated or are not effective as hedges (in thousands):

	Gain (losses) on Derivative Instruments Recognized in Statements of Operations				
		Three Months Ended June 30,		Six Months Ended June 30,	
	Location	2019	2018	2019	2018
Foreign currency derivatives contracts	Other income, net	$ —	$ —	$ —	$ (50)

11. Commitments and Contingencies

Contractual Obligations

The Company leases facilities and certain car leases (the "leases") under agreements accounted for as operating leases. The leases have initial lease terms ranging from 2 years to 10 years. Payments due under the lease contracts include primarily fixed payments. The lease terms include periods under options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Currently, there are no operating leases where we believe it is reasonably certain that the Company will exercise any option to extend the initial term.

The Company has evaluated its facility leases and determined which leases met the definition of the new standard in accordance with Topic 842. The Company also performed an evaluation of their other contracts with suppliers in accordance with Topic 842 and have determined that, except for the facilities and car leases described above, none of its supply contracts contain a lease. Further, the Company has made an accounting policy election to keep leases with an initial term of twelve months or less off the balance sheet. This policy applies to all classes of the underlying assets. The Company will recognize those lease payments and associated interest expense in the consolidated statement of operations evenly over the lease term.

In connection with the leases, the Company recognized operating lease right-of-use assets of $16.0 million and an aggregate lease liability of $19.9 million in its condensed consolidated balance sheet as of June 30, 2019.

The determination of the discount rate used to calculate the present value of the right-of-use assets and lease liabilities depends on whether an interest rate is specified in the lease or not. If the lease specifies a rate, that rate is used when calculating the present value of lease payments. If the rate is not readily determinable, which is generally the case for the Company, the Company's incremental borrowing rate ("IBR") as of the date of inception of the lease is used (for initial measurement, the IBR was determined as of the adoption date of the standard). The IBR is the rate of interest that the Company would have to pay to borrow on a collateralized basis over a similar term and amount equal to the lease payments in a similar economic environment. The Company used a ratings benchmark report against its peers in the technology sector.

Operating Leases	As of June 30, 2019 (in thousands, except lease term and discount rate)
Right-of-use asset	$ 15,956
Current operating lease liability	6,442
Long term operating lease liability	13,443
Total operating lease liability	$ 19,885
Weighted Average Remaining Lease Term	
Operating leases	3.9 years
Weighted Average Discount Rate	
Operating leases	7%

During the three months and six months ended June 30, 2019, there were $1.6 million and $3.2 million of cash payments for operating leases, respectively. The undiscounted future lease payments under the lease liability as of June 30, 2019 were as follows (amounts in thousands):

Year ending December 31:	As of June 30, 2019
2019 (remaining six months)	$ 3,741
2020	6,421
2021	4,955
2022	3,669
2023	1,903
2024 and thereafter	1,961
Total undiscounted lease payments	22,650
Less: present value adjustment	(2,765)
Total operating lease liability	$ 19,885

Rental expense for operating leases and other service agreements was approximately $3.2 million and $2.7 million for the three months ended, June 30, 2019 and 2018, respectively, and $6.1 million and $5.3 million for the six months ended June 30, 2019 and 2018, respectively.

Employee Benefit Plans

The Company has a 401(k) defined contribution plan covering all eligible employees. In 2018, the Company provided for employer matching contributions equal to 50% of employee contributions, up to the lesser of 5% of eligible compensation or $6,000. Matching contributions are deposited into the employee's 401(k) account and are subject to 5 year graded vesting. Beginning in 2019, the Company's 401(k) policy was changed to a Safe Harbor Plan, whereby the Company matches 100% of the first 3% of eligible compensation and 50% of the next 2% of eligible compensation. Furthermore, the match is immediately vested. Salaries and related expenses include $0.8 million and $0.4 million of employer matching contributions for the three months ended June 30, 2019 and 2018, respectively and $1.8 million and $0.9 million for the six months ended June 30, 2019 and 2018, respectively.

Letters of Credit

As of June 30, 2019, the Company has a $1.8 million letter of credit outstanding substantially in favor of a certain landlord for office space. In addition, the Company has a letter of credit totaling $0.1 million as a security deposit for the due performance by the Company of the terms and conditions of a supply contract. There were no draws against these letters of credit during the six months ended June 30, 2019.

12. Stockholders' Equity

Common Stock

As of June 30, 2019, there were 100,000,000 shares of common stock authorized, and 65,398,801 shares issued and outstanding. As of December 31, 2018, there were 100,000,000 shares of common stock authorized, and 63,676,229 shares issued and outstanding. The par value for common shares is $0.001 per share.

On June 6, 2019, our stockholders approved an amendment to our charter to increase the number of shares of our common stock that we are authorized to issue from 100,000,000 to 200,000,000 shares. We expect to file a charter amendment with the State of Delaware to effectuate this increase in the number of shares of our common stock that we are authorized to issue.

Preferred Stock

As of June 30, 2019 and December 31, 2018, there were 5,000,000 shares of preferred stock authorized, and zero shares issued and outstanding. The par value for preferred shares is $0.001 per share.

Stock Repurchase Program

From 2012 through 2018, the Company had a stock repurchase program in place pursuant to which the Company was authorized to repurchase shares of its common stock, in the open market or privately negotiated transactions, at times and prices considered appropriate by the Board of Directors depending upon prevailing market conditions and other corporate considerations. The timing and actual number of shares repurchased depend on a variety of factors including the timing of open trading windows, price, corporate and regulatory requirements and other market conditions. The program was discontinued at the end of 2018. The Company may or may not enter into a new stock repurchase program in the future.

Stock-Based Compensation

The Company follows FASB ASC 718-10, "Stock Compensation," which addresses the accounting for transactions in which an entity exchanges its equity instruments for goods or services, with a primary focus on transactions in which an entity obtains employee services in share-based payment transactions. ASC 718-10 requires measurement of the cost of employee services received in exchange for an award of equity instruments based on the grant-date fair value of the award. Incremental compensation costs arising from subsequent modifications of awards after the grant date must be recognized.

The per share weighted average fair value of stock options granted was $11.74 and $8.15 during the three months ended June 30, 2019 and 2018, respectively and $11.28 and $6.26 during the six months ended June 30, 2019 and 2018, respectively. The fair value of each option grant is estimated on the date of grant using the Black-Scholes option-pricing model with the following weighted average assumptions:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Dividend yield	0.0%	0.0%	0.0%	0.0%
Risk-free interest rate	1.88% - 2.36%	2.6% - 2.8%	1.88% - 2.57%	2.5% - 2.8%
Expected life (in years)	5	5	5	5
Historical volatility	43.42% - 43.69%	43.7% - 48.4%	43.42% - 43.85%	43.7% - 48.4%

A description of the methods used in the significant assumptions used to estimate the fair value of stock-based compensation awards follows:

Dividend yield – The Company uses 0% as it has never issued dividends and does not anticipate issuing dividends in the near term.

Risk-free interest rate – The Company uses the market yield on U.S. Treasury securities at five years with constant maturity, representing the current expected life of stock options in years.

Expected life – The Company uses historical data to estimate the expected life of a stock option.

Historical volatility – The Company uses a trailing five year from grant date to determine volatility.

Stock Option Plans

During 1998, the Company established the Stock Option and Restricted Stock Purchase Plan (the “1998 Plan”). Under the 1998 Plan, the Board of Directors could issue incentive stock options or nonqualified stock options or other equity-based awards in respect of up to 5,850,000 shares of common stock. The 2000 Stock Incentive Plan (the “2000 Plan”) succeeded the 1998 Plan. Under the 2000 Plan, the options which had been outstanding under the 1998 Plan were incorporated in the 2000 Plan increasing the number of shares available for issuance under the 2000 Plan by approximately 4,150,000, thereby reserving for issuance 10,000,000 shares of common stock in the aggregate.

The Company established the 2009 Stock Incentive Plan (the “2009 Plan”) as a successor to the 2000 Plan. Under the 2009 Plan, the options which had been outstanding under the 2000 Plan were incorporated into the 2009 Plan and the Company increased the number of shares available for issuance under the plan by 6,000,000. The Company amended the 2009 Plan (the “Amended 2009 Plan”) effective June 7, 2012. The Amended 2009 Plan increased the number of shares authorized for issuance under the plan by an additional 4,250,000. On June 2, 2017, the Company's Board of Directors amended and restated the Amended 2009 Plan effective April 30, 2017. The amended and restated plan increased the number of shares authorized for issuance under the plan by an additional 4,000,000.

On April 11, 2019, the Company's Board of Directors adopted, and on June 6, 2019, the Company's stockholders approved, the 2019 Stock Incentive Plan ("2019 Stock Incentive Plan") to replace the Amended and Restated 2009 Plan, which was set to expire under its terms on June 9, 2019. Under the 2019 Stock Incentive Plan, the number of shares underlying options and other equity awards which remain outstanding, as well as the number of shares that remained available for grant under the 2009 Plan and under the 2000 Plan were incorporated, as of June 6, 2019 into the 2019 Stock Incentive Plan. In addition, under the 2019 Stock Incentive Plan, 4,250,000 new shares were authorized for issuance. The number of shares authorized for issuance under the 2019 Stock Incentive Plan, the Amended 2009 Plan, and the 2000 Plan is 32,067,744 shares in the aggregate. Options to acquire common stock granted thereunder have 10-year terms. As of June 30, 2019, approximately 4.9 million shares of common stock remained available for issuance under the 2019 Stock Incentive Plan (taking into account all option exercises and other equity award settlements through June 30, 2019).

Employee Stock Purchase Plan

In June 2010, the Company’s stockholders approved the 2010 Employee Stock Purchase Plan with 1,000,000 shares of common stock initially reserved for issuance. Subject to stockholder approval, which was obtained on June 2, 2017, the Company's Board of Directors amended and restated the 2010 Employee Stock Purchase Plan effective April 30, 2017. The amended and restated plan increased the number of shares authorized for issuance under the plan by an additional 1,000,000, thereby reserving for issuance 2,000,000 shares of common stock in the aggregate.

On April 11, 2019, the Company's Board of Directors adopted, and on June 6, 2019, the Company's stockholders approved, the 2019 Employee Stock Purchase Plan (the "2019 Employee Stock Purchase Plan") to replace the Amended and Restated 2010 Employee Stock Purchase Plan which was set to expire under its terms in June 2020. On April 22, 2019, at the Annual Meeting of the Stockholders, the Company's stockholders voted to approve the adoption of the 2019 Employee Stock Purchase Plan. There were 1,000,000 shares authorized to be reserved for issuance under the 2019 Employee Stock Purchase Plan. As of June 30, 2019, approximately 1.0 million shares of common stock remained available for issuance under the 2019 Employee Stock Purchase Plan (taking into account all share purchases through June 30, 2019).

Inducement Plan

During January 2018, the Company established the Inducement Plan (the “2018 Plan”). Under the 2018 Plan, the Board of Directors can issue nonqualified stock options or other equity-based awards in respect of up to 1,500,000 shares of common stock. On April 25, 2018, the Company's Board of Directors amended and restated the 2018 Plan (the "Amended 2018 Plan"). The Amended 2018 Plan increased the number of shares authorized for issuance under the plan by an additional 500,000 shares, and subsequently the Board of Directors has approved and ratified, effective as of July 31, 2018, October 29, 2018 and February 13, 2019, increases of the number of shares authorized for issuance under the Amended 2018 Plan by 500,000, 250,000 and 618,048 shares, respectively, constituting 3,368,048 shares of common stock in the aggregate being reserved for issuance pursuant to grants under the Amended 2018 Plan. As of June 30, 2019, approximately 0.3 million shares of common stock remained available for issuance under the Amended 2018 Plan (taking into account all option exercises and other equity award settlements through June 30, 2019).

