

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

FORM 10-K

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

For the Fiscal Year Ended December 31, 2021

OR

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

For the Transition Period from ____ to ____

Commission File Number 000-30141

LIVEPERSON, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation)

530 7th Ave, Floor M1
New York, New York

(Address of Principal Executive Offices)

13-3861628

(IRS Employer Identification No.)

10018

(Zip Code)

(212) 609-4200

(Registrant's telephone Number, including area Code)

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

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock, par value \$0.001 per share	LPSN	The Nasdaq Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

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, smaller reporting company or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer	<input checked="" type="checkbox"/>	Accelerated Filer	<input type="checkbox"/>
Non-accelerated Filer	<input type="checkbox"/>	Smaller Reporting Company	<input type="checkbox"/>
		Emerging Growth Company	<input type="checkbox"/>

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

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

The aggregate market value of the voting common stock held by non-affiliates of the registrant as of June 30, 2021 (the last business day of the registrant's most recently completed second fiscal quarter) was approximately \$4,035,402,834 (computed by reference to the last reported sale price on The Nasdaq Global Select Market on that date). The registrant does not have any non-voting common stock outstanding.

On February 10, 2022, 72,570,760 shares of the registrant's common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for the 2022 Annual Meeting of Stockholders, which we plan to file subsequent to the date hereof, are incorporated by reference into Items 10, 11, 12, 13 and 14 of Part III of this Form 10-K.

LIVEPERSON, INC.
2021 ANNUAL REPORT ON FORM 10-K
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The following are explanations of some of the industry and general terms we use in this report:

2024 Notes – The Company’s \$230.0 million 0.750% Convertible Senior Notes due 2024 issued in 2019.

2026 Notes – The Company’s \$517.5 million 0% Convertible Senior Notes due 2026 issued in 2020.

ASC – FASB Accounting Standards Codification.

AI – Artificial Intelligence.

APAC – Asia-Pacific.

API – Application programming interface.

ARPU – Average revenue per user.

COVID-19 – Global novel coronavirus disease.

DEI – Diversity, equity, and inclusion.

EMEA – Europe, the Middle East, and Africa.

ESPP – Employee Stock Purchase Plan.

E.U. – European Union.

Experts – Independent service providers.

FaaS – Function as a Service.

FASB – Financial Accounting Standards Board.

GAAP – Accounting principles generally accepted in the United States.

IT – Information technology.

IVRs – Interactive voice response systems.

Nasdaq – Nasdaq Global Select Market.

NIS – New Israeli Shekel.

NLU – Natural language understanding.

PCI – Payment Card Industry.

R&D – Research and development.

ROI – Return on investment.

SaaS – Software-as-a service.

SEC – Securities and Exchange Commission.

SMB – Small business sector.

SMS – Short messaging service.

TASE – Tel Aviv Stock Exchange.

The Notes – Collectively, the 2024 Notes and the 2026 Notes.

U.K. – United Kingdom.

U.S. – United States of America.

Users – Individual consumers.

CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

Statements in this Annual Report on Form 10-K about LivePerson, Inc. (“LivePerson”) that are not historical facts are forward-looking statements. These forward-looking statements are based on our current expectations, assumptions, estimates and projections about LivePerson and our industry. Our expectations, assumptions, estimates and projections are expressed in good faith, and we believe there is a reasonable basis for them, but we cannot assure you that our expectations, assumptions, estimates and projections will be realized. Examples of forward-looking statements include, but are not limited to, statements regarding future business, future results of operations or financial condition (including based on examinations of historical operating trends), management strategies and the COVID-19 pandemic. Many of these statements are found in the “Business” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections of this Annual Report on Form 10-K. When used in this Annual Report on Form 10-K, the words “estimates,” “expects,” “anticipates,” “projects,” “plans,” “intends,” “believes” and variations of such words or similar expressions are intended to identify forward-looking statements. However, not all forward-looking statements contain these words. Forward-looking statements are subject to risks and uncertainties that could cause actual future events or results to differ materially from those expressed or implied in the forward-looking statements. Important factors that could cause our actual results to differ materially from the forward-looking statements we make in this Annual Report on Form 10-K include those set forth in the section entitled “Risk Factors.” It is routine for our internal projections and expectations to change as the year or each quarter in the year progress, 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. We do not undertake any obligation to revise forward-looking statements to reflect future events or circumstances. All forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.

PART I

Item 1. Business

Overview

LivePerson, Inc. (“LivePerson”, the “Company”, “we” or “our”) is a leading Conversational AI company creating digital experiences that are Curiously Human. Conversational AI allows humans and machines to interact using natural language, including speech or text. During the past decade, consumers have made mobile devices the center of their digital lives, and they have made mobile messaging the center of communication with friends, family and peers. This trend has been significantly accelerated by the COVID-19 pandemic and we believe can now be viewed as a permanent, structural shift in consumer behavior. Our technology enables consumers to connect with businesses through these same preferred conversational interfaces, including Facebook Messenger, SMS, WhatsApp, Apple Business Chat, Google Rich Business Messenger and Alexa. These messaging conversations harness human agents, bots and AI to power convenient, personalized and content-rich journeys across the entire consumer lifecycle, from discovery and research, to sales, service and support, and increasingly marketing, social, and brick and mortar engagements. For example, consumers can look up product info like ratings, images and pricing, search for stores, see product inventory, schedule appointments, apply for credit, approve repairs, and make purchases or payments - all without ever leaving the messaging channel. These AI and human-assisted conversational experiences constitute the Conversational Space, within which LivePerson has strategically developed one of the industry’s largest ecosystems of messaging endpoints and use cases.

The Conversational Cloud, our enterprise-class cloud-based platform, enables businesses to become conversational by securely deploying AI-powered messaging at scale for brands with tens of millions of customers and many thousands of agents. The Conversational Cloud powers conversations across each of a brand’s primary digital channels, including mobile apps, mobile and desktop web browsers, SMS, social media, and third-party consumer messaging platforms. Brands can also use the Conversational Cloud to message consumers when they dial a 1-800 number instead of forcing them to navigate IVRs and wait on hold. Similarly, the Conversational Cloud can ingest traditional emails and convert them into messaging conversations, or embed messaging conversations directly into web advertisements, rather than redirect consumers to static website landing pages. Agents can manage all conversations with consumers through a single console interface, regardless of where the conversations originated.

LivePerson’s robust, cloud-based suite of rich messaging, real-time chat, AI and automation offerings features consumer and agent facing bots, intelligent routing and capacity mapping, real-time intent detection and analysis, queue prioritization, customer sentiment, analytics and reporting, content delivery, PCI compliance, co-browsing, and a sophisticated proactive targeting engine. An extensible 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 40 APIs and software development kits are available on the Conversational Cloud.

For your reference:

- Conversational AI: Conversational AI allows humans and machines to interact using natural language, including speech or text.
- Conversational Space: In the Conversational Space, consumers message with brands on their own schedule, using natural language, to resolve their intents - all on their preferred messaging service. The core capabilities of the Conversational Space are voice and text-based interfaces, powered by AI and humans working together. Conversational Space is the simplest, most intuitive interface of all.
- Conversational Cloud: LivePerson’s enterprise-class, AI-powered Conversational Cloud platform empowers consumers to message their favorite brands, just as they do with friends and family.

LivePerson’s Conversational AI offerings put the power of bot development, training, management and analysis 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 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. 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 messaging with our

proprietary Conversational AI, as well as third-party bots, the Conversational Cloud offers brands a comprehensive approach to scaling automations across their millions of customer conversations.

Complementing our proprietary messaging and Conversational AI offerings are teams of technical, solutions and consulting professionals that have developed deep domain expertise in the implementation and optimization of conversational services across industries and messaging endpoints. We are a leading authority in the Conversational Space. LivePerson's products, coupled with our domain knowledge, industry expertise and professional services, have been proven to maximize the effectiveness of the Conversational Space and deliver measurable return on investment for our customers. Certain of our customers have achieved the following advantages from our offerings:

- the ability for each agent to 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;
- labor efficiency gains of at least two times that of voice agents, effectively cutting labor costs by at least 50%;
- improving the overall customer experience, thereby fueling customer satisfaction score increases of up to 20 percentage points, and enhancing retention and loyalty;
- more convenient, personalized and content-rich conversations that increase sales conversion by up to 20%, increase average order value and reduce abandonment;
- more satisfied contact center agents, thereby reducing agent churn by up to 50%;
- a valued connection with consumers via mobile devices, either through native applications, websites, text messages, or third-party messaging platforms;
- leveraged spending that drives visitor traffic by increasing visitor conversions;
- refining and improving performance by understanding which initiatives deliver the highest rate of return; and
- increased lead generation by providing a single platform that engages consumers through advertisements and listings on branded and third-party websites.

As a "cloud computing" or 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.

To further enhance our platform, in September 2020 we signed a partnership with a digital services and consulting company. We are working with this company to transform our technology infrastructure on the public cloud, to build integrated solutions and a global practice around our Conversational Cloud to sell into their channels and global enterprise customer base, and to redefine how the world's top brands communicate.

More than 18,000 businesses, including HSBC, Orange, and GM Financial use our conversational solutions to orchestrate humans and AI, at scale, and create a convenient, deeply personal relationship with their customers.

LivePerson's consumer services offering is an online marketplace that connects Experts who provide information and knowledge for a fee via mobile and online messaging with 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.

LivePerson was incorporated in the State of Delaware in November 1995 and the LivePerson service was introduced in November 1998. The Company completed an initial public offering in April 2000 and is currently traded on the Nasdaq and the TASE. LivePerson is headquartered in New York City. In light of the COVID-19 pandemic and the company's strong performance working remotely, LivePerson has adopted an "employee-centric" workforce model that does not rely on traditional offices. During the second quarter of 2021, the Company decided to reoccupy some of its leased space to provide its employees with the option of working in an office space environment if they choose to do so.

Market Opportunity

LivePerson's proprietary messaging and Conversational AI enable consumers and businesses to use natural language over conversational interfaces such as SMS, Messenger, Apple Business Chat, Google's Rich Business Messenger, and in-home personal assistants like Alexa, in order to get answers to questions, make purchases and resolve customer care inquiries. These conversational messaging capabilities target lower costs and increased customer satisfaction, retention and revenue by utilizing human agents, AI and bots to provide convenient, personalized and content-rich communication as alternatives to calling a 1-800 number, navigating a website or downloading an app.

Our view is that once a consumer has established their favorite brands as contacts in their preferred messaging app, they will be less likely to contact that brand by other means. Instead, they will simply select the contact, open up the thread with their entire history with the brand, and then renew the conversation. As a result, we anticipate that the billions of dollars previously invested by brands across these legacy channels will be increasingly allocated to experiences powered by our platform.

Historically, brands have predominantly promoted calling their 1-800 number or using email as the primary means of contact with consumers. According to a 2018 IBM report, approximately 270 billion customer service calls are made to contact centers each year. With a median cost per call of approximately \$5.60, according to US Contact Center Decision-Makers' Guide, we estimate that businesses spend approximately \$1.5 trillion annually to support their 1-800 number call centers. We believe that moving these calls to messaging represents the largest portion of what we estimate is a \$60 billion go-to-market opportunity. We estimate that nearly half of this market opportunity is tied to service, and the other half tied to sales, marketing, social and brick and mortar use cases.

LivePerson is already capitalizing on this Conversational Space transformation. We cite the following considerations:

- Consumer preference has already shifted away from calling to messaging in our personal lives. WhatsApp and Facebook users combined send more than 65 billion messages a day, and, according to Portio Research, people worldwide were estimated to send an estimated 23 billion text messages a day in 2015. The International Smartphone Mobility Report by mobile data tracking firm Infomate found that Americans spend about 26 minutes a day texting, as compared to six minutes a day on voice calls. A survey by transportation booking app, Hailo, found that making phone calls has dropped to the sixth most popular use of a mobile device, behind sending messages, receiving messages, checking email, surfing the Web, and using the alarm clock. The adoption of messaging has not been constrained to younger generations. According to Experian Marketing Services, adults 55 and older send and receive an average of nearly 500 text messages a month.
- Calling a 1-800 number typically leads to a poor customer experience. Roughly 50% of calls to 1-800 numbers go unresolved, according to IBM, and a 2014 Harris Interactive survey found that "81% of all consumers agree that it is frustrating to be tied to a phone or computer to wait for customer service help." Research by enterprise analytics firm Mattersight, reinforces this view, with 74% of consumers feeling that call centers are getting worse or at best staying the same. The risk of poor customer service is material, according to Harris Interactive, which found that 89% of consumers will leave and go to a competitor due to bad customer experiences.
- LivePerson holds the perspective that AI and automation are the foundation for transforming the conversational experience, disrupting how agents operate and how brands engage with consumers. With AI at the center of the solution and by harnessing data from all primary channels, including voice, messaging, chat, and human agents, LivePerson is in a unique position to provide the best conversational experiences for consumers. Deep voice integrations with CRM, service, and IT systems allows us to deliver a unified agent experience through a single pane of glass.
- We believe the combination of strong alignment to consumer communication preferences, high returns on investment and a growing list of proven referenceable customers have positioned the Conversational Space at an inflection point. Nearly 75% of messaging conversations on our platform had automation attached at the end of 2021, up from nearly 70% at the end of 2020, nearly 60% at the end of 2019, and approximately 25% at the end of 2017. In the first year of its launch, our Conversation Bot Builder was deployed by nearly 300 brands.

We also believe that consumer traffic and digital spending will increasingly shift away from websites and mobile apps to conversational engagements. We think that websites and e-commerce have not lived up to the expectations of businesses and that consumers are likewise frustrated with the navigational experience and the challenges of getting questions answered on

websites. In fact, after more than 20 years and a global pandemic, e-commerce still only accounts for approximately 18% of total retail sales and, in the U.S., Amazon.com accounts for approximately 40% of this share.

The low penetration rates of online and mobile e-commerce reflect disappointing website conversion rates, which average less than 5%. Low conversion rates are likely a factor of the trend for websites to be designed for content, as opposed to commerce, so that they can be indexed to show up in web searches. According to a 2015 Forrester consumer survey, 53% of customers are likely to abandon their online purchases if they cannot find quick answers to their questions. This conflict between content and commerce not only impacts revenue, but also drives higher costs, as we estimate that 60%-80% of all calls to 1-800 numbers originate from consumers first visiting a website and then getting confused or not obtaining the answers they seek.

We believe that LivePerson's proprietary messaging and Conversational AI offerings provide a superior alternative. Certain LivePerson customers have demonstrated increases in website sales of up to 20%, while lowering the cost of engagement relative to voice or email. No longer are consumers navigating through clicks and searches to find answers across multiple static web pages. Instead they use natural language to engage conversationally with a brand. These conversations can be personalized to each brand's unique identity and to each consumer's unique history and preferences. The engagements are content rich, featuring images, reviews, ratings, and videos, and they are convenient, letting the consumer drive the conversation when it meets their needs, and offering the ability to integrate to credit cards, pay wallets and calendars.

We also believe that the Conversational Space will steadily eliminate the need for investment in branded apps. We conclude that consumers will increasingly opt to connect with brands through their preferred messaging channels, such as Apple Business Chat, WhatsApp, SMS, Messenger, or Twitter, rather than clutter their mobile devices, waste storage, and potentially impact performance by downloading a multitude of individual apps.

Another emerging market opportunity for LivePerson is the leveraging of brick and mortar operations as an extension of the contact center. Retailers, telecommunications companies, and financial services companies, among others, all operate brick and mortar storefronts, where thousands of employees often sit idle during off peak hours. The Conversational Cloud enables our customers to set up campaigns where these employees can connect through messaging to customers in their community, with check-ins, follow ups, and special offers, reinforcing relationships at the local level. For example, a telecommunications company targeted consumers that were local to its storefronts with a trade-in offer. Additionally, our platform can arm employees in the field with the ability to rapidly obtain answers to questions as they engage with customers in the stores. For example, a consumer may have a specific question about a new appliance in a home improvement store, and the employee can engage through our platform with a specialist bot or human agent to obtain detailed information on that appliance. The COVID-19 pandemic has only accelerated adoption of these experiences. In 2021 we hit a new milestone of 1.5 billion total conversations on our platform, demonstrating the breadth and depth of our data assets and further strengthening our data moat for delivering high quality Conversational AI.

Strategy

The key elements of LivePerson's business solutions strategy include:

Build awareness and drive adoption of the Conversational Space. LivePerson brought our first customer live on messaging in June 2016. Since that time, we have been focused on building awareness for conversational experiences 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 (events in 2020 and 2021 were held virtually in light of the COVID-19 pandemic) that target executives from enterprise customers and prospects, and feature a key theme within the Conversational Space, such as Apple Business Chat, Google Rich Business Messenger, IVR deflection, or AI. LivePerson customers are the center point of these summits, presenting why they chose LivePerson for conversational experiences, how they achieved success, and what type of ROI they have realized. Each attendee then receives a blueprint for how they can pursue 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 2021, nearly 75% of messaging conversations had automation attached. We will continue to focus on building awareness for the Conversational Space and driving adoption of messaging and AI across our customer base.

Increase messaging volumes by developing a broad ecosystem, expanding customer use cases, and focusing on AI and automation. Our strategy is to drive higher messaging volumes by going both wide across messaging endpoints, deep across consumer use cases, and focusing on AI and automation as the means to deliver powerful scale. 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 drive broad messaging adoption, it is imperative that the Conversational Cloud integrates to all of the messaging apps that consumers prefer to use for communication and addresses all key use cases. 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 ours has been to build one of the industry's broadest ecosystems of messaging endpoints and use cases. 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. In 2019, we added email, allowing brands to manage emails through the same console they use for messaging, and to convert legacy emails into messaging conversations. We also added social monitoring and conversational tools for Twitter and Facebook, and introduced proactive messaging, allowing brands to transform traditional one-way notifications such as flight cancellations or phone plan overage alerts into two-way conversations. Further, we connected to Facebook and WhatsApp digital advertisements, enabling consumers to initiate messaging conversations for marketing and customer care directly within the advertisement. In 2020, we added Instagram and Google's Business Messages, allowing brands to bring customer-initiated conversations into the Conversational Cloud directly from Instagram, Google Search, and Google Maps.

Each channel and use case added opens the door to new consumers, providing brands a greater opportunity to shift share away from their legacy contact center channels into messaging. For example, in 2019, leading airlines launched on WhatsApp and Apple Business Chat with the ability to make secure payments; a baseball stadium launched an automated conversational concierge providing answers to a wide range of questions from restroom locations to player stats; and a multinational telecommunications company used proactive two-way messaging for outbound campaigns. In 2020, one of the largest Telcos in Australia fully virtualized their contact centers, a leading U.S. quick-serve restaurant launched on Facebook Messenger to help customers order meals, one of the biggest banks in the world launched an Apple Business Chat channel to provide a secure way to perform day-to-day banking, and one of the world's largest jewelry retailers used the Conversational Cloud and QR codes to sell millions of dollars of product.

LivePerson makes the management of all these disparate channels seamless to the brand. AI-based 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.

We believe LivePerson is leading the structural shift to Conversational AI. In the wake of the COVID-19 pandemic, leading brands are turning to LivePerson's AI-powered messaging to overcome a capacity gap created by voice call agent work-from-home measures and increased demand for digital engagement as consumers practice social distancing. LivePerson is powering Conversational AI, automation and messaging strategies across a growing number of use cases from care and sales, to marketing, social, conversational advertising and brick and mortar. Our Conversational AI leadership and the increase in adoption have 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 within our target range of 105% to 115% for 2021. The benefit can also be seen in LivePerson's ARPU for our enterprise and mid-market customers, which increased approximately 31% in 2021 to \$610,000 from approximately \$465,000 in 2020.

Attract the industry's best AI, machine learning and conversational talent. We believe that AI and machine learning are critical to successfully scaling in the Conversational Space, and that in order to develop the industry's leading technology, we need to attract the industry's best talent. Since 2018, LivePerson hired more than 437 of the industry's brightest data scientists, machine learning engineers and automation engineers, many from firms such as Nike, Amazon.com, Microsoft and Target, who are working exclusively on applying AI to the Conversational Space. LivePerson also expanded its development talent base in Germany, and added key development talent through the acquisitions of BotCentral in Mountain View, California; Callinize

Inc., dba Tenfold (“Tenfold”) in Austin, Texas; e-bot7 in Munich, Germany; and VoiceBase, Inc. (“VoiceBase”) in San Francisco, California.