Stock Option Activity

A summary of the Company’s stock option activity and weighted average exercise prices follows:

	Stock Option Activity		Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
	Options (in thousands)	Weighted Average Exercise Price		
Balance outstanding at December 31, 2018	6,266	$ 12.13		
Granted	1,035	27.59		
Exercised	(890)	10.23		
Cancelled or expired	(178)	14.38		
Balance outstanding at June 30, 2019	6,233	$ 14.91	6.92	$ 81,143
Options vested and expected to vest	5,435	$ 14.00	6.61	$ 75,377
Options exercisable at June 30, 2019	3,168	$ 12.07	5.09	$ 49,793

The total fair value of stock options exercised during the six months ended June 30, 2019 was approximately $4.2 million. As of June 30, 2019, there was approximately $21.9 million of total unrecognized compensation cost related to nonvested share-based compensation arrangements. That cost is expected to be recognized over a weighted average period of approximately 2.7 years.

The following table summarizes information about outstanding and vested stock options as of June 30, 2019:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number of Shares Outstanding (in thousands)	Weighted-Average Remaining Contractual Life (Years)	Weighted-Average Exercise Price	Number of Shares (in thousands)	Weighted-Average Exercise Price
$5.15 - $7.60	781	6.81	$ 7.39	399	$ 7.32
$7.95 - $10.05	768	5.46	9.46	663	9.50
$10.13 - $11.95	768	6.17	10.84	584	10.53
$11.96 - $12.32	76	2.03	12.09	76	12.09
$12.45 - $12.45	843	8.63	12.45	203	12.45
$12.46 - $14.3	876	4.40	13.60	655	13.37
$14.5 - $17.88	664	6.59	16.17	345	16.60
$18.09 - $25.95	675	8.34	22.06	243	20.35
$28.18 - $28.79	453	9.68	28.28	—	—
$29.55 - $29.55	329	9.78	29.55	—	—
	6,233	6.92	$ 14.91	3,168	$ 12.07

Restricted Stock Unit Activity

A summary of the Company's restricted stock units ("RSUs") activity and weighted average exercise prices follows:

	Restricted Stock Unit Activity		
	Number of Shares (in thousands)	Weighted Average Grant Date Fair Value (Per Share)	Aggregate Fair Value (in thousands)
Balance outstanding at December 31, 2018	2,690	$ 15.81	$ —
Awarded	1,331	27.45	—
Released	(754)	13.47	—
Forfeited	(214)	17.53	—
Non-vested and outstanding at June 30, 2019	3,053	$ 20.79	$ 84,840
Expected to vest	2,043	$ 19.38	$ 56,769

RSUs granted to employees generally vest over a three to four-year period or upon achievement of certain performance conditions. In accordance with ASU 2017-09, as of June 30, 2019, total unrecognized compensation cost, adjusted for estimated forfeitures, related to nonvested RSUs was approximately $59.3 million and the weighted-average remaining vesting period was 3.0 years.

As of June 30, 2019, the Company accrued approximately $2.9 million and $4.8 million in cash awards to be settled in shares of the Company's stock and recorded a corresponding expense, which is included as a component of stock-based compensation expense in the accompanying condensed consolidated financial statements for the three and six months ended June 30, 2019, respectively.

Stock-based compensation expense recognized in the Company's condensed consolidated statements of operations and cash flows was $9.3 million and $3.8 million for the three months ended June 30, 2019 and 2018, respectively, and $16.5 million and $6.3 million for the six months ended June 30, 2019 and 2018, respectively.

13. Restructuring

The Company's restructuring costs relate to the wind-down of its legacy platform and severance costs associated with re-prioritizing and reallocating resources to focus on areas showing high growth potential within the Company's Business Segment. The expense associated with this restructuring was approximately $0.2 million and $1.9 million during the three months ended June 30, 2019 and 2018, respectively, and $0.5 million and $2.1 million for the six months ended June 30, 2019 and 2018, respectively. The Company expects to incur additional restructuring costs through December 31, 2019. There was no restructuring liability as of June 30, 2019. The restructuring liability was approximately $1.0 million as of December 31, 2018. It is classified as accrued expenses and other current liabilities on the condensed consolidated balance sheets.

The following table presents the detail of the liability for the Company's restructuring charges for the periods presented (amounts in thousands):

	June 30, 2019	December 31, 2018
Balance, Beginning of the year	$ 977	$ 2,338
Severance and other associated costs	484	4,468
Cash payments	(1,461)	(5,829)
Balance, End of period	$ —	$ 977

The following table presents the detail of expenses for the Company's restructuring charges for the three months ended June 30, 2019 (amounts in thousands):

	June 30,	
	2019	2018
Severance and other associated costs	$ 205	$ 1,906
Total restructuring costs	$ 205	$ 1,906

The following table presents the detail of expenses for the Company's restructuring charges for the six months ended June 30, 2019 (amounts in thousands):

	June 30,	
	2019	2018
Severance and other associated costs	$ 484	$ 2,084
Total restructuring costs	$ 484	$ 2,084

14. Legal Matters

The Company previously filed an intellectual property suit against [24]7 Customer, Inc. in the Southern District of New York on March 6, 2014 seeking damages on the grounds that [24]7 reverse engineered and misappropriated the Company's technology to develop competing products and misused the Company's business information. On June 22, 2015, [24]7 Customer, Inc. filed suit against the Company in the Northern District of California alleging patent infringement. On December 7, 2015, [24]7 Customer Inc. filed a second patent infringement suit against the Company, also in the Northern District of California. On March 16, 2017, the New York case was voluntarily transferred and consolidated with the two California cases in the Northern District of California for all pre-trial purposes. Rulings by both the Court and the United States Patent Office in the Company's favor have invalidated the majority of [24]7 patents that were asserted in the patent cases. Trial for the Company's intellectual property and other claims asserted against [24]7 in the original litigation is currently set for October 1, 2019. The Company believes the claims filed by [24]7 are entirely without merit and intends to defend them vigorously

The Company routinely assesses all of its litigation and threatened litigation as to the probability of ultimately incurring a liability, and records its best estimate of the ultimate loss in situations where the Company assesses the likelihood of loss as probable.

From time to time, the Company is involved in or subject to legal, administrative and regulatory proceedings, claims, demands and investigations arising in the ordinary course of business, including direct claims brought by or against the Company with respect to intellectual property, contracts, employment and other matters, as well as claims brought against the Company's customers for whom the Company has a contractual indemnification obligation. The Company accrues for a liability when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Significant judgment is required in both the determination of probability and the determination as to whether a loss is reasonably estimable. In addition, in the event the Company determines that a loss is not probable, but is reasonably possible, and it becomes possible to develop what the Company believes to be a reasonable range of possible loss, then the Company will include disclosure related to such matter as appropriate and in compliance with ASC 450. The accruals or estimates, if any, resulting from the foregoing analysis, are reviewed at least quarterly and adjusted to reflect the impact of negotiations, settlements, rulings, advice of legal counsel and other information and events pertaining to a particular matter. To the extent there is a reasonable possibility that the losses could exceed the amounts already accrued, the Company will, as applicable, adjust the accrual in the period the determination is made, disclose an estimate of the additional loss or range of loss, indicate that the estimate is immaterial with respect to its financial statements as a whole or, if the amount of such adjustment cannot be reasonably estimated, disclose that an estimate cannot be made.

From time to time, third parties assert claims against the Company regarding intellectual property rights, privacy issues and other matters arising in the ordinary course of business. Although the Company cannot be certain of the outcome of any litigation or the disposition of any claims, nor the amount of damages and exposure, if any, that the Company could incur, the Company currently believes that the final disposition of all existing matters will not have a material adverse effect on our business, results of operations, financial condition or cash flows. In addition, in the ordinary course of business, the Company is also subject to periodic threats of lawsuits, investigations and claims. Regardless of the outcome, litigation can have an adverse impact on the Company because of defense and settlement costs, diversion of management resources and other factors.

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

General

Our discussion and analysis of our financial condition and results of operations is based upon our condensed consolidated financial statements, which are prepared in conformity with accounting principles generally accepted in the United States of America. As such, we are required to make certain estimates, judgments and assumptions that management believes are reasonable based upon the information available. We base these estimates on our historical experience, future expectations and various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for our judgments that may not be readily apparent from other sources. These estimates and assumptions affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the dates of the condensed consolidated financial statements and the reported amounts of revenue and expenses during the reporting periods. These estimates and assumptions relate to estimates of the carrying amount of goodwill, intangibles, depreciation, stock based-compensation, valuation allowances for deferred income taxes, accounts receivable, the expected term of a customer relationship, accruals and other factors. We evaluate these estimates on an ongoing basis. Actual results could differ from those estimates under different assumptions or conditions, and any differences could be material.

Overview

LivePerson, Inc. ("LivePerson," the "Company," "we" or "our") makes life easier by transforming how people communicate with brands. During the past decade, the consumer has made the mobile device the center of their digital lives, and they have made mobile messaging the center of communication with friends, family and peers. Our technology enables consumers to connect with businesses through these same preferred conversational interfaces, including Facebook Messenger, WhatsApp, Apple Business Chat, Google Rich Business Messenger and Alexa. These messaging conversations harness human agents, bots and Artificial Intelligence (AI) to power convenient, personalized and content-rich journeys across the entire consumer lifecycle, from discovery and research, to sales, service and support, and even marketing and brick and mortar engagements. For example, consumers can look up product info like ratings, images and pricing, search for stores, see products in the store, schedule appointments, apply for credit, approve repairs, make purchases or payments - all without ever leaving the messaging channel. We call these AI and human-assisted conversational experiences over messaging Conversational Commerce.

LiveEngage, our enterprise-class, cloud-based platform, was designed for Conversational Commerce, enabling businesses to securely deploy messaging, coupled with bots and AI, at scale for brands with tens of millions of customers and many thousands of customer care agents. LiveEngage powers conversations across each of a brand's primary digital channels, including mobile apps, mobile and desktop web browsers, short message service (SMS), social media and third-party consumer messaging platforms. Brands can also use LiveEngage to message consumers when they dial a 1-800 number instead of having them navigate interactive voice response systems (IVRs) and wait on hold.

Our robust, cloud-based suite of rich mobile messaging and real-time chat offerings features intelligent routing and capacity mapping, queue prioritization, customer sentiment, real-time analytics and reporting, content delivery, Payment Card Industry (PCI) compliance, cobrowsing and a sophisticated proactive targeting engine. With LiveEngage, agents can manage all conversations with consumers through a single console interface, regardless of which disparate messaging endpoints the consumers originate from: i.e., WhatsApp, Line, Apple Business Chat, IVR, or Google Home. An extensible application programming interface (API) stack facilitates a lower cost of ownership by facilitating robust integration into back-end systems, as well as enabling developers to build their own programs and services on top of the platform. More than three dozen APIs are available on LiveEngage.

LiveEngage also features Maven, a robust AI engine that was custom designed for Conversational Commerce. Maven, announced in December 2018, puts the power of bot development, training and management into the hands of the contact center and its agents, the teams most familiar with how to structure sales and service conversations to drive successful outcomes. The platform enables what the we call "the tango" of humans, AI and bots, whereby human agents act as bot managers, overseeing AI-powered conversations and seamlessly stepping into the flow when a personal touch is needed. Through Maven Assist, agents become ultra-efficient, leveraging the AI engine to serve up relevant content, define next-best actions and take over repetitive transactional work, so that the agent can focus on relationship building. By seamlessly integrating LiveEngage with Maven, as well as third-party bots, the platform provides businesses with a comprehensive view of all AI-based and human-based conversations from a single console.