Bring to market best-in-class AI and machine learning technologies designed for the Conversational Space. We believe that in the last decade many vendors introduced AI and bot offerings that 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 platforms such as the Conversational Cloud. In December 2018, LivePerson announced its 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, LivePerson’s Conversational AI 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, LivePerson’s Conversational AI 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 LivePerson’s Conversational AI include:

- a holistic approach to scaling AI by combining consumer facing bots, agent facing bots, intelligent routing and real-time intent understanding, with an analytics dashboard that helps users focus on the intents that are impacting their business and prioritize which intents to automate next;
- bot building software that is based on dialogue instead of workflow or code, so non-technical employees like contact center agents can design automations;
- leveraging a data moat from hundreds of millions of conversations to feed the machine learning that rapidly and accurately detects consumer sentiment and intents in real-time. Customers of LivePerson can use intent understanding for advanced routing, next-best actions, and to fully contain conversations with automation;
- 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;
- the ability to bootstrap conversations with existing transcripts, reducing design effort and speeding time to market;
- third-party AI NLU integration, so customers are not boxed into one vendor; and
- AI analytics and reporting tailored to the Conversational Space, providing brands with immediate, actionable insights about their businesses and contact center operations.

Our strategy is to continue to enhance the Conversational AI engine and related products, by 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 brands’ investment. Over the past four years we have made good progress in developing our conversational AI platform and within the next 12 months, we expect to have a solution in place for our automations to self-heal, which is the ultimate goal of any AI platform. Our acquisitions of VoiceBase and Tenfold provide us with a mechanism for data capture in the voice channel. This additional data and the associated analytics and system integration give us an even greater ability to scale the usage of our platforms, by building on our strength in messaging. 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 correctly, the entire consumer lifecycle with a brand will be maintained within the Conversational Space, and traffic will steadily shift away from lower returning traditional voice calls, websites, emails, and apps to higher returning messaging endpoints.

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

- The Conversational Cloud, LivePerson's 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 the Conversational Space, intent recognition, robust real-time reporting, role-based real-time analytics, predictive intelligence, and innovations in customer satisfaction and connection measurement. Additionally, the Conversational Cloud is an open platform with pre-built, enterprise-grade integrations into back-end systems as well as the ability to work across NLU providers.
- The Company believes it has a data moat built on hundreds of millions of conversations across industries, geographies and use cases that is feeding the machine learning engines that power intent understanding.
- The platform has expanded to power conversations across a broad spectrum of channels and use cases, from traditional sales and customer service, to marketing, social, email, advertising, and brick and mortar.
- 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 the Conversational Space. 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 Space, 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 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 our market position by increasing our customer base, and expanding within our installed base. We plan to 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 SMB sector. In 2019, we made strong inroads into new verticals with key wins in the airline, food service and healthcare industries. In 2020, we strengthened our presence in key markets including travel/hospitality and retail, and opened new verticals like healthcare and government. In 2021, we continued to grow in verticals such as healthcare and financial services, and expanded into new industries including cryptocurrency. We are experimenting with new conversational businesses, including some that are in regulated industries, like online banking and healthcare. We are increasingly structuring our field organization to emphasize our domain expertise and strengthen customer relationships across target industries.

Continue to build our international presence. We are focused on building our international presence and expanding our international revenue contribution, which accounted for 35% and 38% of total revenue in 2021 and 2020, respectively. We are generating positive results from our recent investments in the Asia Pacific, Europe, and Latin America regions. Expanding go-to-market capacity in international theaters is one of our key strategic focuses and also part of our motivation for our recent acquisition of e-bot7.

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 third-party messaging endpoints including SMS, Facebook Messenger, Apple Business Chat, Google Rich Business Messenger, Line, WhatsApp, Alexa, Google Home, WeChat, Google Ad Lingo, Google Search, Google Maps, Instagram and Twitter, multiple IVR vendors, and dozens of branded apps. The Conversational Cloud integrates our proprietary messaging and Conversational AI with third-party bot offerings, 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 40 APIs and software development kits 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 launched LivePerson Functions, a serverless FaaS integration which enables brands to develop custom behaviors within LivePerson's conversational platform to easily and rapidly tailor conversation flows to their specific needs.

Expand sales partnerships to broaden our presence and accelerate sales cycles. We are focused on broadening our 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. In 2019, we announced strategic partnerships with TTEC, a leading BPO focused on customer experience, and DMI, a digital transformation company, to redefine the customer experience with digital engagement, messaging, and AI-driven automation. In 2020, a digital services and consulting company joined LivePerson's network with a first-of-its-kind 360 degree partnership focusing not only on capturing the global rising demand for conversational commerce and building a personalized experience for customers, but also driving the transformation for internal corporate messaging and the employee experience through Conversational AI. In 2021, we announced strategic integration partnerships with Google Cloud, Adobe and Medallia to help brands make contact center agents more efficient and effective, and empower and enrich the management of customer and employee experience through the power of AI. Our network also expanded with the Tech Mahindra partnership to help brands deliver personalized conversational experiences to consumers at scale.

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. In July 2021, we acquired German conversational AI company e-bot7, which we expect to propel our self-service capabilities and continued growth in Europe. In October 2021, we acquired VoiceBase, a leader in real-time speech recognition and conversational analytics; and Tenfold, an advanced customer engagement platform for integrating communication systems with leading CRM and support services. Once fully integrated, we expect these acquisitions to allow LivePerson to deliver our AI and automation capabilities, insights, and integration as a single integrated product offering across all channels including voice and messaging.

Products and Services

Business solutions offerings

LivePerson's hosted platforms harness human, AI and bot-powered messaging on mobile apps, mobile and desktop web browsers, SMS, social media and third-party consumer messaging platforms. Our business-to-business services are all managed from a single user interface. By supplying a complete, unified consumer view, our solutions enable businesses to deliver a relevant, timely, personalized, and seamless consumer experience for heads of digital and customer care, as well as e-commerce, marketing, and contact center executives. In addition to product offerings, LivePerson provides professional services and value-added business consulting to support complete deployment and optimization of our enterprise solutions. Revenue attributable to our monthly hosted Business services accounted for 78% of total revenue for the year ended December 31, 2021, 79% of total revenue for the year ended December 31, 2020, and 77% of total revenue for the year ended December 31, 2019. Our strategy is to increase the percentage of our total revenue attributable to Business services by leveraging the partner network for a portion of professional services work and the adoption of our self-service tools.

The Conversational Cloud. The Conversational Cloud, LivePerson's enterprise-class, cloud-based platform, enables businesses and consumers to connect through conversational interfaces, such as in-app and mobile messaging, while leveraging bots and AI to increase efficiency. The platform, which is marketed primarily to managers of digital and customer care, as well as e-commerce, marketing, and contact center executives, combines sophisticated mobile and online engagement technology with robust business intelligence and big data to produce compelling, measurable results by intelligently engaging consumers based on a real-time understanding of consumer needs. Rich, contextually aware targeting, actionable insights and personalized experiences, empower businesses to get the most out of their existing online, mobile and social platforms. Potential benefits of

the Conversational Cloud include increased agent efficiency, decreased customer care costs, improved customer experiences, higher conversion rates and increased customer lifetime value.

The Conversational Cloud was designed for conversational experiences, 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. The platform powers conversations across each of a brand's primary digital channels, including mobile apps, mobile and desktop web browsers, SMS, social media, and third-party consumer messaging platforms. Brands can also use the Conversational Cloud to message consumers when they dial a 1-800 number instead of forcing them to navigate IVRs and wait on hold. Similarly, the Conversational Cloud can ingest traditional emails and convert them into messaging conversations, or embed messaging conversations directly into web advertisements, rather than redirect consumers to static website landing pages. The platform seamlessly integrates LivePerson's Conversational AI engine as well as third-party bots, enabling brands to manage both AI-based agents and human agents from a single console.

Our robust, cloud-based suite of rich messaging, real-time chat, AI and automation offerings features consumer and agent facing bots, intelligent routing and capacity mapping, real-time intent detection and analysis, queue prioritization, customer sentiment, analytics and reporting, content delivery, PCI compliance, co-browsing, and a sophisticated proactive targeting engine. With the Conversational Cloud, agents can manage all conversations with consumers through a single console interface, regardless of which disparate messaging endpoints consumers originate from; i.e., WhatsApp, Line, Apple Business Chat, IVR, social, email, Amazon Alexa, or WeChat. An extensible 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 40 APIs and software development kits are available on the Conversational Cloud.

The Conversational Cloud enables the combination of real time on-site data and off-site behavioral data, with a broad set of historical and operational data. Proprietary analytics utilize this data to target end users with compelling engagement options at any step in the conversion funnel and throughout the customer lifecycle. The platform enables customers to maximize online revenue opportunities, improve conversion rates and reduce shopping cart abandonment by proactively engaging the right visitor, using the right channel, at the right time. Our solution identifies segments of website visitors who demonstrate the highest propensity to convert, and engages them in real-time with relevant content and offers, helping to generate incremental sales. The platform also reduces costs in the contact center relative to voice, by identifying consumers who may be struggling with their self-serve experience, and proactively connecting them to a live consumer care specialist via messaging, who can manage several conversations at once. This comprehensive solution blends a proven value-based methodology with an active rules-based engagement engine and deep domain expertise to increase first contact resolution, improve consumer satisfaction, and reduce attrition rates.

LivePerson's Conversational AI. LivePerson's Conversational AI, announced in December 2018, operates as the brains behind new LivePerson AI-based products, and was developed using our conversational data set of millions of brand-to-consumer interactions. LivePerson's Conversational AI was custom designed for the Conversational Space, putting 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 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 the Conversational Cloud, 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 the Conversational Cloud with our proprietary AI, 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. Some of the first products developed on LivePerson's Conversational AI engine include:

- *Conversation Builder*, which non-technical staff such as contact center agents use to design high-quality automated conversations. The conversations are not built from scratch. Conversation Builder creates the initial versions by mining a brand's existing conversation transcripts. Prebuilt industry templates are also available, providing the dialogue and integrations necessary for common use cases such as billing.
- *Conversation Manager*, a console that suggests automated responses and next best actions to contact center agents, who edit and select from them. Edits and selections dynamically improve the responses and next best actions. When the content reaches a brand-set accuracy threshold, it can be offered to consumers without human intervention. Conversation Manager also includes sentiment monitoring to alert contact center agents to conversations that require their attention. Designed for use in large contact centers, Conversation Manager sends these requests to agents who have the capacity and appropriate skills to respond. A major retail brand that adopted this approach in its sales operation increased agent productivity up to 220% within 12 weeks of launch.

- *Conversation Analytics*, dashboards and reporting which take the true voice of the customer - their direct discussions with a brand, spoken in their natural language - and turn it into actionable sales and service intelligence. A major wireless provider using early versions of Conversation Analytics reported the product identifies the root cause of service issues faster than monitoring software, enabling the provider to accelerate the fix and reduce inbound customer inquiries. A leading hospitality firm used Conversation Analytics to identify and add new, top-selling items to its menu selection.
- *Intent Manager*, a real-time intent recognition and classification engine that analyzes consumer intentions at every turn of the conversation. Intent Manager is powered by LivePerson's proprietary natural language understanding capabilities and machine learning algorithms, which are grounded in 20+ years of conversational data and more than one billion messaging transcripts across a variety of industries. Intent Manager is currently being used by top brands to gain real-time insights and take action to improve customer service, marketing, and sales automation
- *Performance Optimizer*, a measurement tool to help brands to measure and manage the health of their conversational operations in a single self-service dashboard. Performance Optimizer measures critical metrics for conversational experiences and uses AI to automatically assess performance, provide actionable insights, and deliver executive reporting.

Professional Services

The mission of our Professional Services team is to help customers optimize the performance of our products in order to drive incremental value through their mobile and online sales and/or service channel(s). This talented group utilizes their deep domain expertise and years of hands-on experience to provide customers with detailed analyses and measurements of their LivePerson deployment that drive strategies and decisions on how to optimize mobile and online messaging, real-time chat, and bot and AI integration. Deliverables of the team include scorecards that measure and chart performance trends, analyses and recommendations for conversational design, web design and process improvement, transcript reviews to discover both voice of the consumer insight and agent improvement opportunities, custom training of call center agents and management, and ongoing management of messaging programs to ensure alignment with current business practices and objectives. The team's value-added methodology and approach to guiding customers towards messaging channels and human/bot agent optimization is an important component of the LivePerson offering, and gives our customers a competitive advantage in the digital world. Revenue attributable to Professional Services accounted for 14%, 13%, and 14% of total revenue for the years ended December 31, 2021, 2020, and 2019, respectively.

e-Bot7

In the third quarter of 2021, we acquired German conversational AI company e-bot7. We expect the acquisition to propel LivePerson's self-service capabilities — empowering brands of all sizes to quickly launch AI-powered messaging experiences — as well as its continued growth in Europe. We believe that combining e-bot7's simple, easy-to-use technology with LivePerson's world-class NLU, global organization, and vast customer base will accelerate the speed at which brands can deploy and train AI-powered conversations.

Tenfold

In the fourth quarter of 2021, we acquired Tenfold, a customer experience integration platform that enables enterprises to modernize customer experience tools without having to replace legacy systems. Tenfold helps transform voice networks and contact center providers without impacting day-to-day operations. Its customers include brands such as Wayfair, TransAmerica, and Sixt. We intend to maintain Tenfold's business operations while integrating and leveraging Tenfold's technology platform with our proprietary messaging and Conversational AI offerings. With Tenfold, LivePerson messaging becomes available to agents anywhere — embedded in a CRM, on the agent's desktop, or in the brand's own integrated systems. Once fully integrated, as a voice platform-agnostic, blended system, we expect the offering also to provide enhanced flexibility for brands to work with any voice vendor and complement LivePerson messaging without impacting agent experience and productivity.

VoiceBase

In the fourth quarter of 2021, we acquired VoiceBase, a voice analytics platform for the enterprise, built on advanced speech recognition technology, that transforms voice and messaging conversations into easily interpreted data and actionable insights. It works with leading brands such as GrubHub, Twilio, Delta Dental, UserTesting, and Slice, and has out-of-the-box

integrations with leading telephony and contact-center systems including RingCentral, Genesys, NICE CXone, Avaya, Twilio, and now LivePerson. We intend to maintain VoiceBase's business operations while integrating and leveraging VoiceBase's technology with our proprietary messaging and Conversational AI offerings. Once fully integrated, we anticipate that VoiceBase's capabilities with LivePerson's Conversational AI will give brands enhanced visibility into customer intents, sentiments, frustrations, and successes from 100% of conversations across messaging and voice, as well as third-party voice, telephony, or contact center systems. These insights make it easier to improve customer experience, uncover sales opportunities and increase revenue, and understand agent productivity and utilization.

Consumer services offering

Our consumer services offering is an online marketplace that connects Experts who provide information and knowledge for a fee via mobile and online messaging with 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. Revenue from our Consumer segment accounted for approximately 8% of total revenue for each of the years ended December 31, 2021, 2020, and 2019, respectively.

Customers

More than 18,000 customers have deployed our business solutions, including Fortune 500 companies, dedicated Internet businesses, a broad range of online merchants, as well as numerous SMBs, automotive dealers, universities, libraries, government agencies and not-for-profit organizations. 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, healthcare, and automotive, within the U.S. and Canada, Latin America, Europe, and the Asia-Pacific region.

No single customer accounted for or exceeded 10% of our total revenue in 2021, 2020, or 2019.

Sales and Marketing

Sales. We sell our business products and services by leveraging a common methodology through both direct and indirect sales channels.

Our sales process focuses on the perspective that the Conversational Space requires an operational transformation that changes how brands engage with consumers across service, sales, marketing, social 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 correctly, the entire consumer lifecycle with a brand will be maintained within the Conversational Space, and traffic will steadily shift away from lower returning voice calls, websites, emails and apps to higher returning messaging endpoints.

Our mobile and online messaging solutions are targeted at business executives whose primary responsibility is optimization of customer care, sales and marketing, or optimizing a consumer's journey across the brand's digital properties. Our solutions enable organizations to provide effective customer service, sales and marketing by deflecting costly phone calls and emails to the more cost efficient mobile and online messaging channel. We focus on the value that our solutions deliver in the form of increased agent efficiency, reduced contact center costs, increased customer satisfaction, improved customer lifetime value, maximized digital consumer acquisition, and optimized website and mobile business outcomes. LivePerson supports any organization with a company-wide strategic initiative to improve the overall mobile and online consumer experience.

Within the business solutions segment we have aligned our field organization to address the different sales strategies of our target markets:

Enterprise and large mid-market. We target large mid-market and enterprise businesses with a combination of direct sales and customer success teams, and partners. Across the globe, we are targeting a select group of brands, many of them already customers, that hold the power to transform customer care. These enterprises have thousands of agents in their contact centers and collectively connect with billions of consumers each year. We leverage thought leadership and related events to showcase our strength in messaging and AI, and highlight existing reference customers who share their successes on our platform and

how they achieved positive ROIs. Increasingly, we are working with large third-party system integrators, technology providers and business process outsourcers to supplement our direct sales effort.

For our large and more complex customers, our sales methodology often begins with research and discovery meetings that enable us to develop a deep understanding of the value drivers and key performance metrics of a prospective customer. We then present an analytical review detailing how our solutions and industry expertise can affect these value drivers and metrics. Once we validate solution capabilities and prove financial return on investment, we transition to a program management model wherein we work hand-in-hand with the customer, providing detailed analysis, measurements and recommendations that help optimize their performance and ensure ongoing program success.

In 2018, we introduced a pilot accelerator program, where we offer customers the option to test our entire platform, across all messaging endpoints and customer use cases, at an entry level price point for a period of three to nine months. This pilot program is intended to accelerate sales cycles and enable customers to rapidly assess the potential ROI and differentiation of our solutions before committing to a more substantial and extended deployment.

Small business and small mid-market. We target small business and small mid-market customers with a mix of direct, online self-service, and third-party partner channels. Our customer acquisition strategy centers on leveraging customer word-of-mouth, our leading brand name, online marketing and partnerships. We also leverage marketing programs and partner resources to promote increased usage and product adoption within these customers.

Indirect Sales. Resources within our organization are focused on developing partnerships to generate revenues via referral partnerships and indirect sales through channel partners. By maximizing market coverage via partners who provide lead referrals and complementary products and services, we believe this channel supports revenue opportunities without incurring the costs associated with traditional direct sales.

Customer Support. Our Professional Services group provides deployment support and ongoing business consulting to enterprise and mid-market customers and maintains involvement throughout the engagement lifecycle. All LivePerson customers have access to 24/7 help desk services through messaging, chat, and technical support ticketing.

Marketing. Our marketing efforts in support of our business operations are organized around the needs, trends and characteristics of our existing and prospective customer base. Our deep relationship with existing customers fosters continuous feedback and critical data analysis, thereby allowing us to develop and refine marketing programs that drive adoption across multiple customer segments. We have a global team, spread across key geographies that is focused on marketing our brand, products and services to executives responsible for the digital channel, the consumer experience, marketing, sales, IT, and consumer service operations of their organization.

Our main focus is on the consumer/retail, telecommunications, financial services, travel/hospitality, technology, healthcare, and automotive industries. Our integrated marketing strategy is focused on driving demand, building customer and consumer advocacy, driving adoption of our platform, and supporting key areas of business, especially large enterprise, but also including mid-sized and small business partners and international entities. We aim to achieve this by delivering high-touch, small group events for senior executives, to educate them on messaging and the transformational ways that digital communication can help their business. We also market our software via high-level thought leadership campaigns, industry event participation, personalized lead generation campaigns to reach potential and existing customers using mediums such as paid and organic search, direct email and mail, industry- and category-specific trade shows and events, and telemarketing.

Our marketing strategy also encompasses a strategic communications approach that integrates public relations, social media, and analyst/influencer relations. We are focused on using those channels to communicate our brand value, to those key stakeholders, to increase overall brand and technology awareness. Communications seek to highlight key customer success stories, and promote executive thought leadership via contributed content, speaking opportunities and press interviews, to raise LivePerson's profile and reinforce our position as an industry leader.

Competition

The markets for mobile and online business messaging, and digital engagement technology are intensely competitive, rapidly changing and characterized by aggressive marketing, pricing pressure, evolving industry standards, rapid technology developments, and frequent new product introductions. We believe that competition will continue to increase as our current competitors increase the sophistication of their offerings and as new participants enter the market, which may cause additional

pricing pressure. If we are unable to accurately anticipate technology developments and continue to innovate in the markets in which we compete, or our competitors are more successful than us at developing compelling new products and services or at attracting and retaining customers, we may lose revenue and market share and our operating results could be adversely affected.

We believe that most contact center technology vendors incorrectly view messaging 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 messaging and AI are the foundation for conversational experiences, which transform how agents operate and 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.

We believe that our differentiated approach to the Conversational Space, combined with our unique technology and expertise, has established the Company as a market leader, with an ability to deliver superior returns on investment:

- The Conversational Cloud, LivePerson's 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 the Conversational Space, intent recognition, robust real-time reporting, role-based real-time analytics, predictive intelligence, and innovations in customer satisfaction and connection measurement. Additionally, the Conversational Cloud is an open platform with pre-built, enterprise-grade integrations into back-end systems as well as the ability to work across NLU providers.
- The platform has expanded to power conversations across a broad spectrum of channels and use cases, from traditional sales and customer service, to marketing, social, email, advertising and brick and mortar.
- The Company believes it has a data moat built on hundreds of millions of conversations across industries, geographies and use cases that is feeding the machine learning engines that power intent understanding.
- 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 the Conversational Space. 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 this focus on technological innovation, expertise and enterprise-class capabilities is positioning LivePerson as a leader in the Conversational Space.

We have current and potential competition from providers of messaging and digital engagement solutions that enable companies to engage and connect with their consumer customers, as well as technology providers that offer customer relationship management and contact center solutions. We have current and potential competitors in many different industries, including:

- technology or service providers offering or powering competing digital engagement, contact center, communications, or customer relationship management solutions such as, eGain, Genesys, Nuance, Oracle, Salesforce.com, and Twilio;
- service providers that offer basic messaging products or services with limited functionality free of charge or at significantly reduced entry level prices;
- social media, social listening, messaging, artificial intelligence, bots, e-commerce, and/or data and data analytics companies, such as Facebook, Google, and WeChat, which may leverage their existing or future capabilities and consumer relationships to offer competing business-to-business solutions; and
- customers that develop and manage their messaging solutions in-house.

In addition, many of our current and potential competitors have substantial competitive advantages, such as greater brand recognition, significantly larger financial, marketing, and resource and development budgets, access to larger customer and/or consumer bases, larger and more established marketing and distribution relationships, and/or more diverse product and service offerings. As a result, these competitors may be able to respond more quickly and effectively than we can to any change in the general market acceptance of messaging services or any new or changing opportunities, technologies, standards, pricing

strategies or customer requirements. Also, because of these advantages, potential customers may select a competitor's products and services, even if our services are more effective. For all of these reasons, we may not be able to compete successfully against our current and future competitors.

Technology

Four key technological features distinguish the LivePerson services:

- We support our customers through a secure, scalable server infrastructure. In September 2020, we signed a partnership with a digital services and consulting company to transform our technology infrastructure on the public cloud and to build integrated solutions. Currently, in North America, our primary servers are hosted in a fully-secured, top-tier, third-party server center located in the Mid-Atlantic United States, and are supported by a top-tier backup server facility located in the Western United States. In Europe, our primary servers are hosted in a fully-secured, top-tier, third-party server center located in the United Kingdom and are supported by a top-tier backup server facility located in The Netherlands. In the Asia Pacific region, our primary and backup servers are hosted in fully-secured, top-tier, third-party server centers located in Australia. Nearly all of our larger customers outside of the United States are hosted within our U.K.- and Australia-based facilities. By managing our servers directly, we maintain greater flexibility and control over the production environment allowing us to be responsive to customer needs and to continue to provide a superior level of service. Utilizing advanced network infrastructure and protocols, our network, hardware and software are designed to accommodate our customers' demand for secure, high-quality 24/7 service, including during peak times such as the holiday shopping season.
- As a hosted service, we are able to add additional capacity and new features quickly and efficiently. This has enabled us to provide these benefits simultaneously to our entire customer base. In addition, it allows us to maintain a relatively short development and implementation cycle.
- As a SaaS provider, we focus on the development of tightly integrated software design and network architecture. We dedicate significant resources to designing our software and network architecture based on the fundamental principles of security, reliability and scalability.
- LivePerson's powerful Conversational AI is powered by over 20 years of proprietary, verbatim conversation data that the company has accumulated helping thousands of clients, including the world's largest brands, message with consumers at scale. The strength of the company's Conversational AI can also be attributed to the company's laser focus on brand-consumer conversations. Unlike other AIs, which are applied to wide-ranging and unrelated use cases, LivePerson's AI has been built specifically to power conversations between brands and consumers, giving it the edge in understanding consumer intents and the resolutions that best satisfy them.

Software Design. Our software design is based on client-server architecture. Since we are a SaaS provider, Conversational Cloud customers and visitors to our customers' websites require only a standard Web browser and do not need to download software from LivePerson in order to interact with our customers' operators or to use the LivePerson services. We also provide APIs that enable our customers and third-parties to integrate the Conversational Cloud with custom designed applications.

Network Architecture. The software underlying our services is integrated with scalable and reliable network architecture. Our network is scalable; we do not need to add new hardware or network capacity for each new LivePerson customer. This network architecture is hosted in co-location facilities with redundant network connections, servers and other infrastructure, enabling superior availability. Our backup server infrastructure housed at separate locations provides our primary hosting facilities with effective disaster recovery capability. We comply with security standards such as SOC2 and PCI. For increased security, through a multi-layered approach, we use advanced firewall architecture and industry-leading encryption standards and employ third-party experts to further validate our systems' security. We also enable our customers to further encrypt their sensitive data using more advanced encryption algorithms.

Government Regulation

We and our customers are subject to a number of laws and regulations in the United States and abroad, including laws related to conducting business on the Internet and on mobile devices, such as laws regarding data privacy, data protection, information security, cybersecurity, restrictions, or technological requirements regarding the collection, use, storage, protection, disposal transfer, or other processing of consumer data, content, consumer protection, internet (or net) neutrality, advertising,

electronic contracts, taxation, provision of online payment services (including credit card processing), and intellectual property rights, which are continuously evolving and developing.

U.S. and international privacy laws and regulations are evolving and changing, are subject to differing interpretations, may be costly to comply with, and may be inconsistent among countries and jurisdictions or conflict with other rules. As we expand our operations in these countries, our liability exposure and the complexity and cost of compliance with data and privacy requirements will likely increase. Any failure by us to comply with our posted privacy policies, applicable federal, state or international laws and regulations relating to data privacy and data protection, or the privacy commitments contained in our contracts, could result in proceedings against us by governmental entities, customers, consumers, watchdog groups or others, which could have a material adverse effect on our business, financial condition and results of operations. In addition, the increased attention focused upon liability as a result of lawsuits, investigations, and legislative proposals and enactments could harm our reputation or otherwise impact the growth of our business.

Intellectual Property and Proprietary Rights

We rely on a combination of patent, copyright, trade secret, trademark and other common law protections in the United States and other jurisdictions, as well as confidentiality requirements and contractual provisions, to protect our proprietary technology, processes and other intellectual property. We own a portfolio of patents and patent applications in the United States and internationally and regularly file patent applications to protect intellectual property that we believe is important to our business, including intellectual property related to digital engagement technology and web and mobile based consumer-facing services. We believe the duration of our patents is adequate relative to the expected lives of our products and services. We pursue the registration of our domain names, trademarks and trade names in the United States and in certain locations outside the United States. We also own copyrights, including in our software, publications and other documents authored by us. These intellectual property rights are important to our business and marketing efforts. We seek to protect our intellectual property rights by relying on federal, state, and common law rights, including registration, or otherwise in the United States and certain foreign jurisdictions, as well as contractual restrictions. However, we believe that factors such as the technological and creative skills of our personnel, new service developments, frequent enhancements and reliable maintenance are more essential to establishing and maintaining a competitive advantage. Others may develop technologies that are similar or superior to our technology. We enter into confidentiality and other written agreements (including invention assignment agreements) with our employees, consultants, customers, potential customers, strategic partners, and other third parties, and through these and other written agreements, we attempt to control access to and distribution of our software, documentation and other proprietary information. Despite our efforts to protect our proprietary rights, third parties may, in an unauthorized manner, attempt to use, copy or otherwise obtain and market or distribute our intellectual property rights or technology or otherwise develop a service with the same functionality as our services. Policing unauthorized use of our services and intellectual property rights is difficult, and we cannot be certain that the steps we have taken will prevent misappropriation of our technology or intellectual property rights, particularly in foreign countries where we do business, where our services are sold or used, where the laws may not protect proprietary rights as fully as do the laws of the United States or where enforcement of laws protecting proprietary rights is not common or effective.

Substantial litigation regarding intellectual property rights exists in the software industry. In the ordinary course of our business, our services and/or our customers' use of our services have been and may be increasingly subject to third-party infringement claims as claims by non-practicing entities become more prevalent and as the number of competitors in our industry segment grows and the functionality of services in different industry segments overlaps. Some of our competitors in the market for digital engagement technology and/or web and mobile based consumer-facing services or other third parties may have filed or may intend to file patent applications covering aspects of their technology and have asserted or may assert claims against us. Any claims alleging infringement of third-party intellectual property rights could require us to spend significant amounts in litigation (even if the claim is invalid), distract management from other tasks of operating our business, pay substantial damage awards, prevent us from selling our products, delay delivery of our services, develop non-infringing software, technology, business processes, systems or other intellectual property (none of which might be successful), or limit our ability to use the intellectual property that is the subject of any of these claims, unless we enter into license agreements with the third parties (which may be costly, unavailable on commercially reasonable terms, or not available at all). Therefore, any such claims could have a material adverse effect on our business, results of operations, cash flows and financial condition.

The duration of the protection afforded to our intellectual property depends on the type of property in question, the laws and regulations of the relevant jurisdiction and the terms of its license agreements with others. With respect to our trademarks and trade names, trademark laws and rights are generally territorial in scope and limited to those countries where a mark has been registered or protected. While trademark registrations may generally be maintained in effect for as long as the mark is in

use in the respective jurisdictions, there may be occasions where a mark or title is not registrable or protectable or cannot be used in a particular country. In addition, a trademark registration may be canceled or invalidated if challenged by others based on certain use requirements or other limited grounds. The duration of property rights in trademarks, service marks and trade names in the United States, whether registered or not, is predicated on our continued use.

Human Capital Management

As a leading provider of conversational solutions, we are at the forefront of a consumer-led shift to Conversational AI, and our Conversational Cloud is setting the industry standard for this future. As a result of these efforts, LivePerson was named to *Fast Company's* annual list of the World's Ten Most Innovative Artificial Intelligence Companies of 2020. Our employees understand that they are critical to our mission of making life easier for people and brands everywhere through trusted Conversational AI. We intend to continue to invest in the diversity, inclusiveness, health and happiness of our employees in order to foster creativity, productivity and growth.

As of December 31, 2021, we had 1,540 full-time employees worldwide, located in more than 12 countries. Of these, 876 were located in the Americas, 548 in EMEA, and 116 in APAC. Although we have statutory employee representation obligations in certain countries, our U.S. employees are not covered by collective bargaining arrangements. We believe we have good relations with our employees. For 2021, our key human capital management efforts focused on the following:

Talent Acquisition and Development. We place a high priority on attracting, recruiting, developing and retaining diverse global talent. As a company, we are focused on benefits and programs that support our employees across the entire employee lifecycle, from recruitment and onboarding, to well-being, learning and development. Our recruiting processes are designed to ensure that we bring on employees who are aligned to our values and culture, and we follow a comprehensive process in order to solicit multiple perspectives and eliminate bias. In 2020, we scaled and expanded an internal program to train employees to become objective "hiring experts" and to reduce unconscious bias in the hiring process. We also launched a new virtual onboarding and orientation program for new hires globally, which includes a multi-day immersion into our principles and team building exercises.

In 2020, we also launched a four week seminar style cohort program to ensure LivePerson employees understand the foundation of AI and how AI is transforming industries and society. The program also features monthly external AI speakers and a monthly podcast series showcasing internal product leaders and AI specialists. Approximately 25% of employees earned certificates of completion during 2020, and we expanded the program during 2021 due to continuing employee demand.

Diversity, Equity and Inclusion. DEI is core to our global strategy. We believe that diverse and inclusive teams foster innovation, creativity and productivity. We have invested resources in this area for some time, and intend to continue to enhance and improve our efforts. In 2021, we hired a dedicated leader to focus on our global diversity recruiting practices. We also began working with two diversity recruiting platforms, intentionally diversified our interview panels, and recalibrated our job description templates to focus more heavily on inclusivity. We also invested in a series of recruiting events in the U.S. and EMEA to help us connect underrepresented talent to open positions.

We are committed to fostering a diverse and inclusive workplace that celebrates different perspectives, cultures, and experiences. We regularly measure the representation of women and minority groups in the company, including in leadership and technical positions, and will continue our ongoing efforts to increase hiring of employees from these groups. We are committed to equal pay for equal work. As part of that commitment, we run a pay equity analysis when we conduct our annual compensation assessments and when we grant equity.

During 2020, we launched an employee-led diversity council empowered to drive global programs focused on DEI as well as to support independent employee resource groups and help ensure the diversity of teams and projects within our company. We have launched several employee-led DEI programs under this umbrella in 2020, including a Women in Technology, Live in Color program and in 2021, we added a LGBTQ+ employee resource group.

Employee Wellness and COVID-19 Response. We remain focused on programs that promote the total wellness of our employees, including resources and services to support physical, mental and financial wellness. We offer industry-leading benefits packages based on the diverse needs of our employees and their families, including comprehensive healthcare, accident insurance, a 401(k) plan, an employee stock purchase program, and time off programs. We work hard to ensure that our

employees are aware of and take advantage of these opportunities, and we review our programs annually to ensure they remain competitive.

This was particularly important during the COVID-19 pandemic, where we proactively prioritized the safety and health of our employees. Before local health experts suggested shelter in place initiatives, we began to limit business travel and encourage all employees to work remotely. We went on to adopt a company policy for all employees to work from home and closed virtually all of our offices (including our corporate headquarters). Since transitioning to a remote work environment, we established multiple employee-led committees to design future of work programs and launched two surveys to gather employee feedback. Based on survey results from over 75% of our global workforce, we identified key themes and opportunities for enhancement, and we have already implemented several employee recommendations.

We also provided opportunities for virtual peer connection, virtual learning, and enhanced emotional well-being benefits and programs, along with flexible work arrangements to ensure our employees have the resources they need to care for themselves and their families. We plan to continue to offer time away, wellness and caregiving leave and financial support and reimbursement for work from home equipment to foster a healthy and happy workforce and community with support for productive remote workspaces.

Website Access to Reports

We make available, free of charge, on our website (www.liveperson.com), our annual reports on Form 10-K, our quarterly reports on Form 10-Q, and our current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Sections 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we have electronically filed such material with, or furnished it to, the SEC. *The Company's web site address provided above is not intended to function as a hyperlink, and the information on the Company's web site is not and should not be considered part of this Annual Report on Form 10-K and is not incorporated by reference herein.* The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at www.sec.gov.

Item 1A. Risk Factors

The following are certain of the important risk factors that could cause, or contribute to causing, our actual operating results to differ materially from those indicated, expected, or suggested by forward-looking statements made in this Annual Report on Form 10-K or presented elsewhere by management from time to time. The risks described below are not the only ones we face. Additional risks not presently known to us, or that we currently deem to be immaterial, could also materially and adversely affect our business, results of operations, financial condition, cash flows, prospects, and/or the price of our outstanding securities.

Summary of Risk Factors

The following is a summary of the principal risks and uncertainties that could materially adversely affect our business, results of operations, financial condition, cash flows, prospects, and/or the price of our outstanding securities, and make an investment in our securities speculative or risky. You should read this summary together with the more detailed description of each risk factor contained below.

Risks Related to Operating our Business

- Our business depends significantly on our ability to retain our key personnel, attract new personnel, and manage attrition.
- Supporting our existing and growing customer base could strain our personnel resources and infrastructure, and if we are unable to scale our operations and increase productivity, we may not be able to successfully implement our business plan.
- The success of our business depends on retention of existing customers and their purchase of additional services, and attracting new customers and new consumer users of our consumer services.
- Our expansion into new products, services, and technologies could subject us to additional risks.
- Major public health issues, and specifically the pandemic caused by the spread of COVID-19, could have a material adverse impact on our business, results of operations, financial condition, cash flows, prospects, and/or the price of our outstanding securities.

- If we do not successfully integrate past or potential future acquisitions, we may not realize the expected business or financial benefits and our business could be adversely impacted.
- Capital needs necessary to execute our business strategy could increase substantially and we may not be able to secure additional financing to execute this strategy.
- Our sales cycles can be lengthy, and the timing of sales can be difficult to predict, which may cause our operating results to vary significantly.
- Delays in our implementation cycles could have an adverse effect on our results of operations.

Risks Related to our Financial Condition and Operating Results

- Our quarterly revenue and operating results may fluctuate significantly, which may cause a substantial decline in the trading price of our securities.
- In the past we have experienced losses, we had an accumulated deficit of \$516.9 million as of December 31, 2021 and we may incur losses in the future.
- The non-payment or late payment of amounts due to us from a significant number of customers may negatively impact our financial condition or make it difficult to forecast our revenues accurately.
- Because we recognize revenue from subscriptions for our service over the term of the subscription, declines in business may not be immediately reflected in our operating results.

Risks Related to Industry Dynamics and Competition

- If we are unable to develop and maintain successful relationships with partners, service partners, social media, and other third-party consumer messaging platforms and endpoints, our business, results of operations, and financial condition could be adversely affected.
- If we are unable to effectively operate on mobile devices, our business could be adversely affected.
- The markets in which we participate are highly competitive, and we may lose customers and revenue if we are not able to innovate or effectively compete.
- Downturns in the global economic environment or in particular industries in which our sales are concentrated may adversely affect our business and results of operations.

Risks Related to Security Vulnerabilities and Service Reliability

- Failures or security breaches in our services or systems, those of our third party service providers, or in the websites of our customers, including those resulting from cyber-attacks, security vulnerabilities, defects, or errors, could harm our business.
- We may be liable if third parties access or misappropriate confidential or personal data from our systems or services.
- We provide service level commitments to certain customers. If we do not meet these contractual commitments, we could be obligated to provide credits or refunds or face contract terminations, which could adversely affect our revenue and harm our reputation.
- Failure to license necessary third party software for use in our products and services, or failure to successfully integrate third party software, could cause delays or reductions in our sales, or errors or failures of our service.

Risks Related to Regulatory and Data Privacy Issues

- Our business is subject to a variety of U.S. and international laws and regulations regarding privacy and data protection, and increased public scrutiny of privacy and security issues could result in increased government regulation, industry standards, and other legal obligations that could adversely affect our business.
- We may be subject to governmental export controls and economic sanctions regulations that could impair our ability to compete in international markets due to licensing requirements and could subject us to liability if we are not in compliance with applicable laws.
- Industry-specific regulation is evolving and unfavorable industry-specific laws, regulations, or interpretive positions could harm our business.
- Future regulation of the Internet or mobile devices may slow our growth, resulting in decreased demand for our services and increased costs of doing business.

Risks Related to our Intellectual Property

- Our products and services may infringe upon intellectual property rights of third parties and any infringement could require us to incur substantial costs and may distract our management.

- Our business and prospects would suffer if we are unable to protect and enforce our intellectual property rights.
- Issues in the use of AI in our product offerings may result in reputational harm or liability.

Risks Related to our International Operations and Tax Issues

- Our results of operations may be adversely impacted due to our exposure to foreign currency exchange rate fluctuations.
- We may be unsuccessful in expanding our operations internationally and/or into direct-to-consumer services due to additional regulatory requirements, tax liabilities, currency exchange rate fluctuations, and other risks, which could adversely affect our results of operations.
- Our operations may expose us to greater than anticipated income, non-income, and transactional tax liabilities, which could harm our financial condition and results of operations.
- Our ability to use our net operating losses to offset future taxable income may be subject to certain limitations.
- Political, economic, and military conditions in Israel could negatively impact our Israeli operations.

Risks Related to our Outstanding Convertible Notes

- Servicing our debt may require a significant amount of cash, and we may not have sufficient cash flow from our business to pay our indebtedness.
- 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.
- Provisions in the indentures for the Notes may deter or prevent a business combination that may be favorable to you.
- The conditional conversion feature of the Notes, if triggered, may adversely affect our financial condition and operating results.
- 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.
- The capped call transactions may affect the value of the Notes and our common stock.