Complementing LiveEngage are teams of technical, solutions and consulting professionals that have developed deep domain expertise in Conversational Commerce across industries and messaging endpoints. We are positioned as an authority in Conversational Commerce, publishing a proprietary Conversational Quotient™ Index that measures each customer across multiple key indicators to ascertain the sophistication and breadth of their conversational commerce capabilities. Each business is then benchmarked against industry peers to determine their relative progression. We have developed a Transformation

Model that is introduced to existing and prospective customers to help guide them on their journeys from legacy voice, email and chat solutions to modern conversational ones powered by messaging and AI. Our products, coupled with our domain knowledge, industry expertise and professional services, have been proven to maximize the effectiveness of Conversational Commerce and deliver measurable return on investment.

As a "cloud computing" or software-as-a-service (SaaS) provider, LivePerson provides solutions on a hosted basis. This model offers significant benefits over premise-based software, including lower up-front costs, faster implementation, lower total cost of ownership, scalability, cost predictability, and simplified upgrades. Organizations that adopt a fully-hosted, multi-tenant architecture that is maintained by LivePerson eliminate the majority of the time, server infrastructure costs, and IT resources required to implement, maintain, and support traditional on-premise software.

More than 18,000 businesses, including HSBC, Orange, and The Home Depot use our Conversational Commerce solutions to orchestrate humans and AI, at scale, and create a convenient, deeply personal relationship.

Our solutions benefit organizations of all sizes conducting business or communicating with consumers through mobile and online messaging and chat. We plan to continue to focus on key target markets: consumer/retail, telecommunications, financial services, travel/hospitality, technology and automotive, within the United States and Canada, Latin America, Europe and the Asia-Pacific region.

We are organized into two operating segments: Business and Consumer. The Business segment enables brands to leverage LiveEngage's sophisticated intelligence engine to connect with consumers through an integrated suite of mobile and online business messaging technologies. The Consumer segment facilitates online transactions between independent service providers ("Experts") and individual consumers ("Users") seeking information and knowledge for a fee via mobile and online messaging.

In order to sustain growth in these segments, our strategy is to expand our position as the leading provider of online and mobile messaging solutions that transform how people communicate with brands. The key elements of LivePerson's business solutions strategy include:

Build awareness and drive adoption of Conversational Commerce. LivePerson brought our first customer live on messaging in June 2016. Since that time, we have been focused on building awareness for Conversational Commerce and driving adoption. We have educated businesses on the financial and operational transformation that occurs when a contact center shifts to an asynchronous messaging environment, where the consumer controls the pace of the conversation, which can last minutes, hours or days, from a synchronous call or chat center, where conversations occur in real-time and have a distinct start and end.

A key component of our industry awareness marketing strategy has been to hold multiple global customer summits each year that target executives from enterprise customers and prospects, and feature a key theme within Conversational Commerce, such as Apple Business Chat, Google Rich Business Messenger, IVR deflection or AI. LivePerson customers are the centerpoint of these summits, presenting why they chose LivePerson for Conversational Commerce, how they achieved success, and what type of ROI they have realized. Each attendee then receives a blueprint for how they can achieve similar outcomes. We have found this strategy to drive strong results for LivePerson, as we have seen a greater than 40% conversion rate on opportunities that were created or advanced as part of the customer summits. By year end 2018, we had brought more than 200 customers live on messaging and increased adoption within our enterprise customers to more than 40%. In addition, more than 50% of messaging conversations had automation attached. We will continue to focus on building awareness for Conversational Commerce and driving adoption of messaging and AI across our customer base.

Increase volumes on LiveEngage by deploying a broad messaging ecosystem and expanding customer use cases. Our strategy is to drive higher volumes on LiveEngage by going both wide across messaging endpoints and deep across consumer use cases. LivePerson offers a platform usage pricing model, where customers are offered access to our entire suite of messaging technologies across their entire agent pool for a pre-negotiated cost per interaction. We believe that over time this model will drive higher revenue for LivePerson by reducing barriers to adoption of new messaging endpoints and use cases.

In order to go wide across messaging endpoints, it is imperative that LiveEngage integrates to all of the messaging apps that consumers prefer to use for communication. For example, if a consumer is an avid WhatsApp user, and a brand only offers SMS as a messaging option, that consumer may be reluctant to try messaging the brand. Therefore, a key strategy of our has been to build one of the industry's broadest ecosystems of messaging endpoints. In June 2016, we launched with In-App messaging. In 2017, we introduced Facebook Messenger, SMS, Web messaging and IVR deflection integrations. In 2018, we added Apple Business Chat, Google Rich Business Messenger, Line, WhatsApp, Alexa, Google Home, Google Ad Lingo and Twitter.

Each channel added opens the door to hundreds of millions of new consumers, providing brands a greater opportunity to shift share away from their legacy contact center channels into messaging. LivePerson makes the management of all these disparate channels seamless to the brand. The LiveEngage intelligent routing, queuing and prioritization software orchestrates these conversations at scale, regardless of which messaging endpoint they originated from, so that human and bot agents can engage with all customers through just one console.

In order to go deep across customer use cases, we are focused on extending LiveEngage beyond just taking share of the 270 billion calls made to customer service 1-800 numbers each year, into sales, marketing and brick and mortar conversations. For example, in 2018, a home improvement retailer launched a bot that autonomously sells millions of dollars of grills; a leading global concessions manager launched a service that lets patrons in a sports arena order beverages to their seats through Apple Business Chat; and a telecommunications company used LiveEngage to drive pre-sales for an iPhone series launch.

We believe that this strategy has influenced LivePerson's enterprise and mid-market revenue retention rate, (the trailing-twelve-month change in total revenue from existing customers after upsells, downsells and attrition) which was greater than 110% in 2018. The benefit can also be seen in LivePerson's average revenue per user (ARPU) for our enterprise and mid-market customers, which increased more than 25% in 2018 to approximately $285,000 from approximately $220,000 in 2017. For this same customer set, when examining only the subset that have adopted messaging, the ARPU in 2018 increased to approximately $500,000. When examining customers that have adopted at least three endpoints, the ARPU in 2018 increased into the low seven figures. We believe these ARPU trends are a clear indication of how LivePerson's strategy to drive messaging adoption has successfully influenced our revenue growth by taking share from legacy communication channels. We will continue to focus on adding new messaging endpoints and driving higher adoption of each of these channels within our customer base.

Globalize R&D to attract the industry's best AI, machine learning and conversational talent. We believe that AI and machine learning are critical to successfully scaling Conversational Commerce, and that in order to develop the industry's leading technology, we need to open offices where the best talent is located. To spearhead that globalization effort, in 2018, LivePerson recruited Alex Spinelli, key architect of the Alexa Operating System at Amazon.com, as our Global CTO. Under Mr. Spinelli's leadership, we opened an Advanced Technology Center in Seattle, Washington, in 2018, expanded our Mannheim, Germany development center, and added key development talent through the acquisitions of BotCentral in Mountain View, California and Conversable in Austin, Texas. We added more than 70 machine learning, AI and Conversational Commerce developers in 2018, recruiting top talent from firms such as Nike, Amazon.com, Microsoft and Target. We expect to continue adding industry leading development talent across our global offices in 2019.

Bring to market best-in-class AI and machine learning technologies designed for Conversational Commerce. We believe that over the past few years many first generation AI and bots have created frustrating experiences for consumers and businesses alike, which in turn has eroded trust in automation. Many of these solutions have proven difficult to build and scale, and have been limited by stand alone implementations that lacked the measurement, reporting and human oversight of Conversational Commerce platforms such as LiveEngage. In December 2018, LivePerson announced Maven, a patent pending AI engine that is designed to overcome these shortcomings and help brands rapidly bring to market conversational AI that can scale to millions of interactions, while increasing customer satisfaction and conversion rates.

Unlike alternative solutions designed solely for IT departments, Maven was built to be used by developers *and* contact center agents. By putting the power of conversational design and bot management in the hands of contact center agents, Maven gives brands the ability to leverage the employees closest to the customer, those who are most versed in the voice of the brand, and with the most expertise in how to craft successful outcomes for customer service and sales journeys.

Some of the key innovations behind Maven include:

- bot building software that is based on dialogue instead of workflow or code, so non-technical employees like contact center agents can design automations
- the ability to bootstrap conversations with existing transcripts, reducing design effort and speeding time to market
- the establishing of contact center agents as bot managers, ensuring that every conversation is safeguarded by a human and that agents are continuously training the AI to be smarter and drive more successful outcomes
- powerful Assist technology that multiplies the efficiency of agents by analyzing intents in real time and then suggesting next best actions, predefined content, and bots that can take over transactional work
- pre-built templates for target verticals that provide out of the box support for the top intents and back-end integrations
- third-party AI NLU integration, so customers aren't boxed into one vendor
- AI analytics and reporting tailored to Conversational Commerce

Our strategy is to continue to enhance the Maven AI engine and related products, leveraging our global R&D footprint and substantial library of mobile and online conversational data, with the aim of increasing agent efficiency, decreasing customer care costs, improving the customer experience and increasing customer lifetime value.

Sustain our leadership position by aligning brands to a vision that transforms how they communicate with consumers and delivers a superior return on investment. We believe that most online retailers view messaging and Conversational Commerce as a feature. They are content with building integrations to a messaging endpoint and offering messaging as just another product in their suite. LivePerson holds the perspective that Conversational Commerce requires an operational transformation that changes how brands engage with consumers across service, sales, marketing and brick and mortar. Brands must adapt their contact centers to an asynchronous messaging environment and leverage a combination of human agents, bots and AI to achieve scale and efficiencies. When done right, the entire consumer lifecycle with a brand will be maintained within the Conversational Commerce relationship, and traffic will steadily shift away from lower returning voice calls, websites and apps to higher returning messaging endpoints.

We believe that LivePerson is uniquely positioned to deliver this transformation due to its technology and expertise:

- The LiveEngage enterprise-class, automation-first, cloud-based platform, was designed for AI-assisted and human-powered messaging in mobile and online channels. The platform offers best-in-class security and scalability, offers the broadest ecosystem of messaging endpoints, is designed for ease of use, and features an AI engine custom built for Conversational Commerce, robust real-time reporting, role-based real-time analytics, predictive intelligence, and innovations in customer satisfaction and connection measurement. Additionally, LiveEngage is an open platform with pre-built, enterprise-grade integrations into back-end systems as well as the ability to work across natural language understanding (NLU) providers.
- LivePerson has deep domain expertise across verticals and messaging endpoints, a global footprint, referenceable enterprise brands and a team of technical, solutions and consulting professionals to assist customers along their transformational journeys. We are positioned as an authority in Conversational Commerce, publishing a proprietary Conversational Quotient™ Index that measures each customer across multiple key indicators to ascertain their level of conversational maturity. Each business is then benchmarked against industry peers to determine their relative progression. We have developed a Transformation Model that is introduced to existing and prospective customers to help guide them on their journeys from legacy and oftentimes inefficient legacy voice, email and chat solutions to modern conversational ones powered by messaging and AI.

We believe that LivePerson's differentiated approach to the Conversational Commerce industry, combined with our unique technology and expertise has established us as a market leader, with an ability to deliver superior returns on investment. LivePerson customers typically manage as many as 40 messaging conversations at a time, as compared to one at a time for a voice agent and two to four at a time for a good chat agent. Adding AI and bots provides even greater scale to the number of conversations managed. Our customers often see labor efficiency gains of at least two times that of voice agents, effectively cutting labor costs by at least 50%. Furthermore, our ability to deliver more convenient, personalized and content-rich conversations often drives increases in customer satisfaction of up to 20 percentage points and increases in sales conversions of up to 20%, while enhancing average order value, customer retention and loyalty.

Strengthen our position in both existing and new industries. We plan to continue to develop its market position by increasing our customer base, and expanding within our installed base. We will continue to focus primarily on key target markets: consumer/retail, telecommunications, financial services, travel/hospitality, technology and automotive within both our enterprise and mid-market sectors, as well as the small business (SMB) sector. Healthcare, insurance, real estate and energy utilities are new target industries and natural extensions of our primary target markets. We are increasingly structuring our field organization to emphasize our domain expertise and strengthen customer relationships.