Risks Related to our Common Stock

- Our stock price has been, and may continue to be, highly volatile, which could reduce the value of your investment and subject us to litigation.
- Our common stock is traded on more than one market and this may result in price variations.
- If our officers, directors and largest stockholders choose to act together, they may be able to significantly influence our management and operations, acting in their own best interest and not necessarily those of our other stockholders.
- Future sales of substantial amounts of our common stock may negatively affect our stock price.
- Provisions in our charter documents and Delaware law could discourage, delay or prevent a takeover that stockholders may consider favorable.

Risks Related to Operating our Business

Our business depends significantly on our ability to retain our key personnel, attract new personnel, and manage attrition.

Our success depends largely on the continued services of our senior management team. The loss of one or more members of senior management could have a material adverse effect on our business, results of operations, and financial condition. We are also substantially dependent on the continued service of other key personnel, including key sales executives responsible for revenue generation and key development personnel accountable for product and service innovation and timely development and delivery of upgrades and enhancements to our existing products and services. Changes to senior management and key employees could also lead to additional unplanned losses of key employees. The loss of key employees could seriously harm our ability to release new products and services and upgrade existing products and services on a timely basis, and put us at a competitive disadvantage.

In the technology industry, there is substantial competition for key personnel, including skilled engineers, sales executives and operations personnel. We may not be able to successfully recruit, integrate and retain qualified personnel in the future, which could impact our ability to innovate and deliver new or updated products to our customers, which could harm our

business. Among other things, our decision to close virtually all of our offices following the onset of the COVID-19 pandemic may make it harder for us to recruit and retain our personnel. If our retention and recruitment efforts are ineffective, employee turnover could increase and our ability to provide services to our customers would be materially and adversely affected. Furthermore, the requirement to expense stock options may discourage us from granting the size or type of stock option awards that job candidates may require in order to join our company.

In addition, we may not be able to outsource certain functions. We expect to evaluate our needs and the performance of our staff on a periodic basis, and may choose to make adjustments in the future. If the size of our staff is significantly reduced, either by our choice or otherwise, it may become more difficult for us to manage existing, or establish new, relationships with customers and other counter-parties, or to expand and improve our service offerings. It may also become more difficult for us to implement changes to our business plan or to respond promptly to opportunities in the marketplace. Further, it may become more difficult for us to devote personnel resources necessary to maintain or improve existing systems, including our financial and managerial controls, billing systems, reporting systems and procedures. Thus, any significant amount of staff attrition could cause our business and financial results to suffer.

Supporting our existing and growing customer base could strain our personnel resources and infrastructure, and if we are unable to scale our operations and increase productivity, we may not be able to successfully implement our business plan.

We continue to experience significant growth in our customer base and personnel, which has placed a strain on our management, administrative, operational and financial infrastructure. We anticipate that additional investments in our internal infrastructure, data center capacity, research, customer support and development, and real estate spending will be required to scale our operations and increase productivity, to address the needs of our customers, to further develop and enhance our services, to expand into new geographic areas, and to scale with our overall growth. We may also need to make additional investments with third party outsourcing providers, such our announced plans to work with a digital services and consulting company to move our technology infrastructure to the public cloud. The additional investments we are making will increase our cost base, which will make it more difficult for us to offset any future revenue shortfalls by reducing expenses in the short term, and there is no guarantee that they will be successful or meet our customers' needs.

We regularly upgrade or replace our various software systems. If the implementations of these new applications are delayed, or if we encounter unforeseen problems with our new systems or in migrating away from our existing applications and systems, our operations and our ability to manage our business could be negatively impacted.

Our success will depend in part upon the ability of our senior management to manage our projected growth effectively. To do so, we must continue to increase the productivity of our existing employees and to hire, train and manage new employees as needed. To manage the expected domestic and international growth of our operations and personnel, we will need to continue to improve our operational, financial and management controls, our reporting systems and procedures, and our utilization of real estate. If we fail to successfully scale our operations and increase productivity, we may be unable to execute our business plan and the market price of our securities could decline.

The success of our business depends on retention of existing customers and their purchase of additional services, and attracting new customers and new consumer users of our consumer services.

Our customers typically subscribe for our services for a twelve month term and may have no obligation to renew their subscription after expiration of the twelve month term. In some cases, our agreements are terminable or may terminate upon 30 to 90 days' notice without penalty. If a significant number of our customers, or any one customer to whom we provide a significant amount of services, were to terminate services, reduce the amount of services purchased, or fail to purchase additional services, our results of operations may be negatively and materially affected. Dissatisfaction with the nature or quality of our services could also lead customers to terminate our service.

We depend on monthly fees and interaction-based fees from our services for substantially all of our revenue. As part of our strategy, we are increasingly offering customers subscriptions with interaction-based fees. While this interaction-based fee model has demonstrated success in our business to date, it could potentially produce greater variability in our revenue as revenue in this model is impacted by the number of interactions that our customers generate through use of our products. Because of the historically small amount of services sold in initial orders, we depend significantly on the growth of our customer base and sales to new customers and sales of additional services to our existing customers. The success of our

consumer offerings similarly depends on our ability to attract and retain new customers. Our revenue could decline unless we are able to obtain additional customers or alternate revenue sources.

Our Gainshare program offers contingent pricing and if we are unsuccessful at achieving customer objectives, the program could result in operating losses.

The Company has developed Gainshare, a fully managed solution where LivePerson provides messaging and AI automation technology as well as the labor, automation, and end-to-end program management. Gainshare pricing is contingent on the degree to which a customer achieves its financial objectives, such as increased revenue or reduced operating costs. If we are unsuccessful in achieving these objectives for our customers (including as a result of broader market events, such as normalization of pandemic-specific shopping trends and returns to physical, in-store shopping experiences), it will reduce the revenue that we recognize from Gainshare and could result in our operating the program at a financial loss, which could have a materially adverse impact on our financial results.

Our expansion into new products, services, and technologies could subject us to additional risks.

We have invested and expect to continue to expand in new products, services, and technologies. We may have limited or no experience in new market segments that we enter or new services that we decide to offer, and customers may not choose to buy or use our service offerings. These offerings, which can present new and difficult technology challenges, may subject us to claims if customers of these offerings experience service disruptions or failures or other quality issues. Our newer activities may involve significant risks and uncertainties, including diversion of resources and management attention from current operations, as well as, in certain circumstances, the use of alternative investment, governance, or revenue strategies that may fail to adequately align incentives across our business or otherwise accomplish our objectives. In addition, new and evolving products, services, and technologies, including those that use AI, machine learning, and blockchain, can raise ethical, technological, legal, regulatory, and other challenges, which may negatively affect our business and demand for our products and services. In addition, profitability, if any, in our newer activities may not meet our expectations, and we may not be successful enough in these newer activities to recoup our investments in them. Failure to realize the benefits of amounts we invest in new technologies, products, or services could result in the value of those investments being written down or written off.

Major public health issues, and specifically the pandemic caused by the spread of COVID-19, could have a material adverse impact on our business, results of operations, financial condition, cash flows, prospects, and/or the price of our outstanding securities.

Our results of operations could in the future be materially adversely impacted by the COVID-19 pandemic. We closely monitor developments related to the COVID-19 pandemic to assess its impact on our business. While still evolving, the COVID-19 pandemic (including the emergence and spread of more transmissible variants) has created significant economic disruption, and financial volatility and uncertainty both in the U.S. and around the world. Although vaccines believed to be highly effective at preventing hospitalization from COVID-19 continue to be produced and distributed, it is not possible to predict the longer term-effects that the COVID-19 pandemic could have on our business, including after the COVID-19 pandemic has subsided. The extent to which the COVID-19 pandemic impacts our business, results of operations, financial condition, cash flows or prospects will depend on future developments, which are highly uncertain and that we may not be able to accurately predict, including the duration and severity of the pandemic; governmental, business and individual actions that have been and continue to be taken in response to the pandemic; the rate of vaccine adoption, the effectiveness of global vaccine distribution efforts and vaccine efficacy; the impact of the pandemic on economic activity and actions taken in response; the effect on our clients and client demand for our services and solutions, including the potential lengthening of the sales cycle; our ability to sell and provide our services and solutions, including through global customer summits (which were held virtually in 2020 and 2021); the ability of our clients to pay for our services and solutions; travel restrictions and working from home; and any closures of our and our clients' offices and facilities. Clients may also slow down decision making, delay planned work, seek to terminate existing agreements and/or delay payment terms.

While we have implemented risk management and contingency plans and taken preventive measures and other precautions, the ultimate impact of the COVID-19 pandemic on our business is uncertain. In 2020, due to health concerns related to the COVID-19 pandemic, we vacated our physical offices around the world, and transitioned to a work-from-anywhere model. While we have been able to operate effectively from remote locations, the long-term impact of such work arrangements remains unknown. For example, such remote work arrangements may increase the risk of cyber incidents or data

breaches and may present workplace culture challenges. Furthermore, we have incurred expenses associated with the early termination of various leases at our office locations around the world.

We also outsource certain critical business activities to third parties and plan to continue to increasingly do so. As a result, we rely upon the successful implementation and execution of the business continuity and repopulation planning of such entities in the current environment. While we closely monitor the business continuity activities of these third parties, successful implementation and execution of their business continuity and repopulation strategies are largely outside our control. If one or more of the third parties to whom we outsource certain critical business activities experience operational failures as a result of the impacts from the spread of COVID-19, or claim that they cannot perform due to a force majeure, it may have a material adverse effect on our business, financial condition, results of operations, liquidity and cash flows.

While governmental and non-governmental organizations are engaging in efforts to combat the spread and severity of the COVID-19 pandemic and related public health issues, these measures may not be effective. We also cannot predict how legal and regulatory responses to concerns about the COVID-19 pandemic and related public health issues will impact our business. Such events or conditions could result in additional regulation or restrictions affecting the conduct of our business in the future.

Any of these events or other currently unforeseen consequences of the coronavirus pandemic, or of other pandemics, epidemics or similar widespread public health concerns, could cause or contribute to the risks and uncertainties enumerated in this Annual Report on Form 10-K, and could materially adversely affect our business, results of operations, financial condition, cash flows, prospects and/or the price of our outstanding securities.

If we do not successfully integrate past or potential future acquisitions, we may not realize the expected business or financial benefits and our business could be adversely impacted.

As part of our business strategy, we have made and will continue to make acquisitions to add complementary businesses, products, technologies, revenue and intellectual property rights. In October 2018, we acquired AdvantageTec, Inc., a leading provider of texting solutions for service departments of automotive dealerships that helps enable the conversational experience across the entire dealership, including variable and fixed operations. In September 2018, we acquired the employees and technology assets of Conversable, Inc. a SaaS based AI powered conversational platform. In January 2018, we acquired the employees and technology assets of BotCentral, Inc., a Silicon Valley based startup which has created a number of bot solutions for major brands in banking, insurance, and travel, running on LivePerson's conversational platform. In July 2021, we acquired German conversational AI company e-bot7. In October 2021, we acquired VoiceBase, Inc., a leader in real-time speech recognition and conversational analytics; and Callinize Inc., dba Tenfold, an advanced customer engagement platform for integrating communication systems with leading CRM and support services.

Acquisitions and investments involve numerous risks to us, including:

- potential failure to achieve the expected benefits of the combination or acquisition;
- inability to generate sufficient revenue to offset acquisition or investment cost;
- difficulties in integrating operations, technologies, products, and personnel;
- diversion of financial and management resources from efforts related to existing operations;
- risks of entering new markets in which we have little or no experience or where competitors may have stronger market positions;
- potential loss of our existing key employees or key employees of the company we acquire;
- inability to maintain relationships with customers and partners of the acquired business;
- potential unknown liabilities associated with the acquired businesses; and
- the tax effects of any such acquisitions.

These difficulties could disrupt our ongoing business, expose us to unexpected costs, distract our management and employees, increase our expenses, and adversely affect our results of operations. Furthermore, we may incur debt or issue equity securities to pay for any future acquisitions. The issuance of equity securities could be dilutive to our existing stockholders.

If we do not effectively implement our plans to migrate our technology infrastructure to the public cloud, our operations could be significantly disrupted.

We have announced plans to migrate our technology infrastructure to the public cloud. This initiative is a major undertaking as we migrate and reconfigure our current system processes, transactions, data and controls to a new cloud-based platform. It could have a significant impact on our business processes, financial reporting, information systems and internal controls.

As we implement the transition of our technology infrastructure to the public cloud, we may need to divert resources away from other important business operations, including management attention. While we plan to implement business contingency and other plans to facilitate continuous internet access, sustained or concurrent service denials or similar failures could limit our ability to provide our customers access to cloud-based services or otherwise operate our business. Additionally, we may experience issues with customer migration, as many of our customers may not migrate to cloud-based technologies on a timely basis or at all or may choose not to utilize our products and services during and after our transition to cloud-based technologies, which could negatively impact our revenue. Additionally, we may experience difficulties as we manage these changes and transition our technology infrastructure to the public cloud, including loss or corruption of data, interruptions in service and downtime, increased cyber threats and activity, delayed financial reporting, unanticipated expenses including increased costs of implementation and of conducting business, and lost revenue. Although we plan to conduct design validations and user testing, these may cause delays in transacting our business due to system challenges, limitations in functionality, inadequate management or process deficiencies in the development and use of our systems. Difficulties in implementing or an inability to effectively implement our migration plans could disrupt our operations and harm our business.

As we increase our reliance on public cloud infrastructure, our products and services will become increasingly reliant on continued access to, and the continued stability, reliability, and flexibility of third-party public cloud services. We have limited control over the public cloud operations and facilities on which we plan to host our technology infrastructure. Any changes in third-party service levels or any disruptions or delays from errors, defects, hacking incidents, security breaches, computer viruses, DDoS attacks, bad acts or performance problems could harm our reputation, damage our customers' businesses, and harm our business. Our public cloud providers are also vulnerable to damage or interruption from earthquakes, hurricanes, floods, fires, war, public health crises, such as COVID-19, terrorist attacks, power losses, hardware failures, systems failures, telecommunications failures and similar events. Although our transition and migration to the public cloud may increase our risk of liability and cause us to incur significant technical, legal or other costs, we may have limited remedies against third-party providers in connection with such liabilities.

Additionally, our public cloud providers may not be able to effectively manage existing traffic levels or increased demand in capacity requirements, especially to cover peak levels or spikes in traffic, and as a result, our customers may experience delays in accessing our solutions or encounter slower performance in our solutions, which could significantly harm the operations of our customers. Interruptions in our services might reduce our revenue, cause us to issue credits to customers, subject us to potential liability, and cause customers to terminate their subscriptions or harm our renewal rates. Finally, we may in the future be unable to secure additional cloud hosting capacity on commercially reasonable terms or at all. If any of our public cloud providers increases pricing terms, terminates or seeks to terminate our contractual relationship or changes or interprets their terms of service or policies in a manner that is unfavorable, we may be required to transfer to another provider and may incur significant costs and experience service interruptions.

Capital needs necessary to execute our business strategy could increase substantially and we may not be able to secure additional financing to execute this strategy.

To the extent that we require additional funds to support our operations or the expansion of our business, or to pay for acquisitions, we may need to sell additional equity, issue debt or convertible securities, or obtain credit facilities through financial institutions. In the past, we have obtained financing principally through the sale of preferred stock, common stock, warrants, and convertible notes. If additional funds are raised through the issuance of debt or preferred equity securities, these securities could have rights, preferences, and privileges senior to holders of common stock, and could have terms that impose restrictions on our operations. If additional funds are raised through the issuance of additional equity or convertible securities, our stockholders could suffer dilution. We cannot assure you that additional funding, if required, will be available to us in amounts or on terms acceptable to us. If sufficient funds are not available or are not available on acceptable terms, our ability to fund any potential expansion, take advantage of acquisition opportunities, develop or enhance our services or products, or

otherwise respond to competitive pressures would be significantly limited. Those limitations would materially and adversely affect our business, results of operations, cash flows, and financial condition.

Our sales cycles can be lengthy, and the timing of sales can be difficult to predict, which may cause our operating results to vary significantly.

The sales cycle for our products can be several months or more and varies substantially from customer to customer, particularly for sales to enterprise customers. Because we sell complex, integrated solutions, it can take many months to close sales as customers evaluate our product offering against available alternatives and define their requirements. We are often required to expend substantial time, effort, and money educating potential customers them about the value of our offerings. The increasingly complex needs of our customers can contribute to a longer sales cycle.

Additionally, our quarterly sales have historically reflected an uneven pattern in which a disproportionate percentage of a quarter's total sales occur in the last month, weeks and days of each quarter. These patterns make prediction of revenue especially difficult and uncertain and increase the risk of unanticipated variations in our results of operations. As a result, we are not always able to precisely predict the quarter in which expected sales will occur. In addition, historically a large portion of our revenue has derived from large orders from large clients. Consequently, delays in the closing of sales, especially from large clients, could have a material impact on the timing of revenue and results of operations.

Delays in our implementation cycles could have an adverse effect on our results of operations.

Certain of our products require some implementation services, including but not limited to, training our customers. As an open platform, we also work with other third parties on implementing a variety of integrations into our platform. We have historically experienced a lag between signing a customer contract and recognizing revenue from that customer. Although this lag has typically ranged from 30 to 90 days, it may take more time between contract signing and recognizing revenue in certain situations. If we experience delays in implementation or do not meet project milestones in a timely manner, we could be obligated to devote more customer support, engineering and other resources to a particular project. If new or existing customers cancel or have difficulty deploying our products or require significant amounts of our professional services, support, or customized features, revenue recognition could be canceled or delayed and our costs could increase, which could negatively impact our operating results.

Our services are subject to payment-related risks.

For certain payment methods, including credit and debit cards, we pay interchange and other fees, which may increase over time and raise our operating costs and lower our profit margins. We rely on third parties to provide payment processing services, including the processing of credit cards and debit cards and it could disrupt our business if these companies become unwilling or unable to provide these services to us. We are also subject to payment card association operating rules, certification requirements and rules governing electronic funds transfers, which could change or be reinterpreted in such a way as to make compliance infeasible. If we fail to comply with these rules or requirements, we may be subject to fines and higher transaction fees and lose our ability to accept credit and debit card payments from our customers or facilitate other types of online payments, and our business and operating results could be adversely affected.

Through our consumer-facing platform, we facilitate online transactions between individual service providers who provide online advice and information to consumers. In connection with these services, we accept payments using a variety of methods, such as credit card, debit card and PayPal. These payments are subject to "chargebacks" when consumers dispute payments they have made to us. Chargebacks can occur whether or not services were properly provided. Susceptibility to chargebacks puts a portion of our revenue at risk. We take measures to manage our risk relative to chargebacks and to recoup properly charged fees, however, if we are unable to successfully manage this risk our business and operating results could be adversely affected. As we offer new payment options to our users, we may be subject to additional regulations, compliance requirements, and fraud.

We are also subject to a number of other laws and regulations relating to money laundering, international money transfers, privacy and information security, and electronic fund transfers. If we were found to be in violation of applicable laws or regulations, we could be subject to civil and criminal penalties or forced to cease our payments services business.

We may experience difficulties integrating e-bot7, VoiceBase and Tenfold, and may not realize expected business or financial benefits and our business could be adversely impacted.

In the third quarter of 2021, we acquired e-bot7, a Conversational AI company. In the fourth quarter of 2021, we acquired VoiceBase, a leader in real time speech recognition and conversational analytics and Tenfold, an advanced customer engagement platform for integrating communication systems with leading CRM and support systems. We intend to maintain the business operations of each of these companies while integrating and leveraging e-bot7's self-service capabilities, Tenfold's technology platform, and VoiceBase's technology with our proprietary messaging and Conversational AI offerings. However, acquiring and integrating a technology company presents unique risks including difficulties in adapting and developing new software technologies and systems protocols, increased software integration expenses, and incompatibility of acquired technologies in addition to the risks discussed under *"If we do not successfully integrate past or potential future acquisitions, we may not realize the expected business or financial benefits and our business could be adversely impacted."*

Our business of facilitating at-home rapid-testing solutions poses substantial risks.

In the first quarter of 2021, our subsidiary Bella Health began to offer its corporate customers access to a digital mobile application that provides our customers' employees with FDA-approved rapid-antigen COVID-19 tests (provided by a qualified third-party), guided self-administration, and access to experts through messaging and Conversational AI.

The business of Bella Health poses certain risks, including our lack of experience operating in the healthcare industry and elevated risks related to compliance with federal, state, and local laws, rules and regulations pertaining to the healthcare and diagnostic testing industry.

These risks include among other things, potential fines and other penalties for failure to protect the security of, and the unauthorized sharing of, health information, or our failure to comply with health care laws and regulations, for each of which we may not have sufficient insurance or indemnification rights. In addition, the revenue we generate from Bella Health may decrease due to reduced demand for COVID-19 testing if the number of COVID-19 infections continues to decrease, unless we are able to develop other product offerings that offset this decrease.

Our expansion into digital healthcare poses substantial new risks to which we have not previously been exposed.

These risks include our lack of experience operating in the healthcare industry and elevated risks relating to compliance with certain U.S. federal, state, and local healthcare laws, regulations, and rules in the heavily-regulated healthcare industry, including: state laws relating to the licensure of medical professionals; state laws regulating telehealth and online healthcare services; state laws that prohibit general business corporations from practicing medicine, controlling physicians' medical decisions, or engaging in certain practices, such as splitting fees with physicians; state law provisions relating to anti-kickback, self-referral, and false claims; provisions of, and regulations relating to the Health Insurance Portability and Accountability Act of 1996, as amended, and its accompanying regulations ("HIPAA"), including provisions relating to the confidentiality and security of individually identifiable health information; and federal and state laws relating to the provision of services by non-physician clinical providers (such as physician assistants or nurses); and exposure to liability, which may include liabilities for failure to comply with healthcare laws, regulations, and rules for which we may not have sufficient insurance or indemnification rights.

In addition, if we were to start accepting payments from third party payors, including, among others, private insurance companies or government payors (such as Medicaid or Medicare), it would create additional compliance obligations, including: federal laws that prohibit entities from submitting false claims to Medicare, Medicaid, or other government programs; federal laws that prohibit the receipt of any form of remuneration in return for the referral of patients for items and services covered, in whole or in part, by federal healthcare programs; federal laws prohibiting physicians from referring Medicare or Medicaid patients to an entity for the provision of certain "designated health services" if the physician (or a member of the physician's immediate family) has a direct or indirect financial relationship with the entity; federal laws relating to failure to disclose or refund overpayments by a government payor; federal and state laws that prohibit healthcare providers from billing and receiving payment from Medicare or Medicaid for services, unless the services are medically necessary; and federal laws that impose civil administrative sanctions for, among other violations, inappropriate billing of services to federally funded healthcare programs, or employing individuals who are excluded from participation in federally funded healthcare programs.

Accordingly, to the extent they are or become applicable as and if we continue to grow in the digital healthcare space, we must monitor our compliance with applicable healthcare laws, regulations, and rules in every jurisdiction in which we operate,

on an ongoing basis, and we cannot provide assurance that our activities and arrangements, if challenged, will be found to be in compliance. Even if our activities and arrangements are found to be in compliance, investigations can be time- and resource-consuming and can divert management's attention from the business. Any such investigation or settlement could increase our costs or otherwise have an adverse effect on our business. Achieving and sustaining compliance with these laws may prove costly. Compliance may require obtaining appropriate licenses or certificates, increasing our security measures and expending additional resources to monitor developments in applicable rules and ensure compliance. Additionally, it is possible that the laws, regulations and rules governing the provision of healthcare services may change significantly in the future. Any new or changed healthcare laws, regulations or rules or any review of our business by judicial, law enforcement, regulatory or accreditation authorities could adversely affect our business, financial condition and results of operations.

Our reputation depends, in part, on factors which are partially or entirely outside of our control.

Our services typically appear under the LivePerson brand or as a LivePerson-branded icon on our customers' websites. The customer service operators and Experts who respond to the inquiries of our customers' users are employees or agents of our customers or independent consultants rather than employees of LivePerson. As a result, we are not able to control the actions of these operators or Experts and the impression that such operator or Expert leaves the user with whom they interact. A user may not know that the operator or Expert is not a LivePerson employee. If a user were to have a negative experience in a LivePerson-powered real-time dialogue, it is possible that this experience could be attributed to us, which could diminish our brand and harm our business. Additionally, we believe the success of our business services is aided by the prominent placement of the chat icon on a customer's website, over which we also have no control.

We are subject to risks related to corporate and social responsibility and reputation.

Many factors influence our reputation including the perception held by our customers, business partners and other key stakeholders. Businesses face increasing scrutiny related to environmental, social and governance activities. We risk damage to our reputation if we fail to act responsibly in a number of areas, such as diversity and inclusion, sustainability and social responsibility. Any harm to our reputation could impact employee engagement and retention, our corporate culture and the willingness of customers and our partners to do business with us, which could have a material adverse effect on our business, results of operations and cash flows.

Risks Related to our Financial Condition and Operating Results

Our quarterly revenue and operating results may fluctuate significantly, which may cause a substantial decline in the trading price of our securities.

We have in the past incurred, and may in the future incur, losses and experience negative cash flows, either or both of which may be significant and may cause our quarterly revenue and operating results to fluctuate significantly. These fluctuations may result from a variety of factors, many of which are outside of our control. Some of the important factors that may cause our revenue and operating results to fluctuate include:

- our ability to attract and retain new customers;
- our ability to retain and increase sales to existing customers;
- demand from customers and consumers for our services;
- our ability to innovate and provide new services to current and future customers;
- our ability to continue to add artificial intelligence, machine learning, and automation into our services;
- the introduction of new services by us or our competitors;
- our ability to avoid and/or manage service interruptions, disruptions, or security incidents;
- changes in our pricing models or policies or in those of our competitors;
- our ability to maintain and add integrations with third-party consumer messaging platforms and endpoints;
- continued adoption by companies of mobile and cloud-based messaging solutions;
- investments in growing our sales and marketing programs;
- continued adoption by Experts and Users of web-based advice services;

- exposure to foreign currency exchange rate fluctuations; and
- the amount and timing of capital expenditures and other costs related to operation and expansion of our business, including those related to acquisitions.

Our revenue and operating results may also fluctuate significantly in the future due to the following factors that are entirely outside of our control:

- new laws, regulations, or regulatory or law enforcement initiatives;
- economic conditions specific to the web, mobile technology, electronic commerce, and cloud computing; consequences of unexpected geopolitical events, natural disasters, acts of war or terrorism, outbreaks of contagious disease (e.g., COVID-19), or climate change; and
- general, regional, and/or global economic and political conditions.

As a result, comparing our operating results on a period-to-period basis may not be meaningful. You should not rely upon these comparisons or our past results as indicators of our future performance. Due to the foregoing factors, it is possible that our operating results in one or more future quarters may fall below the expectations of securities analysts and investors or below any guidance we may provide to the market. If this occurs, the trading price of our securities could decline significantly.

In the past we have experienced losses, we had an accumulated deficit of \$516.9 million as of December 31, 2021 and we may incur losses in the future.

We have in the past incurred, and we may in the future incur, losses and experience negative cash flow, either or both of which may be significant. We recorded net losses from inception through the year ended December 31, 2003. We recorded net income for the years ended December 31, 2004 through 2007 and 2009 through 2012, while we recorded net losses for the years ended December 31, 2008, and 2013 through 2021. We recorded a net loss of \$125.0 million for the year ended December 31, 2021. As of December 31, 2021, our accumulated deficit was approximately \$516.9 million. We cannot assure you that we can sustain or increase profitability on a quarterly or annual basis in the future. Failure to maintain profitability may materially and adversely affect the market price of our securities.

The non-payment or late payment of amounts due to us from a significant number of customers may negatively impact our financial condition or make it difficult to forecast our revenues accurately.

During 2021, we increased our allowance for doubtful accounts from \$5.3 million to approximately \$6.3 million. During 2020, we increased our allowance for doubtful accounts from \$3.1 million to approximately \$5.3 million. 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. A large proportion of receivables are due from larger corporate customers that typically have longer payment cycles. We adjust our allowance for doubtful accounts when accounts previously reserved have been collected. As a result of increasingly long payment cycles, we have faced increased difficulty in predicting our operating results for any given period, and have experienced significant unanticipated fluctuations in our revenues from period to period. Any failure to achieve anticipated revenues in a period could cause the market price of our securities to decline.

There are inherent limitations on the effectiveness of our controls.

We do not expect that our disclosure controls or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well-designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that resource constraints exist, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of the effectiveness of controls to future periods are subject to risks. Over time, controls may become inadequate due to changes in conditions or deterioration in the degree of compliance with policies or procedures. If our controls become inadequate, we could fail to meet our financial reporting obligations, our reputation may be adversely affected, our business and operating results could be harmed, and the market price of our securities could decline.

With the recent volatility in the capital markets, there is a risk that we could suffer a loss of principal in our cash and cash equivalents and short term investments and suffer a reduction in our interest income or in our return on investments.

As of December 31, 2021, we had \$521.8 million in cash and cash equivalents. We regularly invest excess funds from our cash and cash equivalents in short-term money market funds. We currently hold no mortgaged-backed or auction rate securities. However, some of our investments are subject to general credit, liquidity, market, and interest rate risks, which may be exacerbated by any ongoing uncertainty in the United States and global credit markets. In the future, these market risks associated with our investment portfolio may harm the results of our operations, liquidity and financial condition. Although we believe we have chosen a portfolio reasonably designed to preserve our existing cash position, it may not adequately protect the value of our investments. Furthermore, this more cautious portfolio is unlikely to provide us with any significant interest income in the near term.

Because we recognize revenue from subscriptions for our service over the term of the subscription, declines in business may not be immediately reflected in our operating results.

We generally recognize revenue from customers ratably over the terms of their subscription agreements, which are typically 12 or more months. As a result, much of the revenue we report in each quarter is the result of subscription agreements entered into during previous quarters. Consequently, a decline in new or renewed subscriptions or cancellations of existing subscriptions in any one quarter may not be reflected in our revenue results for that quarter. Any such decline, however, could negatively affect our revenue in future quarters. Our subscription model also makes it difficult for us to rapidly increase our revenue through additional sales in any period, because revenue from new customers and additional revenue from existing customers is generally recognized over the applicable subscription term, rather than immediately.

If our goodwill or amortizable intangible assets become impaired, we may be required to record a significant charge to earnings.

Under GAAP, we review our amortizable intangible assets for impairment when events or changes in circumstances indicated that the carrying value may not be recoverable. We review our goodwill for impairment at least annually and when events or changes in circumstances indicate that the carrying value may not be recoverable. Factors that may be considered a change in circumstances indicating that the carrying value of our goodwill or amortizable intangible assets may not be recoverable include a decline in stock price and market capitalization, reduced future cash flow estimates, and slower growth rates in our industry. Based on our annual review for 2021, we determined that it is not more likely than not that the fair value of the reporting units is less than their carrying amount. However, future assessments may yield a different result, and from time to time, we may be required to record a significant charge to earnings in our consolidated financial statements during the period in which any impairment of our goodwill or amortizable intangible assets is determined, resulting in a negative impact on our results of operations.

Risks Related to Industry Dynamics and Competition

If we are unable to develop and maintain successful relationships with partners, service partners, social media, and other third-party consumer messaging platforms and endpoints, our business, results of operations, and financial condition could be adversely affected.

We believe that continued growth for companies in our industry depends, in part, on enabling brands to connect with consumers across consumers' preferred conversational interfaces and messaging endpoints, such as SMS, Facebook Messenger, WhatsApp, Apple Business Chat, Google Rich Business Messenger, Line, and Alexa. In order to grow our business, we have identified and developed, and maintain, strategic relationships with many key technology partners. As part of our growth strategy, we plan to further develop partnerships and specific solution areas with additional technology partners. We typically rely on our strategic partners and third-party service providers to supplement our own subject matter expertise and to leverage industry best practice, provide enhanced products and services, and reduce costs. If we fail to establish these relationships in a timely and cost-effective manner or at all, if these strategic partners or third-party service providers fail to provide the services expected, or if we lose any or all of our current relationships, then our business, results of operations, and financial condition could be adversely affected. Replacing a strategic relationship could also take a long period of time and result in increased expenses. Additionally, even if we are successful at developing these relationships, but there are problems or issues with the integrations, or our ability to scale and onboard our customers onto new endpoints, our reputation, and ability to grow our business may be adversely affected.

We have announced plans to migrate our technology infrastructure to the public cloud, and may in the future be unable to secure additional cloud hosting capacity on commercially reasonable terms or at all. If any of our public cloud providers increases pricing terms, terminates or seeks to terminate our contractual relationship, establishes more favorable relationships with our competitors, or changes or interprets their terms of service or policies in a manner that is unfavorable with respect to us, we may be required to transfer to another provider and may incur significant costs and experience service interruptions.

If we are unable to effectively operate on mobile devices, our business could be adversely affected.

The number of people who access the Internet and complete transactions over the Internet through devices other than desktop computers, including smartphones, handheld tablets, and mobile phones, has increased dramatically in the past few years and is projected to continue to increase. To address these developments, we continue to extend our products and services to support messaging on mobile phone and tablet applications belonging to our company and our customers. If the mobile solutions we have developed do not meet our customers' needs or the needs of their website visitors, or are not widely adopted by our customers and consumers, we may fail to retain existing customers and we may have difficulty attracting new customers. Such solutions may also create new risks related to privacy and security, which could subject us to investigations, litigation, or reputational harm. If we are unable to rapidly innovate and grow mobile revenue, or if we incur excessive expenses in this effort, our financial performance and ability to continue to grow overall revenue may be negatively affected.

Additionally, our mobile phone and tablet applications and those of our customers depend on their interoperability with popular mobile operating systems, networks, and standards that we and they do not control, such as Android and iOS operating systems, and any changes in such systems and terms of service that degrade the functionality of our solutions or give preferential treatment to competitive products could adversely affect our revenue. We may not be successful in developing products that operate effectively with these technologies, systems, networks, or standards. As new devices and platforms are continually being released, it is difficult to predict the challenges we may encounter in developing versions of our solutions for use on these alternative devices.

The markets in which we participate are highly competitive, and we may lose customers and revenue if we are not able to innovate or effectively compete.

The markets for mobile and online business messaging and digital engagement and AI technology are intensely competitive, rapidly changing, and characterized by aggressive marketing, pricing pressure, evolving industry standards, rapid technology developments, and frequent new product introductions. We believe that competition will continue to increase as our current competitors increase the sophistication of their offerings and as new participants enter the market, which may cause additional pressure. If we are unable to accurately anticipate technology developments and continue to innovate in the markets in which we compete and develop successful integrations with third-party consumer messaging platforms, AI providers, and endpoints, or our competitors are more successful than us at developing compelling new products, services, and integrations, or at attracting and retaining customers, we may lose revenue and market share and our operating results could be adversely affected.

We have current and potential competition from providers of messaging and digital engagement solutions that enable companies to engage and connect with their consumer customers, as well as technology providers that offer customer relationship management and contact center solutions. We have current and potential competitors in many different industries, including:

- technology or service providers offering or powering competing digital engagement, contact center, communications, or customer relationship management solutions, such as eGain, Genesys, Nuance, Oracle, Salesforce.com, and Twilio;
- service providers that offer basic messaging products or services with limited functionality free of charge or at significantly reduced entry level prices;
- social media, social listening, messaging, artificial intelligence, bots, e-commerce, and/or data and data analytics companies, such as Facebook, Google, and WeChat, which may leverage their existing or future capabilities and consumer relationships to offer competing B2B solutions; and
- customers that develop and manage their messaging solutions in-house.

In addition, many of our current and potential competitors have substantial competitive advantages, such as greater brand recognition, significantly larger financial, marketing, and resource and development budgets, access to larger customer and/or

consumer bases, larger and more established marketing and distribution relationships, and/or more diverse product and service offerings. As a result, these competitors may be able to respond more quickly and effectively than we can to any change in the general market acceptance of messaging services or any new or changing opportunities, technologies, standards, pricing strategies, or customer requirements. Also, because of these advantages, potential customers may select a competitor's products and services, even if our services are more effective. For all of these reasons, we may not be able to compete successfully against our current and future competitors.

We may be unable to respond to the rapid technological change and changing customer preferences in the online sales, marketing, customer service, and/or online consumer services industries and this may harm our business.

If we are unable, for technological, legal, financial, or other reasons, to adapt in a timely manner to changing market conditions in the online sales, marketing, customer service, and/or e-commerce industry or our customers' or consumers' requirements or preferences, our business, results of operations, and financial condition would be materially and adversely affected. Online business is characterized by rapid technological change. In addition, the market for online sales, marketing, customer service, and expert advice solutions is relatively new. Sudden changes in customer and consumer requirements and preferences, frequent new product and service introductions embodying new technologies, and the emergence of new industry and regulatory standards and practices such as but not limited to data privacy and security standards, could render the LivePerson services and our proprietary technology and systems obsolete. The rapid evolution of these products and services will require that we continually improve the performance, features and reliability of our services. Our success will depend, in part, on our ability to:

- enhance the features and performance of our services;
- develop and offer new services that are valuable to companies doing business online as well as consumers; and
- respond to technological advances and emerging industry and regulatory standards and practices in a cost-effective and timely manner.

If any of our new services, including upgrades to our current services, do not meet our customers' or consumers' expectations, we could lose customers and our business may be harmed. Updating our technology may require significant additional capital expenditures and could materially and adversely affect our business, results of operations, and financial condition.

If new services require us to grow rapidly, this could place a significant strain on our managerial, operational, technical and financial resources. In order to manage our growth, we could be required to implement new or upgraded operating and financial systems, procedures and controls. Our failure to expand our operations in an efficient manner could cause our expenses to grow, our revenue to decline or grow more slowly than expected and could otherwise have a material adverse effect on our business, results of operations, and financial condition.

Downturns in the global economic environment or in particular industries in which our sales are concentrated may adversely affect our business and results of operations.

The U.S. and other global economies have experienced in the past and could in the future experience economic downturn that affects all sectors of the economy, particularly in the financial services and retail industries, resulting in declines in economic growth and consumer confidence, increases in unemployment rates and uncertainty about economic stability. Further, there is increased uncertainty regarding social, political, immigration and trade policies in the U.S., which could impact our global operations and our business. Global credit and financial markets have in the past experienced extreme disruptions, including diminished liquidity and credit availability and rapid fluctuations in market valuations. Our business has been affected by these conditions in the past and could be similarly impacted in the future by any downturn in global economic conditions.

Our business is, and will continue to be, dependent on sales to customers in the telecommunications, financial services, retail, automotive, real estate and technology industries. A downturn in one or more of these industries could have a material adverse effect on our business, liquidity, results of operations, financial condition and cash flows. In the event that industry conditions deteriorate in one or more of these industries, we could experience, among other things, cancellation or non-renewal of existing contracts, reduced demand for our products and reduced sales. It could be difficult to predict the timing, strength or duration of any economic slowdown or subsequent economic recovery, either relating to the global economic environment or to the particular industries in which our sales are concentrated, which, in turn, could make it more challenging for us to forecast

our operating results, make business decisions and identify risks that may adversely affect our business, sources and uses of cash, financial condition and results of operations.

Weak economic conditions may also cause our customers to experience difficulty in supporting their current operations and implementing their business plans. Our customers may reduce their spending on our services, may not be able to discharge their payment and other obligations to us, may experience difficulty raising capital, or may elect to scale back the resources they devote to customer service and/or sales and marketing technology, including services such as ours. Economic conditions may also lead consumers and businesses to postpone spending, which may cause our customers to decrease or delay their purchases of our products and services. If economic conditions deteriorate for us or our customers, we could be required to record charges relating to restructuring costs or the impairment of assets, may not be able to collect receivables on a timely basis, and our business, financial condition, and results of operations could be materially adversely affected.

Risks Related to Security Vulnerabilities and Service Reliability

Failures or security breaches in our services or systems, those of our third party service providers, or in the websites of our customers, including those resulting from cyber-attacks, security vulnerabilities, defects, or errors, could harm our business.

Our products and services involve the storage and transmission of proprietary information and personal data related to our customers and their users, as well as experts and consumers, and theft and security breaches expose us to a risk of loss of such information and data, improper use and disclosure thereof, litigation, regulatory investigation, and potential liability. We experience cyber-attacks of varying degrees on a regular basis. Our security measures may also be breached due to employee or other error, intentional malfeasance and other third party acts, and system errors or vulnerabilities, including vulnerabilities of our third party service providers, or customers, or otherwise. We have announced plans to move our technology infrastructure to the public cloud, which will require us to rely on third-party cloud providers to maintain appropriate safeguards. Additionally, in response to the COVID-19 pandemic, a majority of our office employees are working remotely. We currently expect this to continue for the foreseeable future, which may potentially further increase the risk of cyber incidents or data breaches. Any such breach or unauthorized access, or attempts by outside parties to fraudulently induce employees, users, vendors, or customers to disclose sensitive information in order to gain access to our data or data of our customers, users, experts, or consumers, including, but not limited to, individual personal information and financial credit or debit card data that is protected by law or contract, could result in significant legal and financial exposure, damage to our reputation, and a loss of confidence in the security of our products and services that could potentially have an adverse effect on our business.