Continue to build our international presence. We are focused on expanding our international revenue contribution, which increased to 41% of total revenue in 2018, from 37% in 2017 and 34% in 2016. We generated positive results from previous investments in direct sales and services personnel in the United Kingdom and Western Europe. We also continued to focus on expanding our presence in the Asia Pacific region, leveraging our relationships with partners.

Leverage our open architecture to support partners and developers. In addition to developing our own applications, we continue to cultivate a partner eco-system capable of offering additional applications and services to our customers. We integrate into nearly a dozen third-party messaging endpoints including SMS, Facebook Messenger, Apple Business Chat, Google Rich Business Messenger, Line, WhatsApp, Alexa, Google Home, Google Ad Lingo and Twitter, multiple IVR vendors and dozens of branded apps. Our offering is AI vendor agnostic, empowering our customers to manage a mix of different bots, human agents and technologies from one control panel, thereby optimizing contact center efficiency. LivePerson's proprietary and third-party AI/bots enable brands to partially or fully automate communications with their customers.

In addition, we have opened up access to our platform and our products with more than three dozen APIs that allow customers and third parties to develop on top of our platform. Customers and partners can utilize these APIs to build our capabilities into their own applications and to enhance our applications with their services. In 2019, we expect to increase our marketing efforts to developers, raising awareness for how they can build programs and services on top of our platform.

Expand sales partnerships to broaden our presence and accelerate sales cycles. We are focused on broadening its market reach and accelerating sales cycles by partnering with systems integrators, technology providers, business process outsourcers, value added resellers and other sales partners. We formalized a relationship with IBM Global Business Services in 2017 and Accenture in 2018. We increased the number of partners focused on SMBs by more than 300% in 2018, to over 150 at year end from 40 at the start of the year. These efforts are increasingly yielding positive results for us, as nearly one-third of annual contract value signed in 2018 was directly influenced by partners. We expect to increase investment in our partner channels in 2019.

Maintain Market Leadership in Technology and Security Expertise. As described above, we are devoting significant resources to creating new products and enabling technologies designed to accelerate innovation. We evaluate emerging technologies and industry standards and continually update our technology in order to retain our leadership position in each market we serve. We monitor legal and technological developments in the area of information security and confidentiality to ensure our policies and procedures meet or exceed the demands of the world's largest and most demanding corporations. We believe that these efforts will allow us to effectively anticipate changing customer and consumer requirements in our rapidly evolving industry.

Evaluate Strategic Alliances and Acquisitions When Appropriate. We have successfully integrated several acquisitions over the past decade. While we have in the past, and may from time to time in the future, engage in discussions regarding acquisitions or strategic transactions or to acquire other companies that can accelerate our growth or broaden our product offerings, we currently have no binding commitments with respect to any future acquisitions or strategic transactions.

Key Metrics

Financial overview of the three months ended June 30, 2019 compared to the three months ended June 30, 2018:

- Total revenue increased 15% to $71.0 million from $61.7 million
- Revenue from our Business segment increased 14% to $64.8 million from $56.7 million.
- Gross profit margin increased to 75% from 74%.
- Cost and expenses increased 32% to $92.0 million from $69.5 million.
- Net loss increased to $24.0 million from $8.3 million.
- Average annual revenue per enterprise and mid-market customer increased approximately 20% to $310,000 for the trailing-twelve-months ended June 30, 2019, as compared to $255,000 for the trailing-twelve-months ended June 30, 2018.
- For 2019, we have raised our target for enterprise and mid-market revenue retention to a range of 105% to 115%, as compared to greater than 100% in 2018. LivePerson's second quarter retention rate met our target. Revenue retention rate measures the percentage of revenue retained at quarter end, from full service customers that were on LiveEngage at the same period a year ago.

Adjusted EBITDA and Adjusted Operating Income

To provide investors with additional information regarding our financial results, we have disclosed adjusted EBITDA and adjusted operating income which are non-GAAP financial measures. The tables below present a reconciliation of adjusted EBITDA and adjusted operating income to net (loss) income, the most directly comparable GAAP financial measures.

We have included adjusted EBITDA and adjusted operating income in this Quarterly Report on Form 10-Q because these are key measures used by our management and board of directors to understand and evaluate our core operating performance and trends, to prepare and approve our annual budget and to develop short and long-term operational plans. In particular, the exclusion of certain expenses in calculating adjusted EBITDA and adjusted operating income can provide a useful measure for period-to-period comparisons of our core business. Additionally, adjusted EBITDA is a key financial measure used by the compensation committee of our board of directors in connection with the payment of bonuses to our executive officers. Accordingly, we believe that adjusted EBITDA and adjusted operating income provide useful information to investors and others in understanding and evaluating our operating results in the same manner as our management and board of directors.

Our use of adjusted EBITDA has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of our results as reported under GAAP. Some of these limitations are:

- although depreciation and amortization are non-cash charges, the assets being depreciated and amortized may have to be replaced in the future, and adjusted EBITDA does not reflect cash capital expenditure requirements for such replacements or for new capital expenditure requirements;
- adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs;
- adjusted EBITDA does not consider the impact of acquisition costs;
- adjusted EBITDA does not consider the impact of restructuring costs;
- adjusted EBITDA does not consider the impact of other costs;
- adjusted EBITDA does not reflect tax payments that may represent a reduction in cash available to us; and
- other companies, including companies in our industry, may calculate adjusted EBITDA differently, which reduces its usefulness as a comparative measure.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Reconciliation of Adjusted EBITDA				
GAAP net loss	$ (23,987)	$ (8,321)	$ (42,877)	$ (11,524)
Amortization of purchased intangibles	723	711	1,469	1,422
Stock-based compensation	9,305	3,826	16,471	6,264
Depreciation	3,762	3,428	7,643	6,786
Other litigation and consulting costs	1,727 (1)	1,768 (1)	4,144 (3)	3,038 (3)
Acquisition costs	—	—	648	—
Restructuring costs	205 (2)	1,906 (2)	484 (4)	2,084 (4)
Provision for income taxes	699	536	1,292	47
Other expense, net	2,267	(31)	2,201	(160)
Adjusted EBITDA (loss)	$ (5,299)	$ 3,823	$ (8,525)	$ 7,957

(1) Includes litigation costs of $1.1 million and consulting costs of $0.6 million for the three months ended June 30, 2019 and litigation costs of $1.2 million, consulting costs of $0.4 million, and executive relocation costs of $0.2 million for the three months ended June 30, 2018.

(2) Includes severance costs and other compensation related costs of $0.2 million for the three months ended June 30, 2019 and $1.9 million for the three months ended June 30, 2018.

(3) Includes litigation costs of $2.2 million and consulting costs of $1.9 million for the six months ended June 30, 2019 and litigation costs of $2.1 million, consulting costs of $0.4 million, executive recruitment costs of $0.3 million, and executive relocation costs of $0.2 million for the six months ended June 30, 2018

(4) Includes severance costs and other compensation related costs of $0.5 million for the six months ended June 30, 2019 and $2.1 million for the six months ended June 30, 2018.

Our use of adjusted operating income has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of our results as reported under GAAP. Some of these limitations are:

- although amortization is a non-cash charge, the assets being amortized may have to be replaced in the future, and adjusted operating income does not reflect cash capital expenditure requirements for such replacements or for new capital expenditure requirements;
- adjusted operating income does not consider the impact of acquisition costs;
- adjusted operating income does not consider the impact of restructuring costs;
- adjusted operating income does not consider the impact of other costs;
- other companies, including companies in our industry, may calculate adjusted operating income differently, which reduces its usefulness as a comparative measure.

Because of these limitations, you should consider adjusted operating income alongside other financial performance measures, including various pre-tax GAAP loss and our other GAAP results. The following table presents a reconciliation of adjusted operating income for each of the periods indicated (amounts in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Reconciliation of Adjusted Operating (Loss) income				
Loss before provision for income taxes	$ (23,288)	$ (7,785)	$ (41,585)	$ (11,477)
Amortization of purchased intangibles	723	711	1,469	1,422
Stock-based compensation	9,305	3,826	16,471	6,264
Other litigation and consulting costs	1,727 (1)	1,768 (1)	4,144 (3)	3,038 (3)
Restructuring costs	205 (2)	1,906 (2)	484 (4)	2,084 (4)
Acquisition costs	—	—	648	—
Other expense (income), net	2,267	(31)	2,201	(160)
Adjusted operating (loss) income	$ (9,061)	$ 395	$ (16,168)	$ 1,171

(1) Includes litigation costs of $1.1 million and consulting costs of $0.6 million for the three months ended June 30, 2019 and litigation costs of $1.2 million, consulting costs of $0.4 million, and executive relocation costs of $0.2 million for the three months ended June 30, 2018.

(2) Includes severance costs and other compensation related costs of $0.2 million for the three months ended June 30, 2019 and $1.9 million for the three months ended June 30, 2018.

(3) Includes litigation costs of $2.2 million and consulting costs of $1.9 million for the six months ended June 30, 2019 and litigation costs of $2.1 million, consulting costs of $0.4 million, executive recruitment costs of $0.3 million, and executive relocation costs of $0.2 million for the six months ended June 30, 2018

(4) Includes severance costs and other compensation related costs of $0.5 million for the six months ended June 30, 2019 and $2.1 million for the six months ended June 30, 2018.

Critical Accounting Policies and Estimates

Our condensed consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States of America. As such, we are required to make certain estimates, judgments and assumptions that management believes are reasonable based upon the information available. We base these estimates on our historical experience, future expectations and various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for our judgments that may not be readily apparent from other sources. These estimates and assumptions affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the dates of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting periods.

We believe that the assumptions and estimates associated with revenue recognition, depreciation, stock-based compensation, accounts receivable, the valuation of goodwill and intangible assets, income taxes and legal contingencies have the greatest potential impact on our consolidated financial statements. We evaluate these estimates on an ongoing basis. Actual results could differ from those estimates under different assumptions or conditions, and any differences could be material. The significant accounting policies which we believe are the most critical to aid in fully understanding and evaluating the reported consolidated financial results include the following:

Revenue Recognition

The majority of our revenue is generated from monthly service revenues and related professional services from the sale of the LivePerson services. Revenues are recognized when control of these services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those services.

We determine revenue recognition through the following steps:

- identification of the contract, or contracts, with a customer;
- identification of the performance obligations in the contract;
- determination of the transaction price;
- allocation of the transaction price to the performance obligations in the contract; and
- recognition of revenue when, or as, the Company satisfies a performance obligation.

Total revenue of $71.0 million and $61.7 million recognized during the three months ended June 30, 2019 and 2018, respectively, and $137.4 million and $119.9 million recognized during the six months ended June 30, 2019, respectively, under Topic 606, was not materially different from what would have been recognized under Topic 605.

Hosted Services- Business Revenue

Hosted Services Business revenue is reported at the amount that reflects the ultimate consideration expected to be received and primarily consist of fees that provide customers access to LiveEngage, our enterprise-class, cloud-based platform. We have determined such access represents a stand-ready service provided continually throughout the contract term. As such, control and satisfaction of this stand-ready performance obligation is deemed to occur over time. We recognize this revenue over time on a ratable basis over the contract term, beginning on the date that access to the LiveEngage platform is made available to the customer. The passage of time is deemed to be the most faithful depiction of the transfer of control of the services as the customer simultaneously receives and consumes the benefit provided by our performance. Subscription contracts are generally one year or longer in length, billed, monthly, quarterly or annually in advance. There is no significant variable consideration related to these arrangements. Additionally, for certain of our larger customers, we may provide call center labor through an arrangement with one or more of several qualified vendors. For most of these customers, we pass the fee we incur with the labor provider and the fee for the hosted services through to our customers in the form of a fixed fee for each order placed via our online engagement solutions. For these Gainshare (formerly Pay for Performance) arrangements in accordance with ASC 606, "Principal Agent Considerations", we act as a principal in a transaction if it controls the specified goods or services before they are transferred to the customer.