While we continue to expand our focus on this issue and are taking measures to safeguard our products and services from cybersecurity threats and vulnerabilities in desktop computers, mobile phones, smartphones and handheld devices, cyber-attacks, and other security incidents continue to evolve in sophistication and frequency. Because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems, are constantly evolving in sophisticated ways to avoid detection and often are not recognized until launched against a target, it may be difficult or impossible for us to anticipate or identify these techniques or to implement adequate preventative measures. And while technological advancements enable more data and processes, such as mobile computing and mobile payments, they also increase the risk that cyber-attacks and other security incidents will occur. We engage third parties to review and assist in safeguarding our products and services from such threats. Those parties may identify vulnerabilities, some of which may not be immediately remedied. A significant cyber-attack, or a security incident of any magnitude that is profiled in the media, involving our, our third party service providers' or our customers' systems, could result in material harm to our brand and reputation, our ability to deliver our services or retain customers, and expose us to lawsuits, regulatory investigations, and significant damages, fines or penalties.

In addition, our customers may authorize third party access to their customer data located in our cloud environment. Because we do not control the transmissions to customer-authorized third parties, or the processing of such data by customer authorized third parties, we cannot ensure the integrity or security of such transmissions or processing. Because our services are responsible for critical communication between our customers and consumers, any security failures, defects or errors in our components, materials or software or those used by our customers could have an adverse impact on us, on our customers and on the end users of their websites. Such adverse impact could include a decrease in demand for our services, damage to our reputation and to our customer relationships, legal exposure, and other financial liability or harm to our business.

We may be liable if third parties access or misappropriate confidential or personal data from our systems or services.

The dialogue transcripts of the text-based chats, email interactions and other interactions between our customers and their users may include information, such as personal contact and demographic information. Although we employ and continually

test and update our security measures to protect this information from unauthorized access, it is still possible that our security measures could be breached and such a breach could result in unauthorized access to our customers' data or our data, including our intellectual property and other confidential business information. Because the techniques employed by hackers to obtain unauthorized access or to sabotage systems change frequently and are becoming more sophisticated in circumventing security measures and avoiding detection, we may be unable to anticipate all techniques or to implement adequate preventative measures. Any security breach could result in disclosure of our trade secrets or disclosure of confidential customer, supplier or employee data. If third parties were able to penetrate our network security or otherwise misappropriate personal data relating to our customers' users or the text of customer service inquiries, our competitive position may be harmed and we could be subject to liability. In the event of a security incident, we could be required to comply with a myriad of breach notification laws at the state, federal and international level, which may cause business disruption and extensive notification costs, and could lead to penalties, government investigations and lawsuits for compliance failures. We may as a result of a security incident be deemed out of compliance with U.S. federal and state laws, international laws, or contractual commitments, and we may be subject to government investigations, lawsuits, fines, criminal penalties, statutory damages, and other costs to respond to breach or security incidents, which could have a material adverse effect on our business, results of operations, and financial condition. We may incur significant costs to protect against the threat of security breaches or to mitigate the harm and alleviate problems caused by such breaches. While we currently maintain insurance coverage that may cover certain cyber security risks, such insurance coverage is subject to certain exclusions and exceptions and may be insufficient to cover all losses.

Furthermore, certain software and services that we use to operate our business are hosted and/or operated by third parties or integrated with our systems. For example, as we expand our use of cloud-based services, we will increasingly rely on third-party cloud providers to maintain appropriate safeguards to protect confidential or personal data we receive. While we intend to conduct due diligence on these cloud providers with respect to their security and business controls, we may not have the visibility to effectively monitor the implementation and efficacy of these controls. If third-party services were to be interrupted or their security breached, our business operations could be similarly disrupted and we could be exposed to liability and costly investigations or litigation. The need to properly secure, and securely transmit and store, confidential information online has historically been a significant barrier to e-commerce and online communications, and will become increasingly highlighted as a consumer and regulatory focus and concern. Any publicized compromise of security could deter people from using online services such as the ones we offer or from using them to conduct transactions, which involve transmitting confidential information. Because our success depends on the general acceptance and reputation of our services and electronic commerce, we may incur significant costs to protect against the threat of security breaches or to alleviate problems caused by these breaches.

We provide service level commitments to certain customers. If we do not meet these contractual commitments, we could be obligated to provide credits or refunds or face contract terminations, which could adversely affect our revenue and harm our reputation.

As is common for many cloud service providers, we offer service level commitments in certain of our customer contracts, primarily related to uptime of our service. If we are unable to meet the stated service level commitments or suffer periods of downtime that exceed the periods allowed under our customer contracts, whether due to downtime caused by us or our third-party service providers, which has occurred on several occasions in the past and could occur in the future (including in connection with the migration of our technology infrastructure to the public cloud), we may be contractually obligated to provide these customers with service credits and/or pay financial penalties, which could significantly impact our revenue. In addition, even if our contracts provide otherwise, these customers may attempt to terminate or reduce their contracts, which has occurred from time to time, and/or pursue other legal remedies. Recurring or extended service outages could also cause damage to our reputation and result in substantial customer dissatisfaction or loss, which could adversely affect our current and future revenue and operating results.

We are dependent on technology systems and third-party content that are beyond our control.

The success of our services depends in part on our customers' online services as well as the Internet and mobile connectivity of consumers, both of which are outside of our control. As a result, it may be difficult to identify the source of problems if they occur. In the past, we have experienced problems related to connectivity, which has resulted in slower than normal response times to user messaging requests and interruptions in service. Our services rely both on the Internet and on our connectivity vendors for data transmission. Therefore, even when connectivity problems are not caused by our services, our customers or their consumers may attribute the problem to us. This could diminish our brand and harm our business, divert the attention of our technical personnel from our product development efforts or cause significant customer relations problems.

In addition, we rely in part on third party service providers and other third parties for various services, including, but not limited to, Internet connectivity, network infrastructure hosting, security and maintenance, and software and hardware from a variety of vendors. These providers may experience problems that result in slower than normal response times and/or interruptions in service. If we are unable to continue utilizing the third party services that support our web hosting and infrastructure or if our services experience interruptions or delays due to existing third party service providers or transition to new third party service providers, our reputation and business could be harmed, and we may be exposed to legal and reputational risk, and significant remediation costs.

We also rely on the security of our third party service providers to protect our proprietary information and information of our customers. Information technology system failures, including a breach of our or our third party service providers' data security, could disrupt our ability to function in the normal course of business by potentially causing, among other things, an unintentional disclosure of customer information or loss of information. Additionally, despite our security procedures or those of our third party service providers, information systems may be vulnerable to threats such as computer hacking, ransomware, cyber-terrorism or other unauthorized attempts by third parties to access, obtain, modify or delete our or our customers' data. Any such breach could have a material adverse effect on our operating results and our reputation as a provider of business collaboration and communications solutions and could subject us to significant penalties and negative publicity, as well as government investigations and claims for damages or injunctive relief under state, federal and foreign laws or contractual agreements.

We also depend on third parties for hardware and software, and our consumer services depend on third parties for content. Such products and content could contain defects or inaccurate information. Problems arising from our use of such hardware or software or third party content could require us to incur significant costs or divert the attention of our technical or other personnel from our product development efforts or to manage issues related to content. To the extent any such problems require us to replace such hardware or software we may not be able to do so on acceptable terms, if at all.

We depend on the continued viability of the infrastructure of the Internet.

To the extent that the Internet continues to experience growth in the number of users and frequency of use by consumers resulting in increased bandwidth demands, we cannot assure you that the infrastructure for the Internet will be able to support the demands placed upon it. The Internet has experienced outages and delays as a result of damage to portions of its infrastructure. Outages or delays could adversely affect online sites, email and the level of traffic on the Internet. The Internet is also subject to continued and ongoing cyber-attacks and related conduct, which affect all online businesses. We also depend on Internet service providers that provide our customers and Internet users with access to the LivePerson services. In the past, users have experienced difficulties due to system failures unrelated to our service. In addition, the Internet could lose its viability due to delays in the adoption of new standards and protocols required to handle increased levels of Internet activity. Insufficient availability of telecommunications services to support the Internet also could result in slower response times and negatively impact use of the Internet generally, and our customers' sites (including their use of the Conversational Cloud) in particular. If the infrastructure of the Internet does not effectively support the growth of the Internet, we may not maintain profitability and our business, results of operations, and financial condition will suffer.

Technological or other defects could disrupt or negatively impact our services, which could harm our business and reputation.

We face risks related to the technological capabilities of our services. We expect the number of interactions between our customers' operators and consumers over our system to increase significantly as we expand our customer base. Our network hardware and software may not be able to accommodate this additional volume. Additionally, we must continually upgrade our software to improve the features and functionality of our services in order to be competitive in our markets. If future versions of our software contain undetected errors, our business could be harmed. If third-party content is flawed, our business could be harmed. As a result of software upgrades at LivePerson, our customer sites have, from time to time, experienced slower than normal response times and interruptions in service. If we experience system failures or degraded response times, our reputation and brand could be harmed. We may also experience technical problems in the process of installing and initiating the LivePerson services on new web hosting services, including in connection with our plans to migrate our technology infrastructure to the public cloud. These problems, if not remedied, could harm our business.

Our services also depend on complex software which may contain defects, particularly when we introduce new versions onto our servers. We may not discover software defects that affect our new or current services or enhancements until after they are deployed. It is possible that, despite testing by us, defects may occur in the software. These defects could result in:

- damage to our reputation;
- lost sales;
- contract terminations;
- loss of market share;
- delays in or loss of market acceptance of our products; and
- unexpected expenses and diversion of resources to remedy errors.

Our products are complex, and errors, failures, or “bugs” may be difficult to correct.

Our products are complex, integrating hardware, software and elements of a customers’ existing infrastructure. Despite quality assurance testing conducted prior to the release of our products our software may contain “bugs” that are difficult to detect and fix. Any such issues could interfere with the expected operation of a solution, which might negatively impact customer satisfaction, reduce sales opportunities or affect gross margins. Depending upon the size and scope of any such issue, remediation may have a negative impact on our business. Our inability to cure an application or product defect, should one occur, could result in the failure of an application or product line, damage to our reputation, litigation, and/or product reengineering expenses. Our insurance may not cover or may be insufficient to cover expenses associated with such events.

Failure to license necessary third party software for use in our products and services, or failure to successfully integrate third party software, could cause delays or reductions in our sales, or errors or failures of our service.

We license third party software that we plan to incorporate into our products and services. In the future, we might need to license other software to enhance our products and meet evolving customer requirements. These licenses may not continue to be available on commercially reasonable terms or at all. Some of this technology could be difficult to replace once integrated. The loss of, or inability to obtain, these licenses could result in delays or reductions of our products and services until we identify, license and integrate or develop equivalent software, and new licenses could require us to pay higher royalties. If we are unable to successfully license and integrate third party technology, we could experience a reduction in functionality and/or errors or failures of our products, which may reduce demand for our products and services.

Third-party licenses may expose us to increased risks, including risks associated with the integration of new technology, the impact of new technology integration on our existing technology, open source software disclosure requirements, the diversion of resources from the development of our own proprietary technology, and our inability to generate revenue from new technology sufficient to offset associated acquisition and maintenance costs.

Our business is subject to the risks of earthquakes, fires, floods, and other natural catastrophic events and to interruption by man-made problems such as terrorism or cyber-attacks.

Although we intend to migrate our technology infrastructure to the public cloud, a substantial majority of our computer and communications infrastructure is running in our private cloud on hardware that is located at a limited number of facilities in the United States, Europe, and Australia. Our systems and operations are vulnerable to damage or interruption from earthquakes, fires, floods, hurricanes, other acts of nature, power losses, telecommunications failures, terrorist attacks, acts of war, human errors, break-ins, cyber-attacks or failures, pandemics or other public health crises, or similar events. For example, a significant natural disaster, such as an earthquake, fire or flood, could have a material adverse impact on our business, operating results and financial condition, and our insurance coverage may be insufficient to compensate us for losses that may occur. In addition, acts of terrorism could cause disruptions in our business or the economy as a whole. Our headquarters are located in New York City and we have a significant employee presence located in Israel, each of which regions has experienced acts of terrorism in the past. Our servers may also be vulnerable to computer viruses, break-ins, cyber-attacks, such as coordinated denial-of-service attacks or ransomware, or other failures, and similar disruptions from unauthorized tampering with our computer systems, which could lead to interruptions, delays, loss of critical data or the unauthorized disclosure of confidential customer data. Although we have implemented security measures and disaster recovery capabilities, there can be no assurance that we will not suffer from business interruption, or unavailability or loss of data, as a result of any such events. As we rely heavily on our servers, computer and communications systems and the internet to conduct our business and provide

high quality service to our customers, such disruptions could negatively impact our ability to run our business, result in loss of existing or potential customers and increased expenses, and/or have an adverse effect on our reputation and the reputation of our products and services, any of which would adversely affect our operating results and financial condition.

Risks Related to Regulatory and Data Privacy Issues

Our business is subject to a variety of U.S. and international laws and regulations regarding privacy and data protection, and increased public scrutiny of privacy and security issues could result in increased government regulation, industry standards, and other legal obligations that could adversely affect our business.

We collect, process, store, and use personal data and other information generated during mobile and online messaging between brands and consumers and between experts and consumers. We post our privacy policies and practices on our websites and we also often include privacy commitments in our contracts. Our business is subject to numerous federal, state and international laws and regulations regarding privacy, data protection, personal information, security, data collection, storage, use and transfer, and the use of cookies and similar tracking technologies. To the extent that additional legislation regarding user privacy is enacted, such as legislation governing the collection and use of information regarding Internet or mobile users through the use of cookies or similar technologies, the effectiveness of our services could be impaired by restricting us from collecting or using information that may be valuable to our customers and/or exposing us to lawsuits or regulatory investigations. The foregoing could have a material adverse effect on our business, results of operations, and financial condition.

U.S. and international privacy laws and regulations are evolving and changing, subject to differing interpretations, may be costly to comply with, and may be inconsistent among countries and jurisdictions or conflict with other rules. As we expand our operations in these countries, our liability exposure and the complexity and cost of compliance with data and privacy requirements will likely increase. Any failure by us to comply with our posted privacy policies, applicable federal, state or international laws and regulations relating to data privacy and data protection, or the privacy commitments contained in our contracts, could result in proceedings against us by governmental entities, customers, consumers, watchdog groups or others, which could have a material adverse effect on our business, financial condition and results of operations. In addition, the increased attention focused upon liability as a result of lawsuits and legislative proposals and enactments could harm our reputation or otherwise impact the growth of our business.

Laws and practices regarding handling and use of personal and other information by companies have come under increased public scrutiny, and governmental entities, consumer agencies and consumer advocacy groups have called for, and in many instances, enacted increased regulation and changes in industry practices. For example, the E.U. General Data Protection Regulation (“GDPR”), which became effective in May 2018, replacing the E.U. Data Protection Directive, imposes significantly greater compliance burdens on companies that control or process personal data of users primarily located in the E.U. and, for noncompliance, provides for considerable fines up to the higher of 20 million Euros or 4% of global annual revenue. European regulators have issued numerous fines pursuant to the GDPR. One material change is that data processors (as that term is defined by applicable E.U. data protection law) have direct obligations, including implementing technical and organizational measures, and are subject to enhanced notification rules. The GDPR also imposes certain technological requirements that may, from time to time, require us to make changes to our services to enable LivePerson and/or our customers to meet legal requirements and may impact how data protection is addressed in our customer and vendor agreements. Ensuring compliance with the GDPR is an ongoing commitment that involves substantial costs, and it is possible that despite our efforts, governmental authorities or third parties will assert that our services or business practices fail to comply. We also must require vendors that process personal data to take on additional privacy and security obligations, and some may refuse, causing us to incur potential disruption and expense related to our business processes. If our policies and practices, or those of our vendors, are, or are perceived to be, insufficient, we could be subject to enforcement actions or investigations by Data Protection Authorities (including in the E.U.) or lawsuits by private parties, and our business could be negatively impacted.

The E.U. has also released a proposed Regulation on Privacy and Electronic Communications (“e-Privacy Regulation”) to replace the E.U.’s Privacy and Electronic Communications Directive (“e-Privacy Directive”) to, among other things, better align with the GDPR, to amend the current e-Privacy Directive’s rules on the use of cookies and other tracking technologies, and to harmonize across current E.U. member state e-privacy data protection laws. Compliance with changes in laws and regulations related to privacy may require significant cost, limit the use and adoption of our services, and require material changes in our business practices that result in reduced revenue. Noncompliance could result in material fines and penalties, litigation, regulatory investigation and/or governmental orders requiring us to change our data practices, which could damage our reputation and harm our business.

Additionally, as web and mobile commerce continues to evolve, regulation by federal, state and foreign governments or agencies in the areas of data privacy and data security is likely to increase. For instance, recent legal developments in Europe have created complexity and regulatory compliance uncertainty regarding certain transfers of personal information from the European Economic Area (the “EEA”) to the United States and certain other third countries. For example, on July 16, 2020, the Court of Justice of the European Union (“CJEU”) invalidated the E.U.-U.S. Privacy Shield Framework (the “E.U.-U.S. Privacy Shield”) under which personal information could be transferred from the EEA to U.S. entities who had self-certified under the Privacy Shield program. Similarly, on September 8, 2020, the Swiss Data Protection Authority announced in a position statement that it no longer considers the Swiss-U.S. Privacy Shield adequate for the purpose of transferring personal data from Switzerland to the United States. While the CJEU upheld the adequacy of E.U.-specified standard contractual clauses (“SCCs”) as an adequate personal information transfer mechanism, it made clear that reliance on them alone may not necessarily be sufficient in all circumstances and that their use must be assessed on a case-by-case basis taking into account the surveillance laws in and the right of individuals afforded by, the destination country. The CJEU went on to state that, if the competent supervisory authority believes that the SCCs cannot be complied with in the destination country and the required level of protection cannot be secured by other means, such supervisory authority is under an obligation to suspend or prohibit that transfer unless the data exporter has already done so itself. Ongoing legal challenges in the E.U. to the mechanisms allowing companies to transfer personal data from the EEA to certain other jurisdictions, including the U.S., following the CJEU’s decision may result in further limitations on the ability to transfer data across borders, particularly if governments are unable or unwilling to reach new or maintain existing agreements that permit cross-border data transfers.

On January 31, 2020, the U.K. withdrew its membership from the E.U., which is commonly referred to as “Brexit.” As a result, we became subject to the GDPR as incorporated into UK law through the Data Protection Act of 2018 (“U.K. GDPR”). The relationship between the U.K. and the E.U. in relation to certain aspects of data protection law remains unclear, however, and it is unclear how U.K. data protection laws and regulations will develop in the medium to longer term, including how data transfers to and from the U.K. will be regulated in the long term. Any changes to these laws may require us to modify our data processing practices and policies and to incur substantial costs and expenses to comply. The updated SCCs apply only to the transfer of data outside of the EEA and not the U.K. Although the European Commission adopted an adequacy decision for the U.K. on June 28, 2021, allowing the continued flow of personal data from the EEA to the United Kingdom, this decision will automatically expire four years after its entry into force, will be regularly reviewed going forward and may be revoked if the U.K. diverges from its current adequate data protection laws following its exit from the E.U.

We rely on a mixture of mechanisms to govern the transfer of personal data from our E.U. and U.K. business to the U.S. and are continuing to evaluate what additional mechanisms may be required to establish adequate safeguards for the cross-border transfer of personal data. The European Commission updated the SCCs on June 4, 2021, and additional regulatory guidance has been released that seeks to impose additional obligations on companies choosing to rely on the SCCs. Parties transferring personal data from the EEA to third countries with “inadequate data protection” such as the U.S. will have until December 27, 2022 to update any existing agreements, or any new agreements executed before September 27, 2021, that rely on SCCs. The new SCCs apply only to the transfer of data outside of the EEA and not the U.K., though on January 31, 2022, the U.K.’s Information Commissioner’s Officer announced that proposals for the U.K.’s own form of agreement and addendum to the E.U. SCCs (the “U.K. SCCs”), which could be used for transfers for data from the U.K., have been laid before Parliament. If no objections are raised in Parliament and the proposals are approved, the U.K. SCCs will come into force on March 21, 2022 (subject to a grace period for implementation). The outcome of the consultation has yet to be published. As such, any transfers by us or our vendors of personal data from the E.U./U.K. may not comply with E.U./U.K. data protection laws, may increase our exposure to the GDPR’s/U.K. GDPR’s heightened sanctions for violations of their cross-border data transfer restrictions and may reduce demand for our products from companies subject to E.U./U.K. data protection laws. If we are unable to transfer personal data between and among countries and regions in which we operate, it could affect the manner in which we provide our services and could adversely affect our financial results, and, until the legal uncertainties regarding how to legally continue transfers pursuant to the SCCs and other mechanisms are settled, we will continue to face uncertainty as to whether our efforts to comply with our obligations under the GDPR will be sufficient. Failure to comply with existing or new rules may result in significant penalties or orders to stop the alleged noncompliant activity.

In addition to the changing regulatory landscape in the E.U. and the U.K., in June 2018, the State of California legislature passed the California Consumer Privacy Act of 2018 (“CCPA”), which came into effect in January of 2020. The CCPA gives California residents new data privacy rights, allows consumers to opt out of certain data sharing with third parties, and provides a new private cause of action for data breaches. Moreover, a new privacy law, the California Privacy Rights Act (“CPRA”), which is scheduled to take effect on January 1, 2023 (with a lookback to January 1, 2022), will significantly modify the CCPA, and will impose additional data protection obligations on companies doing business in California, potentially resulting in further complexity and requiring us to incur additional costs and expenses in an effort to comply. Similarly, other states, such as

Virginia and Colorado, have instituted privacy and data security laws, rules, and regulations, and many similar laws have been proposed at the federal and state level; accordingly, we also may be subject to additional compliance obligations as such legislation is considered and adopted, which may require us to modify our data processing practices and policies and incur substantial costs and expenses to comply.

In addition to government activity, privacy advocacy and other industry groups have established and may continue to establish new self-regulatory standards that may place additional burdens on us. If our privacy practices are deemed unacceptable by watchdog groups or privacy advocates, such groups may take measures that harm our business by, for example, disparaging our reputation and our business, which may have a material adverse effect on our results of operations, and financial condition. In addition, privacy concerns may cause consumers to avoid online sites that collect various forms of data or to resist providing the data necessary to allow our customers to use our services effectively. Even the perception of data security and data privacy concerns, whether or not valid, could inhibit sales and market acceptance of our products and services.

Our business is subject to a variety of U.S. and foreign laws, and existing, new and developing regulatory or other legal requirements could subject us to claims or materially impact our business.

We and our customers are subject to a number of laws and regulations in the United States and abroad, including laws related to conducting business on the Internet or mobile devices, such as laws regarding data privacy, data protection, information security, cybersecurity, restrictions or technological requirements regarding the collection, use, storage, protection, transfer or other processing of consumer data, content, consumer protection, internet (or net) neutrality, advertising, electronic contracts, taxation, provision of online payment services (including credit card processing), and intellectual property rights, which are continuously evolving and developing. Because our services are accessible worldwide, certain foreign jurisdictions may claim that we are required to comply with their laws, even if we do not have a local entity, employees or infrastructure. Foreign data protection, privacy, and other laws and regulations may often be more restrictive than those in the United States. The scope and interpretation of the laws and other obligations that apply to us, including those related to user privacy and data security, are often uncertain and may be conflicting, particularly laws and obligations outside the U.S. There is a risk that these laws may be interpreted and applied differently in any given jurisdiction in a manner that is not consistent with our current practices, which could cause us to incur substantial cost and could negatively impact our brand, reputation and business.

Businesses using our products and services may collect data from their users. Various federal, state and foreign government bodies and agencies impose laws regarding collection, use, storage, retention, disposal, transfer or other processing of data from website visitors. We offer our customers a variety of data security procedures and practices, such as encryption for data at rest and masking algorithms for sensitive data prior to transfer to our database, in an effort to protect information. Changes to applicable laws and how they are interpreted relating to privacy and data security could significantly increase the cost to us and our customers of regulatory compliance and could negatively impact our business.

For instance, some states in the U.S. have enacted legislation designed to protect consumer privacy by prohibiting the distribution of “spyware” over the Internet. Such legislation typically focuses on restricting the proliferation of software that, when installed on an end user’s computer, is used to intentionally and deceptively take control of the end user’s machine. We do not believe that the data monitoring methods that we employ constitute “spyware” or are prohibited by applicable laws. However, federal, state and foreign laws and regulations, many of which can be enforced by government entities or private parties, are constantly evolving and can be subject to significant changes in application and interpretation. If, for example, the scope of the previously mentioned “spyware” legislation were changed to include web analytics, such legislation could apply to the technology we use and potentially restrict our ability to conduct our business.

Further, various federal, state and foreign government bodies and agencies are highly focused on consumer protection initiatives, particularly in light of the increase in new technologies and services that incorporate or use bots, artificial intelligence and/or machine learning. For example, the California B.O.T. Act came into effect in July 2019 and requires that companies using bots on platforms with more than 10 million unique monthly visitors from the U.S. use clear and conspicuous disclosure to inform consumers that they are not speaking to a human. Similar bills have been introduced from time to time at the state and federal level in recent years. Further, use of artificial intelligence and machine learning may be subject to laws and evolving regulations regarding the use of artificial intelligence, controlling for, among other things, data bias, and antidiscrimination. For example, the Federal Trade Commission (“FTC”) enforces consumer protection laws such as Section 5 of the FTC Act, which prohibits unfair and deceptive practices, including use of biased algorithms in AI. The European Commission also recently published its proposal for a regulation implementing harmonized rules on AI and amending certain union legislative acts. The proposed regulation would impose additional restrictions and obligations on providers of AI systems, including increasing transparency so consumers know they are interacting with an AI system, requiring human oversight in AI,

and prohibiting certain practices of AI that could lead to physical or psychological harm. Given the increased focus by the FTC and other regulators on the use of AI, it is possible that additional laws, regulations, and standards related to AI may be introduced in the future. Regulation in this area could impact how businesses use our products and services to interact with consumers and how we provide our services to our customers. AI tools can also present unique technological and legal challenges, such as the possibility of insufficient data sets, or (as stated above) data sets that contain biased information, which can negatively impact the decisions, predictions or analyses that AI applications produce. Deficiencies such as these could cause us reputational harm and subject us to legal liability, including claims of product liability, breach of warranty, or negligence.

In addition, regulatory authorities and governments around the world are considering a number of legislative and regulatory proposals concerning privacy, collection and use of website visitor data, data storage, data protection, the “right to be forgotten,” content regulation, cybersecurity, government access to personal information, online advertising, email and other categories of electronic spam, and other matters that may be applicable to our business. Compliance with these laws may require substantial investment or may be technologically challenging for us. For example, some jurisdictions, including in the United States, are considering whether the collection of anonymous data may invade the privacy of website visitors. If laws or regulations are enacted that limit data collection or use practices related to anonymous data, we and/or our customers may be required to obtain the express consent of web visitors in order for our technology to perform certain basic functions that are based on the collection and use of technical data. Requirements that a website must first obtain consent from its web visitors before using our technology could reduce the amount and value of the services we provide to customers, which might impede sales and/or cause some existing customers to discontinue using our services.

It is also likely that, as our business grows and evolves, an increasing portion of our business shifts to mobile, and our solutions are offered and used in a greater number of countries, we will become subject to laws and regulations in additional jurisdictions. We may need to expend considerable effort and resources to develop new product features and/or procedures to comply with any such legal requirements. It is difficult to predict how existing laws will apply to our business and what new laws and legal obligations we may become subject to. If we are not able to comply with these laws or other legal obligations, or if we become liable under them, we may be forced to implement material changes to our business practices, delay release of new and enhanced services and expend substantial resources, which would negatively affect our business, financial condition and results of operations. In addition, any increased attention focused on liability issues, or as a result of regulatory fines or lawsuits, could harm our reputation or otherwise impact the growth of our business. Any costs incurred as a result of this potential liability could harm our business and operating results.

We monitor pending legislation and regulatory initiatives to ascertain relevance, analyze impact and develop strategic direction surrounding regulatory trends and developments. Due to shifting economic and political conditions, tax policies or rates in various jurisdictions may be subject to significant change. A range of other proposed or existing laws and new interpretations of existing laws could have an impact on our business. For example:

Government agencies and regulators have reviewed, are reviewing and will continue to review, the personal data handling practices of companies doing business online, including privacy and security policies and practices. This review may result in new laws or the promulgation of new regulations or guidelines that may apply to our products and services. For example, the State of California and other states have passed laws relating to disclosure of companies’ practices with regard to Do-Not-Track signals from Internet browsers, the ability to delete information of minors, and new data breach notification requirements. Outside the E.U. and the U.S., a number of countries have adopted or are considering privacy laws and regulations that may result in significant greater compliance burdens. Existing and proposed laws and regulations regarding cybersecurity and monitoring of online behavioral data, such as proposed “Do Not Track” regulations, regulations aimed at restricting certain targeted advertising practices and collection and use of data from mobile devices, new and existing tools that allow consumers to block online advertising and other content, and other proposed online privacy legislation could potentially apply to some of our current or planned products and services. Existing and proposed laws and regulations related to email and other categories of electronic spam could impact the delivery of commercial email and other electronic communications by us or on behalf of customers using our services.

The Federal Trade Commission (“FTC”) in particular has aggressively investigated and brought enforcement actions against companies that fail to comply with their privacy or data security commitments to consumers, or fail to comply with regulations or statutes such as the Children’s Online Privacy Protection Act. Any investigation or review of our practices may require us to make changes to our products and policies, which could harm our business. Currently there are many proposals by lawmakers and industry groups in this area, both in the United States and overseas, which address the collection, maintenance and use of personal information, web browsing and geolocation data, and establish data security and breach notification

requirements. Further, regulators and industry groups have also released self-regulatory principles and guidelines for various data privacy and security practices. Given that this is an evolving and unsettled area of regulation, the imposition of any new significant restrictions or technological requirements could have a negative impact on our business.

Various governmental bodies and many customers and businesses are increasingly focused on environmental, social and governance issues, which has in the past resulted, and may in the future continue to result, in the adoption of new laws and regulations and changing buying practices. If we fail to keep pace with these developments, our reputation and results of operations could be adversely impacted.

We might unintentionally violate such laws now or in the future; such laws or their interpretation or application may be modified; and new laws may be enacted in the future. Any such developments could subject us to legal liability exposure, and harm our business, operating results and financial condition.

We may be subject to governmental export controls and economic sanctions regulations that could impair our ability to compete in international markets due to licensing requirements and could subject us to liability if we are not in compliance with applicable laws.

Certain of our products and services may be subject to export control and economic sanctions regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations and various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Control. Exports of our products and the provision of our services must be made in compliance with these laws and regulations. If we fail to comply with these laws and regulations, we and certain of our employees could be subject to substantial civil or criminal penalties, including: the possible loss of export privileges; fines, which may be imposed on us and responsible employees or managers; and, in extreme cases, the incarceration of responsible employees or managers. Obtaining the necessary authorizations, including any required license, for a particular deployment may be time-consuming, is not guaranteed and may result in the delay or loss of sales opportunities. In addition, changes in our products or services, or changes in applicable export or economic sanctions regulations may create delays in the introduction and deployment of our products and services in international markets, or, in some cases, prevent the export of our products or provision of our services to certain countries or end users. Any change in export or economic sanctions regulations, shift in the enforcement or scope of existing regulations, or change in the countries, governments, persons or technologies targeted by such regulations, could also result in decreased use of our products and services, or in our decreased ability to export our products or provide our services to existing or prospective customers with international operations. Any decreased use of our products and services or limitation on our ability to export our products and provide our services could adversely affect our business, results of operations, and financial condition. Further, we incorporate encryption technology into certain of our products. Various countries regulate the import of certain encryption technology, including through import permitting and licensing requirements, and have enacted laws that could limit our customers' ability to import our products into those countries. Encryption products and the underlying technology may also be subject to export control restrictions. Governmental regulation of encryption technology and regulation of exports of encryption products, or our failure to obtain required approval for our products, when applicable, could harm our international sales and adversely affect our revenue. Compliance with applicable regulatory requirements regarding the export of our products and provision of our services, including with respect to new releases of our products and services, may create delays in the introduction of our products and services in international markets, prevent our customers with international operations from deploying our products and using our services throughout their globally-distributed systems or, in some cases, prevent the export of our products or provision of our services to some countries altogether.

Industry-specific regulation is evolving and unfavorable industry-specific laws, regulations, or interpretive positions could harm our business.

Our customers and potential customers do business in a variety of industries, including financial services, the public sector, healthcare and telecommunications. Regulators of various industries have adopted and may in the future adopt regulations or interpretive positions regarding the use of cloud computing and other outsourced services. The costs of compliance with, and other burdens imposed by, industry-specific laws, regulations and interpretive positions may limit our customers' use and adoption of our services and reduce overall demand. For example, some financial services regulators have imposed guidelines for use of cloud computing services that mandate specific controls or that require financial services providers to obtain regulatory approval prior to outsourcing certain functions. If we are unable to comply with these guidelines or controls, or if our customers are unable to obtain regulatory approval to use our service where required, our business may be harmed and we may be unable to conduct business with customers in such industries. In addition, an inability to satisfy the standards of certain third-party certification bodies that our customers may expect, such as the PCI Data Security Standards,

may have an adverse impact on our business. If we are unable in the future to achieve or maintain these industry-specific certifications or comply with other similar requirements or standards that are relevant to our customers, our business and our revenue may be adversely impacted.

In some cases, industry-specific laws, regulations or interpretive positions may also apply directly to us as a service provider. Any failure or perceived failure by us to comply with such requirements could have a material adverse impact on our business and results of operations.

In addition, we may become subject to additional regulatory and compliance burdens as we expand our product offerings into new conversational businesses. For example, we recently launched a new conversational banking initiative. While we are relying on the banking license of a third party and certain of their compliance programs for this initiative, if we or our partner fail to comply with applicable laws, rules and regulations, fail to successfully manage our regulatory or compliance obligations, or fail to obtain and maintain required licenses, we could be subject to fines and/or proceedings by governmental agencies, regulatory bodies, and/or private litigation, which could materially and adversely affect our business, financial condition and results of operations.

Future regulation of the Internet or mobile devices may slow our growth, resulting in decreased demand for our services and increased costs of doing business.

State, federal and foreign regulators could adopt laws and regulations that impose additional burdens on companies that conduct business online or that adversely affect the growth or use of the Internet or mobile commerce. For example, these laws and regulations could discourage communication by e-mail or other web-based communications, particularly targeted e-mail of the type facilitated by our services, which could reduce demand for our services. Laws or regulations that affect the use of the Internet or mobile devices, including but not limited to laws affecting net neutrality could also decrease demand for our services and increase our costs. Some jurisdictions have adopted regulations prohibiting certain forms of discrimination by Internet access providers; however, substantial uncertainty exists in the U.S. and elsewhere. For example, in the U.S., the Federal Communications Commission repealed net neutrality rules effective June 11, 2018, which could lead internet access providers to restrict, block, degrade or charge for access to our products and services, while California, among other states, have passed legislation that seeks to reestablish net neutrality. Further, regulatory focus on data privacy, data security and consumer protection continues to expand on a worldwide basis and is becoming more complex, which will increase the risks to our business on reputational, operational, and compliance bases.

The continued growth and development of the market for online services may prompt calls for more stringent consumer protection laws or laws that will inhibit the use of Internet-based or mobile-based communications or the information contained in these communications or the ways in which information may be collected, stored, used and transferred in the course of providing services. For example, in the United States, the CAN-SPAM Act regulates the transmission and content of commercial emails, and, among other things, obligates the sending of such emails to provide recipients with the ability to opt-out or unsubscribe and other requirements; and the Children's Online Privacy Protection Act regulates the ability of certain online services to collect or use certain categories of information from children under age 13 absent parental consent. The adoption of any additional laws or regulations, or changes to existing laws or regulations, may decrease the expansion of the Internet or smartphone usage. A decline in the growth of the Internet or smartphone usage, particularly as it relates to online communication, could decrease demand for our services and increase our costs of doing business, or otherwise harm our business. Any new legislation or regulations, application of laws and regulations from jurisdictions whose laws do not currently apply to our business, or application of existing laws and regulations to the Internet, mobile and other online services could increase our costs and harm our growth.

We anticipate making investments in, and potentially holding, creating or managing blockchain-based assets, including cryptocurrency or other digital tokens and development of blockchain-based decentralized applications ("DApps"), which may subject us to exchange risk and additional tax and regulatory requirements.

In the fourth quarter of 2021, we updated our investment policy to provide us with more flexibility to further diversify and maximize returns on our cash that is not required to maintain adequate operating liquidity. Under this policy, which was duly approved by our board of directors, we may invest a portion of such cash in investment instruments related to cryptocurrencies and other blockchain-based assets through a newly established subsidiary. Our subsidiary is expected to contract with providers to invest in funds and/or directly hold blockchain-based, assets including cryptocurrencies such as USD

Coin, in order to engage in investment strategies such as yield farming, which involves lending or staking cryptocurrencies to generate returns in the form of transaction fees or interest.

The laws surrounding cryptocurrency and blockchain-based assets are uncertain and evolving. Cryptocurrencies are not considered legal tender or backed by any government, and any cryptocurrencies we may hold or related investments we may experience price volatility, technological glitches and various law enforcement and regulatory interventions. The use of cryptocurrency is currently limited both in the U.S. and around the world, and the widespread acceptance and adoption of cryptocurrencies as a store of value or means of payment for goods and services is uncertain. The application of securities laws and other regulations to cryptocurrency and blockchain-based assets is unclear, and it is possible that regulators in the U.S. or other jurisdictions may create new regulations or interpret laws in a manner that adversely affect the price of blockchain-based assets, restrict our future ability to invest in or hold blockchain-based assets and subject us to additional regulatory requirements, including laws governing payments, financial services, virtual currency, anti-money laundering, counter-terrorism financing, trade sanctions, privacy and data protection, tax, consumer protection, environmental protection and competition. Further, the use and development of cryptocurrency has been prohibited or effectively prohibited in some countries. If we fail to comply with regulations or prohibitions applicable to us, we could face regulatory or other enforcement actions and potential fines and other consequences. If any regulatory authority asserts that we require a license or other regulatory approval to conduct business involving cryptocurrencies or other blockchain-based assets, it could have a material adverse effect on our business, results of operations, cash flows and financial condition.

If we accept and hold cryptocurrency in the future, we may have exchange rate risk on the cryptocurrencies we hold as well as the risks that regulatory or other developments may adversely affect their value. We may choose not to hedge, or may be unable to fully hedge, our exposure to cryptocurrencies and other blockchain-based assets and may at times be unable to convert them to U.S. dollars. If we hold cryptocurrency and its value decreases relative to our acquisition price, our financial condition may be harmed.

Moreover, cryptocurrency and blockchain-based assets are currently considered indefinite-lived intangible assets under applicable accounting rules, meaning that any decrease in the asset's fair value below our carrying value for such asset at any time subsequent to its acquisition will require us to recognize impairment charges, whereas we may make no upward revisions for any market price increases until a sale, which may adversely affect our operating results in any period in which such impairment occurs. Moreover, there is no guarantee that future changes in GAAP will not require us to change the way we account for cryptocurrency held by us.

As intangible assets that may lack centralized issuers or governing bodies, cryptocurrencies' and blockchain-based assets' lack of a physical form, their reliance on technology for their creation, existence and transactional validation and their decentralization may subject their integrity to the threat of security breaches, cyberattacks or other malicious activities, as well as human errors or computer malfunctions that may result in the loss or destruction of private keys needed to access such assets. As cryptocurrencies and blockchain-based assets have no physical existence beyond the record of transactions on a blockchain, a variety of technical factors related to blockchain technologies could also impact the price of cryptocurrencies and the stability of our investments. For example, malicious attacks by cryptocurrency miners, inadequate mining fees to incentivize validation of transactions, hard "forks" of individual blockchains into multiple blockchains, and advances in digital computing, algebraic geometry, and quantum computing could undercut the integrity of blockchain technologies and negatively affect the price of cryptocurrencies and the stability of our investments. While we intend to take all reasonable measures to secure any digital assets, if such threats are realized or the measures or controls we or our counterparties create or implement to secure our digital assets fail, it could result in a partial or total misappropriation or loss of our digital assets, and our financial condition and operating results may be harmed.