Professional Services Revenues

Professional services revenue primarily consists of fees for deployment and optimization services, as well as training delivered on an on-demand basis which is deemed to represent a distinct stand-ready performance obligation. Professional Services Revenues are reported at the amount that reflects the ultimate consideration we expect to receive in exchange for such services. Control for the majority of our Professional Services contracts passes over time to the customer and is recognized ratably over the contracted period, as the passage of time is deemed to be the most faithful depiction of the transfer of control. For certain deployment services, which are not deemed to represent a distinct performance obligation, revenue will be recognized in the same manner as the fee for access to the LiveEngage platform and as such will be recognized on a straight-line basis over the contract term. For services billed on a fixed price basis, revenue is recognized over time based on the proportion performed using inputs as the measure of progress toward complete satisfaction of the performance obligation. Professional service contracts are generally one year or longer in length, billed, monthly, quarterly or annually in advance. There is no significant variable consideration related to these arrangements.

Contracts with Multiple Performance Obligations

Some of our contracts with customers contain multiple performance obligations. For these contracts, we account for individual performance obligations separately if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price basis. We determine the standalone selling prices based on our overall pricing objectives, taking into consideration market conditions and other factors, including the value of our contracts, the cloud applications sold, and the number and types of users within our contracts.

Hosted Services- Consumer Revenue

For revenue from our Consumer segment generated from online transactions between Experts and Users, revenue is recognized at an amount net of Expert fees in accordance with ASC 606, “Principal Agent Considerations,” due primarily to the fact that the Expert is the primary obligor. Additionally, we perform as an agent without any risk of loss for collection, and are not involved in selecting the Expert or establishing the Expert’s fee. We collect a fee from the consumer and retain a portion of the fee, and then remit the balance to the Expert. Revenue from these transactions is recognized at the point in time when the transaction is complete and no significant performance obligations remain.

Deferred Revenues

We record deferred revenues when cash payments are received or due in advance of our performance. The increase in the deferred revenue balance as of June 30, 2019 is primarily driven by cash payments received or due in advance of satisfying our performance obligations, partially offset by $30.1 million of revenues recognized that were included in the deferred revenue balance as of December 31, 2018.

Stock-Based Compensation

We follow ASC 718-10, "Stock Compensation," which addresses the accounting for transactions in which an entity exchanges its equity instruments for goods or services, with a primary focus on transactions in which an entity obtains employee services in share-based payment transactions. ASC 718-10 requires measurement of the cost of employee services received in exchange for an award of equity instruments based on the grant-date fair value of the award (with limited exceptions). Incremental compensation costs arising from subsequent modifications of awards after the grant date must be recognized.

As of June 30, 2019, we accrued approximately $2.9 million and $4.8 million in cash awards to be settled in shares of our stock and recorded a corresponding expense, which is included as a component of stock-based compensation expense in the accompanying condensed consolidated financial statements for the three and six months ended June 30, 2019, respectively.

As of June 30, 2019, there was approximately $21.9 million of total unrecognized compensation cost related to nonvested share-based compensation arrangements. That cost is expected to be recognized over a weighted average period of approximately 2.7 years. As of June 30, 2019, there was approximately $59.3 million of total unrecognized compensation cost related to nonvested restricted stock units. That cost is expected to be recognized over the remaining weighted average period of approximately 3.0 years.

Accounts Receivable

We perform ongoing credit evaluations of our customers' financial condition (except for customers who purchase the LivePerson services by credit card via Internet download) and have established an allowance for doubtful accounts based upon factors surrounding the credit risk of customers, historical trends and other information that we believe to be reasonable, although they may change in the future. If there is a deterioration of a customer's credit worthiness or actual write-offs are higher than our historical experience, our estimates of recoverability for these receivables could be adversely affected. Although our large number of customers limits our concentration of credit risk we do have several large customers. If we experience a significant write-off from one of these large customers, it could have a material adverse impact on our condensed consolidated financial statements. No single customer accounted for or exceeded 10% of our total revenue in the six months ended June 30, 2019 and 2018. No customer accounted for approximately 10% of accounts receivable as of June 30, 2019. One customer exceeded 10% of our total accounts receivable as of December 31, 2018. During the six months ended June 30, 2019 we increased our allowance for doubtful accounts by $0.6 million to approximately $2.9 million. During 2018, we increased our allowance for doubtful accounts by $1.0 million to $2.3 million.

A large proportion of our receivables are due from larger corporate customers that typically have longer payment cycles. We base our allowance for doubtful accounts on specifically identified credit risks of customers, historical trends and other information that we believe to be reasonable. Receivables are written-off and charged against its recorded allowance when we have exhausted collection efforts without success. We adjust our allowance for doubtful accounts when accounts previously reserved have been collected.

Goodwill

In accordance with ASC 350, "Goodwill and Other Intangible Assets," goodwill and indefinite-lived intangible assets are not amortized, but reviewed for impairment upon the occurrence of events or changes in circumstances that would reduce the fair value below its carrying amount. Goodwill is required to be tested for impairment at least annually. In September 2011, Financial Accounting Standards Board issued ASU No. 2011-08, Intangibles — Goodwill and Other (Topic 350) ("ASU 2011-08"). ASU 2011-08 permits an entity to first assess qualitative factors to determine whether it is "more likely than not" that the fair value of a reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the two-step goodwill impairment test described in Topic 350. The more-likely-than-not threshold is defined as having a likelihood of more than 50%. If it is determined that the fair value of a reporting unit is more likely than not to be less than its carrying value (including unrecognized intangible assets) than it is necessary to perform the second step of the goodwill impairment test. The second step of the goodwill impairment test is judgmental in nature and often involves the use of significant estimates and assumptions. Similarly, estimates and assumptions are used in determining the fair value of other intangible assets. These estimates and assumptions could have a significant impact on whether or not an impairment charge is recognized and also the magnitude of any such charge. We perform internal valuation analysis and consider other market information that is publicly available. Estimates of fair value are primarily determined using discounted cash flows and market comparisons. These approaches use significant estimates and assumptions including projected future cash flows (including timing), discount rates reflecting the risk inherent in future cash flows, perpetual growth rates, determination of appropriate market comparables and the determination of whether a premium or discount should be applied to such comparables.

We evaluate for goodwill impairment annually on September 30th. On September 30, 2018, we determined that it was not more-likely that the fair value of the reporting units are less than their carrying amount. Accordingly, we did not perform the two-step goodwill impairment test.

Impairment of Long-Lived Assets

In accordance with ASC 360-10, "Accounting for the Impairment or Disposal of Long-lived Assets," long-lived assets, such as property, plant and equipment and purchased intangibles subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. The amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. We do not have any long-lived assets, including intangible assets, which we consider to be impaired.

Legal Contingencies

We are subject to legal proceedings and litigation arising in the ordinary course of business. Periodically, we evaluate the status of each legal matter and assess our potential financial exposure. If the potential loss from any legal proceeding or litigation is considered probable and the amount can be reasonably estimated, we accrue a liability for the estimated loss. Significant judgment is required to determine the probability of a loss and whether the amount of the loss is reasonably estimable. The outcome of any proceeding is not determinable in advance. As a result, the assessment of a potential liability and the amount of accruals recorded are based only on the information available at the time. As additional information becomes available, we reassess the potential liability related to the legal proceeding or litigation, and may revise our estimates. Any revisions could have a material effect on our results of operations. See Note 14, Legal Matters, of the Notes to the Condensed Consolidated Financial Statements for additional information on our legal proceedings and litigation.

Recently Issued Accounting Standards

See Note 1 to Condensed Consolidated Financial Statements for a full description of recently issued accounting standards.

Recently Adopted Accounting Pronouncements

See Note 1 to Condensed Consolidated Financial Statements for a full description of recently adopted accounting pronouncements.

Revenue

The majority of our revenue is generated from monthly service revenues and related professional services from the sale of the LivePerson services. We charge a monthly, quarterly or annual fee, which varies by service and customer usage. The majority of our larger customers also pay a professional services fee related to implementation and ongoing optimization services. A large proportion of our revenue from new customers comes from large corporations. These companies typically have more significant implementation requirements and more stringent data security standards. Such customers also have more sophisticated data analysis and performance reporting requirements, and are likely to engage our professional services organization to provide such analysis and reporting on a recurring basis. Revenues are recognized when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services.

Revenue from our Business segment accounted for 91% of total revenue for the three months ended June 30, 2019. Revenue from our Business segment accounted for 92% of total revenue for the three months ended June 30, 2018 and for the six months ended June 30, 2019 and 2018. Revenue attributable to our monthly hosted Business services accounted for 83% and 85% of total Business revenue for the three months ended June 30, 2019 and 2018, respectively. Revenue attributable to our monthly hosted Business services accounted for 84% and 87% of total Business revenue for the six months ended June 30, 2019 and 2018, respectively. Our service agreements typically have twelve month terms and, in some cases, are terminable or may terminate upon 30 to 90 days' notice without penalty. Given the time required to schedule training for our customers' operators and our customers' resource constraints, we have historically experienced a lag between signing a customer contract and recognizing revenue from that customer. Although this lag typically ranges from 30 to 90 days, it may take more or less time between contract signing and recognizing revenue in certain situations.

Revenue from our Consumer segment is generated from online transactions between Experts and Users and is recognized net of Expert fees and accounted for approximately 9% of total revenue for the three months ended June 30, 2019. Revenue from our Consumer segment accounted for approximately 8% of total revenue for the three months ended June 30, 2018 and for the six months ended June 30, 2019 and 2018.

We also have entered into contractual arrangements that complement our direct sales force and online sales efforts. These are primarily with call center service companies, pursuant to which LivePerson is paid a commission based on revenue generated by these service companies from our referrals. To date, revenue from such commissions has not been material.

Costs and Expenses

Our cost of revenue consists of:

- compensation costs relating to employees who provide customer support and implementation services to our customers;

- outside labor provider costs;
- compensation costs relating to our network support staff;
- depreciation of certain hardware and software;
- allocated occupancy costs and related overhead;
- the cost of supporting our infrastructure, including expenses related to server leases, infrastructure support costs and Internet connectivity;
- the credit card fees and related payment processing costs associated with consumer and self-service customers; and
- amortization of certain intangibles.

Our sales and marketing expenses consist of compensation and related expenses for sales personnel and marketing personnel, online marketing, allocated occupancy costs and related overhead, advertising, marketing events, sales commissions, public relations, promotional materials, travel expenses and trade show exhibit expenses.

Our general and administrative expenses consist primarily of compensation and related expenses for executive, accounting, legal, information technology and human resources personnel, allocated occupancy costs and related overhead, professional fees, provision for doubtful accounts and other general corporate expenses.

Our product development expenses consist primarily of compensation and related expenses for product development personnel, allocated occupancy costs and related overhead, outsourced labor and expenses for testing new versions of our software. Product development expenses are charged to operations as incurred.

Non-Cash Compensation Expense

The net non-cash compensation amounts are as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
	(in thousands)		(in thousands)	
Stock-based compensation expense	$ 9,305	$ 3,826	$ 16,471	$ 6,264

Results of Operations

We are organized into two operating segments for purposes of making operating decisions and assessing performance. The Business segment enables brands to leverage LiveEngage’s sophisticated intelligence engine to connect with consumers through an integrated suite of mobile and online business messaging technologies. The Consumer segment facilitates online transactions between independent service providers (“Experts”) and individual consumers (“Users”) seeking information and knowledge for a fee via mobile and online messaging.

During the first two quarters of 2019, we have made increasing investments in sales and development capacity and marketing programs in order to maximize in-year productivity. These investments have contributed to losses in the first two quarters of 2019.

Comparison of the Three and Six Months Ended June 30, 2019 and 2018

Revenue

	Three Months Ended June 30,			Six Months Ended June 30,		
	2019	2018	% Change	2019	2018	% Change
	(in thousands)			(in thousands)		
Revenue by Segment:						
Business	$ 64,835	$ 56,708	14%	$ 125,830	$ 110,269	14%
Consumer	6,124	4,952	24%	11,531	9,632	20%
Total	$ 70,959	$ 61,660	15%	$ 137,361	$ 119,901	15%

Business revenue increased by 14% to $64.8 million and $125.8 million in the three months and six months ended June 30, 2019, respectively, from $56.7 million and $110.3 million in the comparable periods in 2018. The increase in B2B revenue is driven mainly by increases in hosted services of $5.3 million and $9.5 million and in professional services of $2.8 million and $6.1 million year over year during the three months and six months ended June 30, 2019, respectively. Included in hosted services, variable revenue, which includes gainshare and overage revenue, decreased by $2.0 million and $2.3 million during the three months and six months ended June 30, 2019, respectively.

The increase in revenue is primarily attributed to increased contract signings with new customers and greater adoption of conversational commerce solutions by existing customers. In the second quarter, nearly 50% of our enterprise customers had adopted messaging, up from nearly 35% in the prior year period. LivePerson has developed a large ecosystem of conversational messaging endpoints that integrates to our platform, and is driving adoption of these endpoints along with bots and AI across care, sales, marketing, and brick and mortar use cases. As adoption increases, we are seeing higher revenue per customer. Our average annual revenue per enterprise and midmarket customer increased approximately 20% year over year to $310,000 in the trailing twelve months ended June 30, 2019, from $255,000 in the prior year period. Similarly, we are seeing strong revenue retention rates. Revenue retention for our enterprise and midmarket customers was within our target range of 105% to 115% for the period ended June 30, 2019, which marked the 10th consecutive quarter of a greater than 100% revenue retention rate. Finally, as we add sales capacity we are also increasing the number of deals we sign. Total deals signed increased 50% year over year in the second quarter of 2019.

Consumer revenue increased by 24% and 20% to $6.1 million and $11.5 million in the three months and six months ended June 30, 2019, respectively, from $5.0 million and $9.6 million in the comparable periods in 2018. This variance is driven by an increase in price per minute and in volume of chat minutes.

Cost of Revenue - Business

Cost of revenue consists of compensation costs relating to employees who provide customer service to our customers, compensation costs relating to our network support staff, outside labor provider costs, the cost of supporting our server and network infrastructure, and allocated occupancy costs and related overhead.

	Three Months Ended June 30,			Six Months Ended June 30,		
	2019	2018	% Change	2019	2018	% Change
	($ in thousands)			($ in thousands)		
Cost of revenue - business	$ 16,960	$ 15,086	12 %	$ 34,622	$ 28,004	24 %
Percentage of total revenue	24%	24%		25%	23%	
Headcount (at period end):	212	234	(9)%	212	234	(9)%

Cost of revenue increased by 12% to $17.0 million in the three months ended June 30, 2019, from $15.1 million in the comparable period in 2018. This variance was primarily attributable to increases in outsourced labor and other business services of approximately $1.5 million and in primary and backup server facilities, depreciation, and allocated overhead cost related to supporting our server and network infrastructure of approximately $0.7 million. This was partially offset by a decrease in total compensation and related costs for customer service and network operations personnel of approximately $0.3 million.

Cost of revenue increased by 24% to $34.6 million in the six months ended June 30, 2019, from $28.0 million in the comparable period in 2018. This variance was primarily attributable to increases in outsourced labor and other business services of approximately $3.5 million, in primary and backup server facilities, depreciation, and allocated overhead cost related to supporting our server and network infrastructure of approximately $2.1 million and in total compensation and related costs for customer service and network operations personnel of approximately $1.0 million.

Cost of Revenue - Consumer

Cost of revenue consists of compensation costs relating to employees who provide customer service to Experts and Users, compensation costs relating to our network support staff, the cost of supporting our server and network infrastructure, credit card and transaction processing fees and related costs, and allocated occupancy costs and related overhead.

	Three Months Ended June 30,			Six Months Ended June 30,		
	2019	2018	% Change	2019	2018	% Change
	($ in thousands)			($ in thousands)		
Cost of revenue - consumer	$ 1,089	$ 950	15 %	$ 2,076	$ 1,986	5 %
Percentage of total revenue	2%	2%		2%	2%	
Headcount (at period end)	14	17	(18)%	14	17	(18)%

Cost of revenue increased by 15% to $1.1 million in the three months ended June 30, 2019, from the comparable period in 2018. This variance was primarily attributable to increases in backup server facilities and allocated occupancy costs and overhead in credit card processing fees of approximately $0.2 million.

Cost of revenue increased by 5% to $2.1 million in the six months ended June 30, 2019, from the comparable period in 2018. This variance was primarily attributable to increases in backup server facilities and allocated occupancy costs and overhead in credit card processing fees of approximately $0.2 million offset partially by decreases in total compensation and related costs for customer service and network operations personnel of approximately $0.1 million.

Sales and Marketing - Business

Our sales and marketing expenses consist of compensation and related expenses for sales and marketing personnel, as well as advertising, marketing events, public relations, trade show exhibit expenses and allocated occupancy costs and related overhead.

	Three Months Ended June 30,			Six Months Ended June 30,		
	2019	2018	% Change	2019	2018	% Change
	($ in thousands)			($ in thousands)		
Sales and marketing - business	$ 35,568	$ 23,339	52%	$ 65,660	$ 45,062	46%
Percentage of total revenue	50%	38%		48%	38%	
Headcount (at period end):	475	315	51%	475	315	51%

Sales and marketing expenses increased by 52% to $35.6 million in the three months ended June 30, 2019 from $23.3 million in the comparable period in 2018. This variance was primarily attributable to an increase in salaries and related costs of approximately $8.0 million as we expanded sales capacity by adding sales reps, sales development reps and partner managers. The Company believes the market is moving from early adopters to mainstream, and is adding sales capacity to address demand. In addition, there was an increase in business services and outsourced subcontracted labor of approximately $1.8 million, an increase in marketing events, advertising, public relations, and tradeshow exhibit expenses of approximately $1.5 million, and an increase in allocated occupancy costs and overhead, depreciation, and software to support our sales personnel of approximately $1.0 million.

Sales and marketing expenses increased by 46% to $65.7 million in the six months ended June 30, 2019 from $45.1 million in the comparable period in 2018. This variance was primarily attributable to an increase in salaries and related costs of approximately $13.8 million as we expanded sales capacity by adding sales reps, sales development reps and partner managers. In addition, there was an increase in marketing events, advertising, public relations, and tradeshow exhibit expenses of approximately $3.1 million, an increase in allocated occupancy costs and overhead, depreciation, and software to support our sales personnel of approximately $2.2 million, and an increase in business services and outsourced subcontracted labor of approximately $2.1 million.This was offset partially by a decrease in recruiting costs of approximately $0.5 million.

Sales and Marketing - Consumer

Our sales and marketing expenses consist of compensation and related expenses for marketing personnel, as well as online promotion, public relations and allocated occupancy costs and related overhead.

	Three Months Ended June 30,			Six Months Ended June 30,		
	2019	2018	% Change	2019	2018	% Change
	($ in thousands)			($ in thousands)		
Sales and marketing - consumer	$ 3,775	$ 2,053	84%	$ 6,719	$ 4,461	51%
Percentage of total revenue	5%	3%		5%	4%	
Headcount (at period end):	14	12	17%	14	12	17%

Sales and marketing expenses increased by 84% and 51% to $3.8 million and $6.7 million in the three and six months ended June 30, 2019, respectively, from $2.1 million and $4.5 million in the comparable periods in 2018. This variance was primarily attributable to increases in advertising and online expenses.

General and Administrative

Our general and administrative expenses consist of compensation and related expenses for executive, accounting, legal, human resources and administrative personnel, professional fees and other general corporate expenses.

	Three Months Ended June 30,			Six Months Ended June 30,		
	2019	2018	% Change	2019	2018	% Change
	($ in thousands)			($ in thousands)		
General and administrative	$ 13,763	$ 11,499	20%	$ 27,930	$ 21,622	29%
Percentage of total revenue	19%	19%		20%	18%	
Headcount (at period end):	151	114	32%	151	114	32%

General and administrative expenses increased by 20% to $13.8 million in the three months ended June 30, 2019 from $11.5 million in the comparable period in 2018. This variance was primarily attributable to an increase in total compensation expenses of approximately $2.8 million, in part due to the build out of the Company's recruiting and HR capabilities. Other factors include an increase in business services and outsourced labor of approximately $1.2 million and in consulting fees relating to procurement of $0.5 million. This was partially offset by a decrease in allocated occupancy costs, related overhead, information technology and other general corporate expenses of approximately $1.7 million and the nonrecurrence of debt issuance costs and executive relocation costs in 2018 of approximately $0.5 million.

General and administrative expenses increased by 29% to $27.9 million in the six months ended June 30, 2019 from $21.6 million in the comparable period in 2018. This variance was primarily attributable to an increase in total compensation expenses of approximately $5.2 million, in part due to the build out of the Company's recruiting and HR capabilities. Other factors include an increase in business services and outsourced labor of approximately $2.2 million and in consulting fees relating to procurement and pricing strategies of $1.8 million and deal costs of $0.6 million. This was partially offset by a decrease in allocated occupancy costs, related overhead, information technology and other general corporate expenses of approximately $2.7 million and the nonrecurrence of executive recruitment, relocation, and debt issuance costs in 2018 of approximately $0.8 million.

Product Development

Our product development expenses consist of compensation and related expenses for product development personnel as well as allocated occupancy costs and related overhead and outsourced labor and expenses for testing new versions of our software.

	Three Months Ended June 30,			Six Months Ended June 30,		
	2019	2018	% Change	2019	2018	% Change
	($ in thousands)			($ in thousands)		
Product development	$ 20,182	$ 14,219	42%	$ 38,355	$ 27,471	40%
Percentage of total revenue	28%	23%		28%	23%	
Headcount (at period end):	418	367	14%	418	367	14%

Product development costs increased by 42% to $20.2 million in the three months ended June 30, 2019 from $14.2 million in the comparable period in 2018. This variance was primarily attributable to increases in total compensation, recruiting expense and associated costs for product development personnel of approximately $2.9 million, in depreciation expense and backup server facilities and allocated overhead related to costs of supporting our server and network infrastructure of approximately $1.9 million, and in outsourcing and business services of approximately $1.2 million.

Product development costs increased by 40% to $38.4 million in the six months ended June 30, 2019 from $27.5 million in the comparable period in 2018. This variance was primarily attributable to increases in total compensation, recruiting expense and associated costs for product development personnel of approximately $4.9 million, in depreciation expense and backup server facilities and allocated overhead related to costs of supporting our server and network infrastructure of approximately $3.8 million, and in outsourcing and business services of approximately $2.2 million.

We continue to invest in new product development efforts to expand the capability of LiveEngage. In accordance with ASC 350-40 - "Internal- Use Software," as new projects are initiated that provide functionality to the LiveEngage platform, the associated development and employee costs will be capitalized. Upon completion, the project costs will be depreciated over five years. In the three and six months ended June 30, 2019, $7.2 million and $12.6 million was capitalized, respectively, compared to $2.2 million and $4.7 million in the comparable periods in 2018.

Restructuring Costs

Restructuring costs consist of reprioritizing and reallocating resources to focus on areas showing high growth potential.

	Three Months Ended June 30,			Six Months Ended June 30,		
	2019	2018	% Change	2019	2018	% Change
	($ in thousands)			($ in thousands)		
Restructuring costs	$ 205	$ 1,906	(89)%	$ 484	$ 2,084	(77)%
Percentage of total revenue	—%	3%		—%	2%	

Restructuring costs decreased by 89% and 77% to approximately $0.2 million and $0.5 million during the three months and six months ended June 30, 2019, respectively, from $1.9 million and $2.1 million in the comparable periods in 2018. This variance was primarily attributable to a decrease of severance costs . Severance costs are associated with re-prioritizing and reallocating resources to focus on areas showing high growth potential.

Amortization of Purchased Intangibles

	Three Months Ended June 30,			Six Months Ended June 30,		
	2019	2018	% Change	2019	2018	% Change
	($ in thousands)			($ in thousands)		
Amortization of purchased intangibles	$ 438	$ 424	3%	$ 899	$ 848	6%
Percentage of total revenues	1%	1%		1%	1%	

Amortization expense for purchased intangibles increased by 3% and 6% to $0.4 million and $0.9 million in the three and six months ended June 30, 2019, respectively, from $0.4 million and $0.8 million in the comparable periods in 2018. This variance was primarily attributable to amortization of acquisitions capitalized during the fourth quarter of 2018.

Additional amortization expense in the amount of $0.3 million and $0.6 million in the three and six months ended June 30, 2019 and 2018 is included in cost of revenue.

Other Income, net

Other income, net consists of interest income on cash and cash equivalents, investment income and financial (expense) income which is a result of currency rate fluctuations associated with exchange rate movement of the U.S. dollar against the New Israeli Shekel, British Pound, Euro, Australian Dollar and Japanese Yen.

	Three Months Ended June 30,			Six Months Ended June 30,		
	2019	2018	% Change	2019	2018	% Change
	($ in thousands)			($ in thousands)		
Other (expense) income, net	$ (2,267)	$ 31	(7,413)%	$ (2,201)	$ 160	(1,476)%

Other expense, net increased to $2.3 million and $2.2 million in the three and six months ended June 30, 2019, respectively, from other income, net of $0.1 million and $0.2 million in the comparable periods in 2018 due to interest expense attributable to the 0.750% Convertible Senior Notes due 2024 (the "Notes") partially offset by interest income on cash and cash equivalents and financial income which is attributable to currency rate fluctuations.

Provision For Income Taxes

	Three Months Ended June 30,			Six Months Ended June 30,		
	2019	2018	% Change	2019	2018	% Change
	($ in thousands)			($ in thousands)		
Provision for income taxes	$ 699	$ 536	30%	$ 1,292	$ 47	2,649%

Provision for income taxes increased to $0.7 million and $1.3 million in the three and six months ended June 30, 2019, respectively, from $0.5 million and $0.1 million in the comparable periods in 2018. Our consolidated effective tax rate was impacted by the statutory income tax rates applicable to each of the jurisdictions in which we operate.

Net Loss

We had a net loss of $24.0 million in the three months ended June 30, 2019 compared to a net loss of $8.3 million for the three months ended June 30, 2018. During the three months ended June 30, 2019, there were increases in revenue of approximately $9.3 million, increases in operating expenses of approximately $22.5 million, increases in other (expense) income, net of approximately $2.3 million, and increase in provision for income taxes of approximately $0.2 million.

We had a net loss of $42.9 million in the six months ended June 30, 2019 compared to a net loss of $11.5 million for the six months ended June 30, 2018. During the six months ended June 30, 2019, there were increases in revenue of approximately $17.5 million, increases in operating expenses of approximately $45.2 million, increases in other (expense) income, net of approximately $2.4 million, and increase in provision for income taxes of approximately $1.2 million.

Liquidity and Capital Resources

	Six Months Ended June 30,	
	2019	2018
	(in thousands)	
Consolidated Statements of Cash Flows Data:		
Cash flows used in operating activities	$ (28,912)	$ (2,007)
Cash flows used in investing activities	(21,675)	(8,821)
Cash flows provided by financing activities	208,986	24,322

As of June 30, 2019, we had approximately $224.7 million in cash and cash equivalents, an increase of approximately $158.3 million from December 31, 2018. The increase is primarily attributable to cash provided by investing activities relating to issuance of the Notes, as described in Note 8 to the Condensed Consolidated Financial Statements, and cash provided by financing activities relating to issuance of common stock. This was partially offset by purchases of capped calls, as described in Note 8 to the Condensed Consolidated Financial Statements, fixed assets for our co-location facilities and capitalization of internally developed software, and debt issuance costs, as well as decreases in accrued expenses and accounts payable and increases in prepaid expenses and accounts receivable.

Net cash used in operating activities was $28.9 million for the six months ended June 30, 2019 and consisted primarily of net loss, a decrease in accrued expenses and accounts payable and increases in prepaid expenses and accounts receivable. This was partially offset by increases in deferred revenue and non-cash expenses related to depreciation, stock compensation, accretion of debt discount, and amortization of purchased intangibles. The increase in deferred revenue was primarily related to changes in our billing terms for some of our larger customers. Net cash used in operating activities was $2.0 million for the six months ended June 30, 2018 and consisted primarily of net loss and increases in prepaid expenses and other current assets and accounts receivable and decreases in accrued expenses. This was partially offset by increases in deferred revenue and non-cash expenses related to depreciation, stock compensation, and amortization of purchased intangibles. The increase in accounts receivable and deferred revenue was primarily related to changes in our billing terms for some of our larger customers.

Net cash used in investing activities was $21.7 million in the six months ended June 30, 2019 and consisted primarily of the purchase of fixed assets for our co-location facilities and capitalization of internally developed software. Net cash used in investing activities was $8.8 million in the six months ended June 30, 2018 and was due primarily to the purchase of fixed assets for our co-location facilities and capitalization of internally developed software and the BotCentral assets acquired, partially offset by a release of restricted cash used with foreign currency forward contracts.

Net cash provided by financing activities was $209.0 million in the six months ended June 30, 2019 and consisted primarily of proceeds from issuance of the Notes and proceeds from issuance of common stock in connection with the exercise of stock options by employees. This was partially offset by purchases of capped calls, debt issuance costs, and repurchase of our common stock. The net proceeds of the Notes was approximately $221.0 million, after deducting initial purchaser debt issuance costs paid or payable by us, from issuance of the Notes, as described in Note 8 to the Condensed Consolidated Financial Statements. Net cash provided by financing activities was $24.3 million in the six months ended June 30, 2018. This was due primarily to proceeds from the issuance of common stock in connection with the exercise of stock options by employees, partially offset by repurchase of our common stock.

We have incurred significant expenses to develop our technology and services, to hire employees in our customer service, sales, marketing and administration departments, and for the amortization of purchased intangible assets, as well as non-cash compensation costs. Historically, we have incurred net losses and negative cash flows for various quarterly and annual periods since our inception, including during numerous quarters and annual periods in the past several years. As of June 30, 2019, we had an accumulated deficit of approximately $230.4 million.

Our principal source of liquidity is the net proceeds from the issuance of our convertible senior notes, after deducting purchaser discounts and debt issuance costs paid by us, issuance of common stock in connection with the exercise of options, and payments received from customers using our products. We anticipate that our current cash and cash equivalents will be sufficient to satisfy our working capital and capital requirements for at least the next twelve (12) months. However, we cannot assure you that we will not require additional funds prior to such time, and we would then seek to sell additional equity or debt securities through public financings, or seek alternative sources of financing. We cannot assure you that additional funding will be available on favorable terms, when needed, if at all. If we are unable to obtain any necessary additional financing, we may be required to further reduce the scope of our planned sales and marketing and product development efforts, which could materially adversely affect our business, financial condition and operating results. In addition, we may require additional funds in order to fund more rapid expansion, to develop new or enhanced services or products or to invest in or acquire complementary businesses, technologies, services or products.

Off-Balance Sheet Arrangements

We do not engage in off-balance sheet financing arrangements.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Foreign Currency Exchange Risks

Our Israeli operations have currency rate fluctuation risk associated with the exchange rate movement of the U.S. dollar against the New Israeli Shekel (“NIS”). During the three months ended June 30, 2019, the U.S. dollar appreciated by approximately 1% as compared to the NIS while the exchange rate remained flat during the six months ended June 30, 2019. During the three and six months ended June 30, 2019, expenses generated by our Israeli operations totaled approximately $16.0 million and $30.5 million. We actively monitor the movement of the U.S. dollar against the NIS, Pound Sterling, Euro, AUS dollar and Japanese Yen and have considered the use of financial instruments, including but not limited to derivative financial instruments, which could mitigate such risk. If we determine that our risk of exposure materially exceeds the potential cost of derivative financial instruments, we may in the future enter in to these types of investments. The functional currency of our wholly-owned Israeli subsidiaries, LivePerson Ltd. (formerly HumanClick Ltd.) and Kasamba Ltd., is the U.S. dollar; the functional currency of our operations in the United Kingdom is the Pound Sterling; the functional currency of our operations in the Netherlands, Germany, France and Italy is the Euro; the functional currency of our operations in Australia is the Australian Dollar; and the functional currency of our operations in Japan is the Japanese Yen.

Collection Risks

Our accounts receivable are subject, in the normal course of business, to collection risks. We regularly assess these risks and have established policies and business practices to protect against the adverse effects of collection risks. During the six months ended June 30, 2019, our allowance for doubtful accounts increased by $0.6 million to approximately $2.9 million. During the year ended December 31, 2018, our allowance for doubtful accounts increased by $1.0 million to approximately $2.3 million. A large proportion of our receivables are due from larger corporate customers that typically have longer payment cycles. We base our allowance for doubtful accounts on specifically identified credit risks of customers, historical trends and other information that we believe to be reasonable. Receivables are written-off and charged against its recorded allowance when we have exhausted collection efforts without success. We adjust our allowance for doubtful accounts when accounts previously reserved have been collected.

Interest Rate Risk

Our investments consist of cash and cash equivalents. Therefore, changes in the market's interest rates do not affect in any material respect the value of the investments as recorded by us.

In March 2019, we issued $230.0 million in aggregate principal amount of the Notes, as discussed in Note 8 to the Condensed Consolidated Financial Statements. As the Notes have a fixed annual interest rate, we have no financial and economic interest exposure associated with changes in interest rates. However, the fair value of the Notes changes when the market price of our stock fluctuates or interest rates change.

Inflation Risk

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

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, including the Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our "disclosure controls and procedures," as that term is defined in Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as of June 30, 2019. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of June 30, 2019 to ensure that the information we are required to disclose in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms, and to ensure that such information is accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended June 30, 2019 identified in connection with the evaluation thereof by our management, including the Chief Executive Officer and Chief Financial Officer, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations of the Effectiveness of Internal Control

A control system, no matter how well conceived and operated, can only provide reasonable, not absolute, assurance that the objectives of the internal control system are met. Because of the inherent limitations of any internal control system, no evaluation of controls can provide absolute assurance that all control issues, if any, have been detected.

Part II. Other Information

Item 1. Legal Proceedings

We previously filed an intellectual property suit against [24]7 Customer, Inc. in the Southern District of New York on March 6, 2014 seeking damages on the grounds that [24]7 reverse engineered and misappropriated our technology to develop competing products and misused our business information. On June 22, 2015, [24]7 Customer, Inc. filed suit against us in the Northern District of California alleging patent infringement. On December 7, 2015, [24]7 Customer Inc. filed a second patent infringement suit against us, also in the Northern District of California. On March 16, 2017, the New York case was voluntarily transferred and consolidated with the two California cases in the Northern District of California for all pre-trial purposes. Rulings by both the Court and the United States Patent Office in our favor have invalidated the majority of [24]7 patents that were asserted in the patent cases. Trial for our intellectual property and other claims asserted against [24]7 in the original litigation is currently set for October 1, 2019. We believe the claims filed by [24]7 are entirely without merit and intend to defend them vigorously.

We routinely assess all of our litigation and threatened litigation as to the probability of ultimately incurring a liability, and record our best estimate of the ultimate loss in situations where we assess the likelihood of loss as probable.

From time to time, we are involved in or subject to legal, administrative and regulatory proceedings, claims, demands and investigations arising in the ordinary course of business, including direct claims brought by or against us with respect to intellectual property, contracts, employment and other matters, as well as claims brought against our customers for whom we have a contractual indemnification obligation. We accrue for a liability when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Significant judgment is required in both the determination of probability and the determination as to whether a loss is reasonably estimable. In addition, in the event we determine that a loss is not probable, but is reasonably possible, and it becomes possible to develop what we believe to be a reasonable range of possible loss, then we will include disclosure related to such matter as appropriate and in compliance with ASC 450. The accruals or estimates, if any, resulting from the foregoing analysis, are reviewed at least quarterly and adjusted to reflect the impact of negotiations, settlements, rulings, advice of legal counsel and other information and events pertaining to a particular matter. To the extent there is a reasonable possibility that the losses could exceed the amounts already accrued, we will, as applicable, adjust the accrual in the period the determination is made, disclose an estimate of the additional loss or range of loss, indicate that the estimate is immaterial with respect to our financial statements as a whole or, if the amount of such adjustment cannot be reasonably estimated, disclose that an estimate cannot be made.

From time to time, third parties assert claims against us regarding intellectual property rights, privacy issues and other matters arising in the ordinary course of business. Although we cannot be certain of the outcome of any litigation or the disposition of any claims, nor the amount of damages and exposure, if any, that we could incur, we currently believe that the final disposition of all existing matters will not have a material adverse effect on our business, results of operations, financial condition or cash flows. In addition, in the ordinary course of our business, we are also subject to periodic threats of lawsuits, investigations and claims. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Item 1A. Risk Factors

Our operations and financial results are subject to various risks and uncertainties, including those described in Part I, Item 1A. “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2018, filed on February 25, 2019,
which could adversely affect our business, financial condition, results of operations, cash flows, and the trading price of our common stock. Other than as set forth below, there have been no material changes to the risk factors described in our most recent Annual Report on Form 10-K.

Risks Related to Our Notes

Servicing our future debt may require a significant amount of cash, and we may not have sufficient cash flow from our business to pay our indebtedness.

Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our Notes or any additional future indebtedness depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not generate cash flow from operations in the future sufficient to service our debt and make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional debt financing or equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our current or any future indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations. In addition, any of our future debt agreements may contain restrictive covenants that may prohibit us from adopting any of these alternatives. Our failure to comply with these covenants could result in an event of default which, if not cured or waived, could result in the acceleration of our debt.

We may not have the ability to raise the funds necessary to settle conversions of the Notes in cash or to repurchase the Notes upon a fundamental change, and any future debt may contain limitations on our ability to pay cash upon conversion or repurchase of the Notes.

Holders of the Notes have the right to require us to repurchase all or a portion of their Notes upon the occurrence of a fundamental change before the maturity date at a fundamental change repurchase price equal to 100% of the principal amount of the Notes to be repurchased, plus accrued and unpaid interest, if any. In addition, upon conversion of the Notes, unless we elect to deliver solely shares of our common stock to settle such conversion (other than paying cash in lieu of delivering any fractional share), we are required to make cash payments in respect of the Notes being converted. However, we may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of Notes surrendered therefor or pay cash with respect to Notes being converted. In addition, our ability to repurchase Notes or to pay cash upon conversions of Notes may be limited by law, regulatory authority, or any agreements governing our future indebtedness. Our failure to repurchase Notes at a time when the repurchase is required by the indenture or to pay any cash upon conversions of Notes as required by the indenture would constitute a default under the indenture. A default under the indenture or the fundamental change itself could also lead to a default under agreements governing any future indebtedness. If the payment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase the Notes or to pay cash upon conversions of Notes.

The conditional conversion feature of the Notes, if triggered, may adversely affect our financial condition and operating results.

In the event the conditional conversion feature of the Notes is triggered, holders of the Notes will be entitled to convert their Notes at any time during specified periods at their option. If one or more holders elect to convert their Notes, unless we elect to satisfy our conversion obligation by delivering solely shares of our common stock (other than paying cash in lieu of delivering any fractional share), we would be required to settle a portion or all of our conversion obligation through the payment of cash, which could adversely affect our liquidity. In addition, even if holders of Notes do not elect to convert their Notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the Notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

The accounting method for convertible debt securities that may be settled in cash, such as the Notes, could have a material effect on our reported financial results.

Under Accounting Standards Codification 470-20, *Debt with Conversion and Other Options*, or ASC 470-20, an entity must separately account for the liability and equity components of the convertible debt instruments (such as the Notes) that may be settled entirely or partially in cash upon conversion in a manner that reflects the issuer's economic interest cost. The effect of ASC 470-20 on the accounting for the Notes is that the equity component, net of issuance costs, is required to be included in the additional paid-in capital section of stockholders' equity on our condensed consolidated balance sheet at the issuance date and the value of the equity component is treated as original issue discount for purposes of accounting for the liability component of the Notes. As a result, we are required to record a greater amount of non-cash interest expense in current periods presented as a result of the amortization of the discounted carrying value of the Notes to their face amount over the term of the Notes. We will report larger net losses (or lower net income) in our financial results because ASC 470-20 requires interest to include both the current period's amortization of the debt discount and the instrument's non-convertible coupon interest rate, which could adversely affect our reported or future financial results, the trading price of our common stock and the trading price of the Notes.

In addition, under certain circumstances, convertible debt instruments (such as the Notes) that may be settled entirely or partly in cash may be accounted for utilizing the treasury stock method, the effect of which is that the shares issuable upon conversion of such Notes are not included in the calculation of diluted earnings per share except to the extent that the conversion value of such Notes exceeds their principal amount. Under the treasury stock method, for diluted earnings per share purposes, the transaction is accounted for as if the number of shares of common stock that would be necessary to settle such excess, if we elected to settle such excess in shares, are issued. We cannot be sure that the accounting standards in the future will continue to permit the use of the treasury stock method. If we are unable to use the treasury stock method in accounting for the shares issuable upon conversion of the Notes, then our diluted earnings per share would be adversely affected.

The capped call transactions may affect the value of the Notes and our common stock.

In connection with the transaction in which we issued the Notes, we entered into capped call transactions with certain option counterparties. The capped call transactions are expected generally to reduce the potential dilution to our common stock upon any conversion of Notes and/or offset any cash payments we are required to make in excess of the principal amount of the converted Notes, as the case may be, upon any conversion of Notes, with such reduction and/or offset subject to a cap.

The option counterparties or their respective affiliates are expected to modify their hedge positions by entering into or unwinding various derivatives with respect to our common stock and/or purchasing or selling our common stock, the Notes or other of our securities or instruments (if any), in secondary market transactions prior to the maturity of the Notes (and are likely to do so during any observation period related to a conversion of Notes occurring on or after November 1, 2023 or following any earlier conversion or any repurchase of Notes by us on any fundamental change repurchase date or otherwise). This activity could also cause or avoid an increase or a decrease in the market price of our common stock or the Notes, which could affect a holder's ability to convert the Notes and, to the extent the activity occurs during any observation period related to a conversion of Notes, it could affect the amount and value of the consideration that a holder will receive upon conversion of such Notes.

The potential effect, if any, of these transactions and activities on the market price of our common stock or the Notes will depend in part on market conditions and cannot be ascertained at this time. Any of these activities could adversely affect the value of our common stock and the value of the Notes (and as a result, the amount and value of the consideration that a holder would receive upon the conversion of any Notes) and, under certain circumstances, a holder's ability to convert his or her Notes.

We do not make any representation or prediction as to the direction or magnitude of any potential effect that the transactions described above may have on the price of our common stock or the Notes. In addition, we do not make any representation that the option counterparties or their respective affiliates will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

We are subject to counterparty risk with respect to the capped calls.

The option counterparties to the capped call transactions are financial institutions, and we are subject to the risk that any or all of them may default under the capped calls. Our exposure to the credit risk of the option counterparties is not secured by any collateral. Global economic conditions have in the recent past resulted in, and may again result in, the actual or perceived failure or financial difficulties of many financial institutions. If an option counterparty becomes subject to insolvency proceedings, we will become an unsecured creditor in those proceedings, with a claim equal to our exposure at that time under our transactions with that option counterparty. Our exposure depends on many factors but, generally, an increase in our exposure will be correlated to an increase in the market price and in the volatility of our common stock. In addition, upon a default by an option counterparty, we may suffer more dilution than we currently anticipate with respect to our common stock. We can provide no assurances as to the financial stability or viability of the option counterparties.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Unregistered Sales of Equity Securities

There were no unregistered sales of equity securities by the issuer during the three months ended June 30, 2019.

Purchase of Equity Securities by the Issuer

There were no repurchases of equity securities by the issuer during the three months ended June 30, 2019.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

None.

Item 5. Other Information

None.

ITEM 6. EXHIBITS

The following exhibits are filed as part of this Quarterly Report on Form 10-Q:

10.1	#	LivePerson, Inc. 2019 Stock Incentive Plan
10.2	#	LivePerson, Inc. 2019 Employee Stock Purchase Plan
31.1	*	Certification by Chief Executive Officer pursuant to Exchange Act Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	*	Certification by Chief Financial Officer pursuant to Exchange Act Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	**	Certification by Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	**	Certification by Chief Financial Officer 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 Extension Schema Document
101.CAL	*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	*	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith

** Furnished herewith

\# Management contract or compensatory plan, contract or arrangement

SIGNATURES

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

LIVEPERSON, INC.
(Registrant)

Date:	August 2, 2019	By:	/s/ ROBERT P. LOCASCIO
		Name:	Robert P. LoCascio
		Title:	Chief Executive Officer (principal executive officer)
Date:	August 2, 2019	By:	/s/ CHRISTOPHER E. GREINER
		Name:	Christopher E. Greiner
		Title:	Chief Financial Officer (principal financial and accounting officer)

CERTIFICATIONS

I, Robert P. LoCascio, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of LivePerson, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) 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(s) 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:	August 2, 2019	By:	/s/ ROBERT P. LOCASCIO
		Name:	Robert P. LoCascio
		Title:	Chief Executive Officer (principal executive officer)

Exhibit 31.2

CERTIFICATIONS

I, Christopher E. Greiner, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of LivePerson, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) 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(s) 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:	August 2, 2019	By:	/s/ CHRISTOPHER E. GREINER
		Name:	Christopher E. Greiner
		Title:	Chief Financial Officer (principal financial officer)

Exhibit 32.1

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

I, Robert P. LoCascio, Chief Executive Officer of LivePerson, Inc. (the "Company"), certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Quarterly Report of the Company on Form 10-Q for the period ended June 30, 2019, as filed with the Securities and Exchange Commission (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date:	August 2, 2019	By:	/s/ ROBERT P. LOCASCIO
		Name:	Robert P. LoCascio
		Title:	Chief Executive Officer (principal executive officer)

This certification shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that section, nor shall it be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent the Company specifically incorporates it by reference.

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

I, Christopher E. Greiner, Chief Financial Officer of LivePerson, Inc. (the “Company”), certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Quarterly Report of the Company on Form 10-Q for the period ended June 30, 2019, as filed with the Securities and Exchange Commission (the “Report”), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date:	August 2, 2019	By:	/s/ CHRISTOPHER E. GREINER
		Name:	Christopher E. Greiner
		Title:	Chief Financial Officer (principal financial officer)

This certification shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that section, nor shall it be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent the Company specifically incorporates it by reference.