Finally, blockchain is an emerging technology that offers new capabilities which are not fully proven through sustained widespread use in the marketplace. Furthermore, the creation and use of blockchain technology and DApps in new industries will be subject to potential technical, legal and regulatory constraints. There is no warranty that blockchain-based assets and DApps will be uninterrupted or error-free and there is an inherent risk that the software, network, blockchain-based assets and related technologies and theories could contain undiscovered technical flaws or weaknesses, the cryptographic security measures that authenticate transactions and the distributed ledger could be compromised, and breakdowns could cause the partial or complete inability to use or loss of blockchain-based assets or DApps.

Global or local climate change and natural resource conservation regulations or requirements could adversely impact our business.

The long-term effects of climate change on the global economy and the cloud and SaaS industry remain unknown. Changes in weather where we operate may increase the costs of powering and cooling computer hardware we use to develop software and provide cloud-based services. In response to concerns about global climate change, governments may adopt new regulations affecting the use of fossil fuels or requiring the use of alternative fuel sources. Our server infrastructure consumes significant energy resources, including those generated by the burning of fossil fuels.

Our customers, investors and other stakeholders may require us to take steps to demonstrate that we are taking ecologically responsible measures in operating our business. The costs and any expenses we may incur to make our network more energy-efficient and comply with any new regulations could negatively impact our operating results. Failure to comply with applicable laws and regulations or other requirements imposed on us could result in material fines and penalties, litigation, regulatory investigation and/or governmental orders requiring us to change our data practices, which could damage our reputation and harm our business.

Risks Related to our Intellectual Property

Our products and services may infringe upon intellectual property rights of third parties and any infringement could require us to incur substantial costs and may distract our management.

We have had patent and other infringement lawsuits filed against us claiming that certain of our products and services infringe third party intellectual property rights, and we are subject to the future risk of additional third party claims alleging infringement against us or against our customers for use of our products and services. Many of our customer and partner contracts, including certain suppliers, contain indemnification obligations requiring us to indemnify our customers from certain claims against them or arising from the use of our services. Substantial litigation regarding intellectual property rights exists in the software industry. In the ordinary course of our business, our services and/or our customers' use of our services may be increasingly subject to third-party infringement claims as claims by non-practicing entities become more prevalent and the number of competitors in our industry segment grows and the functionality of services in different industry segments overlaps. Some of our competitors in the market for digital engagement technology, and/or web and mobile based consumer-facing services or other third parties may have filed or may intend to file patent applications covering aspects of their technology and have asserted and may in the future assert claims against us. Any claims alleging infringement of third-party intellectual property rights could require us to spend significant amounts in litigation (even if the claim is invalid), distract management from other tasks of operating our business, pay substantial damage awards, prevent us from selling our products, delay delivery of our services, require the development of non-infringing software, technology, business processes, systems or other intellectual property (none of which might be successful), or limit our ability to use the intellectual property that is the subject of any of these claims, unless we enter into license agreements with the third parties (which may be costly, unavailable on commercially reasonable terms, or not available at all). Therefore, any such claims could have a material adverse effect on our business, results of operations, cash flows and financial condition.

Our business and prospects would suffer if we are unable to protect and enforce our intellectual property rights.

Our success and ability to compete depend, in part, upon the protection of our intellectual property rights relating to the technology underlying our services. We rely on a combination of patent, copyright, trade secret, trademark and other common law protections in the United States and other jurisdictions, as well as confidentiality requirements and contractual provisions, to protect our proprietary technology, processes and other intellectual property. We own a portfolio of patents and patent applications in the U.S. and internationally and regularly file patent applications to protect intellectual property that we believe is important to our business, including intellectual property related to digital engagement technology, and/or web and mobile based consumer-facing services. We believe the duration of our patents is adequate relative to the expected lives of our products and services. We pursue the registration of our domain names, trademarks and trade names in the U.S. and in certain locations outside the U.S. We also own copyrights, including in our software, publications and other documents authored by us. These intellectual property rights are important to our business and marketing efforts. We seek to protect our intellectual property rights by relying on federal, state, and common law rights, including registration, or otherwise in the U.S. and certain foreign jurisdictions, as well as contractual restrictions. However, we believe that factors such as the technological and creative skills of our personnel, new service developments, frequent enhancements and reliable maintenance are more essential to establishing and maintaining a competitive advantage. Others may develop technologies that are similar or superior to our technology. We enter into confidentiality and other written agreements (including invention assignment agreements) with our employees,

consultants, customers, potential customers, strategic partners, and other third parties, and through these and other written agreements, we attempt to control access to and distribution of our software, documentation and other proprietary information. Despite our efforts to protect our proprietary rights, third parties may, in an unauthorized manner, attempt to use, copy or otherwise obtain and market or distribute our intellectual property rights or technology or otherwise develop a service with the same functionality as our services. Policing unauthorized use of our services and intellectual property rights is difficult, and we cannot be certain that the steps we have taken will prevent misappropriation of our technology or intellectual property rights, particularly in foreign countries where we do business, where our services are sold or used, where the laws may not protect proprietary rights as fully as do the laws of the U.S. or where enforcement of laws protecting proprietary rights is not common or effective.

The duration of the protection afforded to our intellectual property depends on the type of property in question, the laws and regulations of the relevant jurisdiction and the terms of its license agreements with others. With respect to our trademarks and trade names, trademark laws and rights are generally territorial in scope and limited to those countries where a mark has been registered or protected. While trademark registrations may generally be maintained in effect for as long as the mark is in use in the respective jurisdictions, there may be occasions where a mark or title is not registrable or protectable or cannot be used in a particular country. In addition, a trademark registration may be canceled or invalidated if challenged by others based on certain use requirements or other limited grounds. The duration of property rights in trademarks, service marks and trade names in the U.S., whether registered or not, is predicated on our continued use.

It is possible that:

- any issued patent or patents issued in the future may not be broad enough to protect our intellectual property rights;
- any issued patent or any patents issued in the future could be successfully challenged by one or more third parties, which could result in our loss of the right to prevent others from exploiting the inventions claimed in the patents;
- current and future competitors may independently develop similar technologies, duplicate our services or design around any patents we may have; and
- effective intellectual property protection may not be available in every country in which we do business, where our services are sold or used, where the laws may not protect proprietary rights as fully as do the laws of the United States or where enforcement of laws protecting proprietary rights is not common or effective.

Further, to the extent that the invention described in any U.S. patent was made public prior to the filing of the patent application, we may not be able to obtain patent protection in certain countries. We also rely upon copyright, trade secret, trademark and other common law in the U.S. and other jurisdictions, as well as confidentiality procedures and contractual provisions, to protect our proprietary technology, processes and other intellectual property. Any steps we might take may not be adequate to protect against infringement and misappropriation of our intellectual property by third parties. Similarly, third parties may be able to independently develop similar or superior technology, processes or other intellectual property. Third parties may register marks that are confusingly similar to the trademarks or services marks that we have used in the U.S. and our failure to monitor foreign registrations or mark usage may impact our rights in certain trademarks or services marks. Policing unauthorized use of our services and intellectual property rights is difficult, and we cannot be certain that the steps we have taken will prevent misappropriation of our technology or intellectual property rights, particularly in foreign countries where we do business, where our services are sold or used, where the laws may not protect proprietary rights as fully as do the laws of the U.S. or where enforcement of laws protecting proprietary rights is not common or effective. The unauthorized reproduction or other misappropriation of our intellectual property rights could enable third parties to benefit from our technology without paying us for it. If this occurs, our business, results of operations, and financial condition could be materially and adversely affected. In addition, disputes concerning the ownership or rights to use intellectual property could be costly and time-consuming to litigate, may distract management from operating our business and may result in our loss of significant rights.

Issues in the use of AI in our product offerings may result in reputational harm or liability.

We have built, and expect to continue to build, AI into many of our product offerings and we expect this element of our business to grow. We envision a future in which AI operating in our devices, applications and the cloud helps our customers be more productive in their business activities and interactions with consumers. As with many disruptive innovations, AI presents risks and challenges that could affect its adoption, and therefore our business. AI algorithms may be flawed. Datasets may be

insufficient or contain biased information. Inappropriate or controversial data practices by us or others could impair the acceptance of AI solutions. These deficiencies could undermine the decisions, predictions, or analysis AI applications produce, subjecting us to competitive harm, legal liability, and brand or reputational harm. Some AI scenarios present ethical issues. If we enable or offer AI solutions that are controversial because of their impact on human rights, privacy, employment, or other social issues, we may experience a material adverse effect on our business, results of operations and cash flows.

We may be subject to legal liability and/or negative publicity for the services provided to consumers via our technology platforms.

Our technology platforms enable representatives of our customers as well as individual service providers to communicate with consumers and other persons seeking information or advice on the web or via mobile devices. The law relating to the liability of online platform providers such as us for the activities of users of their online platforms is often challenged in the U.S. and internationally. We may be unable to prevent users of our technology platforms from providing negligent, unlawful or inappropriate advice, information or content via our technology platforms, or from behaving in an unlawful manner, and we may be subject to allegations of civil or criminal liability for negligent, fraudulent, unlawful or inappropriate activities carried out by users of our technology platforms.

Claims could be made against online services companies under both U.S. and foreign law, such as fraud, defamation, libel, invasion of privacy, negligence, data breach, copyright or trademark infringement, or other theories based on the nature and content of the materials disseminated by users of our technology platforms. In addition, domestic and foreign legislation has been proposed that could prohibit or impose liability for the transmission over the Internet of certain types of information. Our defense of any of these actions could be costly and involve significant time and attention of our management and other resources.

The Digital Millennium Copyright Act (“DMCA”) is intended, among other things, to reduce the liability of online service providers for transmitting or storing materials that infringe copyrights of others or referring, listing or linking to third party web properties that include materials that infringe copyrights of others. Additionally, Section 230 of the Communications Decency Act (“CDA”), is intended to provide statutory protections to online service providers who host or distribute third party content. A safe harbor for copyright infringement is also available under the DMCA to certain online service providers that provide specific services, if the providers take certain affirmative steps as set forth in the DMCA. There are various Congressional efforts to restrict the scope of the protections from liability for service providers in certain circumstances. Important questions regarding the safe harbor under the DMCA and the CDA have yet to be litigated, and we cannot guarantee that we will meet the safe harbor requirements of the DMCA or of the CDA. If we are not covered by a safe harbor, for any reason, we could be exposed to claims, which could be costly and time-consuming to defend.

Our consumer service allows consumers to provide feedback regarding service providers. Although all such feedback is generated by users and not by us, claims of defamation or other injury could be made against us for content posted on our websites. Our liability for such claims may be higher in jurisdictions outside the United States where laws governing Internet or mobile transactions are unsettled.

If we become liable for information provided by our users and carried via our service in any jurisdiction in which we operate, we could be directly harmed and we may be forced to implement new measures to reduce our exposure to this liability. In addition, the increased attention focused upon liability issues as a result of these lawsuits and legislative proposals could harm our reputation or otherwise impact the growth of our business. Any costs incurred as a result of this potential liability could harm our business.

In addition, negative publicity and user sentiment generated as a result of fraudulent or deceptive conduct by users of our technology platforms could damage our reputation, reduce our ability to attract new users or retain our current users, and diminish the value of our brand.

In the future, we may be required to spend substantial resources to take additional protective measures or discontinue certain service offerings, either of which could harm our business. Any costs incurred as a result of potential liability relating to the sale of unlawful services or the unlawful sale of services could harm our business. In addition to legislation and regulations relating to privacy and data security and collection, we may be subject to consumer protection laws that are enforced by regulators such as the FTC and private parties, and include statutes that regulate the collection and use of information for marketing purposes. Any new legislation or regulations regarding the Internet, mobile devices, software sales or export and/or the cloud or SaaS industry, and/or the application of existing laws and regulations to the Internet, mobile devices, software sales

or export and/or the cloud or SaaS industry, could create new legal or regulatory burdens on our business that could have a material adverse effect on our business, results of operations, and financial condition. Additionally, as we operate outside the U.S., the international regulatory environment relating to the Internet, mobile devices, software sales or export, and/or the SaaS industry could have a material adverse effect on our business, results of operations, and financial condition.

Risks Related to our International Operations and Tax Issues

Our results of operations may be adversely impacted due to our exposure to foreign currency exchange rate fluctuations.

We conduct business in currencies other than the U.S. dollar in Europe, Australia, Japan and Israel. As we continue to expand our international operations we become more exposed to the effects of fluctuations in currency exchange rates. As a result of the expanding size and scope of our international operations, our currency rate fluctuation risk associated with the exchange rate movement of the U.S. dollar has increased.

Since we conduct business in currencies other than the U.S. dollar but report our financial results in U.S. dollars, fluctuations in currency exchange rates could adversely affect our results of operations. For example, during the year ended December 31, 2021, we experienced a foreign currency exchange impact of approximately 1.8% percent, or approximately \$8.3 million if held in constant currency, to our revenue. Fluctuations in the value of the U.S. dollar relative to other foreign currencies could materially affect our revenue, cost of revenue and operating expenses, and result in foreign currency transaction gains and losses. We may seek to enter into hedging transactions in the future or to use financial instruments, such as derivative financial instruments, to mitigate risk, but we may be unable to enter into them successfully, on acceptable terms or at all. Additionally, these programs rely on our ability to forecast accurately and could expose us to additional risks that could adversely affect our financial condition and results of operations. We cannot predict whether or not we will incur foreign exchange losses in the future. To the extent the international component of our revenues grows, our results of operations will become more sensitive to foreign exchange rate fluctuations.

Economic conditions and regulatory changes caused by the United Kingdom's exit from the European Union could negatively impact our business.

On January 31, 2020, the U.K. withdrew its membership from the E.U., which is commonly referred to as "Brexit." Pursuant to the withdrawal arrangements entered into between the U.K. and the E.U. in connection with Brexit, the U.K. was no longer a part of the E.U. at the end of the transition period on December 31, 2020. While the U.K. has for the most part chosen to retain existing E.U. law and on December 24, 2020 the U.K. and E.U. agreed to a trade and cooperation agreement which took provisional effect from January 1, 2020, the longer term economic, legal, political and social implications for the U.K. and the E.U. remain unclear and may lead to ongoing political, regulatory and economic uncertainty and periods of exacerbated volatility in both the U.K. and in wider European markets for some time. Such uncertainty may have a material adverse effect on our ability to operate in the U.K. and the E.U.

Brexit has resulted in significant volatility in global stock market and currency exchange rate fluctuations that resulted in strengthening of the U.S. dollar relative to other foreign currencies in which we conduct business and global economic uncertainty. The continuing uncertainty may cause our customers to closely monitor their costs and reduce their spending budgets. This could negatively impact our business, including affecting our relationships with our existing and future customers, suppliers and employees.

Further volatility in exchange rates resulting from Brexit is expected to continue in the short term as a result of Brexit. We translate sales and other results denominated in foreign currency into U.S. dollars for our financial statements. During periods of a strengthening dollar, our reported international sales and earnings could be reduced because foreign currencies may translate into fewer U.S. dollars.

The longer term economic, legal, political and social implications of Brexit could potentially disrupt the markets we serve and the tax jurisdictions in which we operate and adversely change tax benefits or liabilities in these or other jurisdictions. They may also impact how we deliver our products and services to customers in the U.K. and in the E.U., which may cause us to lose customers, suppliers and/or employees and could result in increased operating expenses. In addition, Brexit could lead to further legal uncertainty and potentially divergent laws and regulations, as well as other adverse effects that we are unable to anticipate. Any of these effects of Brexit, among others, could negatively impact our business, results of operations, financial condition, cash flows and prospects.

We may be unsuccessful in expanding our operations internationally and/or into direct-to-consumer services due to additional regulatory requirements, tax liabilities, currency exchange rate fluctuations, and other risks, which could adversely affect our results of operations.

In addition to our operations in the U.S., we have operations in Australia, Bulgaria, Canada, France, Germany, Israel, Italy, Japan, Latin America, Netherlands, Singapore, Spain, and the U.K. We have also continued to invest in global messaging initiatives and in acquisitions. Our ability to continue to expand into international markets and in the online consumer market involves various risks, including the possibility that returns on such investments will not be achieved in the near future, or ever, and the difficulty of competing in markets with which we are unfamiliar.

Our international operations and direct-to-consumer services may also fail due to other risks inherent in foreign and/or online consumer operations, including:

- varied, unfamiliar, unclear and changing legal and regulatory restrictions, including different legal and regulatory standards applicable to Internet or mobile services, communications, privacy, and data protection;
- difficulties in staffing and managing foreign operations;
- differing intellectual property laws that may not provide sufficient protection for our intellectual property;
- adverse tax consequences or additional tax liabilities;
- difficulty in addressing country-specific business requirements and regulations, for instance, data privacy laws;
- fluctuations in currency exchange rates;
- strains on financial and other systems to properly administer value-added tax (“VAT”) and other taxes;
- different consumer preferences and requirements in specific international markets;
- international legal, compliance, political, regulatory or systemic restrictions, or other international governmental scrutiny, applicable to United States companies with sales and operations in foreign countries, including, but not limited to, possible compliance issues involving the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act, and similar laws in other jurisdictions; and
- local instability and shifting political, economic, and military conditions including armed conflict and terrorist activity.

In addition, we rely in part on third-party service providers with international operations. For example, we rely on a third-party service provider that utilizes approximately 100 engineers based in Ukraine for a portion of our engineering and software development initiatives. If this third party’s operations were disrupted or discontinued due to local instability or political, economic or military conditions, then our ability to provide services to some of our current customers and the development of new products or enhancement of existing products could be delayed, and our results of operations could be adversely affected.

Our current and any future international expansion plans will require management attention and resources and may be unsuccessful. We may find it impossible or prohibitively expensive to continue expand internationally or we may be unsuccessful in our attempt to do so, and our results of operations could be adversely impacted. In addition, violations of any foreign laws or regulations could result in fines, criminal sanctions against us, our officers or our employees, prohibitions on the conduct of our business and damage to our reputation.

Our operations may expose us to greater than anticipated income, non-income, and transactional tax liabilities, which could harm our financial condition and results of operations.

There is heightened scrutiny by fiscal authorities in many jurisdictions on the potential taxation of e-commerce businesses. The Organization for Economic Co-operation and Development (“OECD”) has issued guidelines, referred to as the Base Erosion and Profit Shifting project, to its member-nations aimed at encouraging broad-based legislative initiatives intended to prevent perceived base erosion transactions and income shifting in a tax-advantaged manner. Further, for the past several years, the OECD has had a specific focus on the taxation implications of e-commerce business, generally referred by the OECD as the “digital economy.” In the fourth quarter of 2019, the OECD released details on its proposed approach which would, among other changes, create a new right to tax certain “digital economy” income not necessarily based on traditional nexus concepts nor on the “arm’s length principle.” At this point, there is a lack of consensus among the key members, particularly the United States, with the latest OECD proposal. The United States has expressed that it would generally support a

solution along the lines proposed by the OECD only if the solution was in the form of a “safe-harbor” rather than a mandatory requirement. A failure to reach full consensus on an executable plan within the tight time frame under which the OECD is operating could result in individual jurisdictions legislating digital tax provisions in an uncoordinated and unilateral manner, and further result in greater or even double taxation that companies may not have sufficient means to remedy. For example, a number of jurisdictions, including the U.K., France and Italy, have already adopted or have formally proposed legislation that would affect the taxation of certain e-commerce businesses based on differing criteria and metrics. Efforts to alleviate this increased tax burden will increase the cost of structuring and compliance as well as the cost of doing business internationally. Any changes to the taxation of our international activities may increase our worldwide effective tax rate and adversely impact our financial position and results of operations.

Further, the prospective taxation by multiple jurisdictions of e-commerce businesses could subject us to exposure to withholding, sales, VAT and/or other transaction taxes on our past and future transactions in such jurisdictions where we currently or in the future may be required to report taxable transactions. A successful assertion by any jurisdiction that we failed to pay such withholding, sales, VAT or other transaction taxes, or the imposition of new laws requiring the registration for, collection of, and payment of such taxes, could result in substantial tax liabilities related to past, current and future sales, create increased administrative burdens and costs, discourage customers from purchasing content from us, or otherwise substantially harm our business and results of operations. We are currently subject to and in the future may become subject to additional compliance requirements for certain of these taxes. Changes in our exposure to withholding, sales, VAT and/or other transaction taxes could have an adverse impact on our financial condition in the future.

In addition, an increasing number of states have considered or adopted laws that attempt to impose tax collection obligations on out-of-state companies. In June 2018, the Supreme Court of the United States issued its decision in the matter of *South Dakota v. Wayfair, Inc.* This decision effectively reversed the 25-year-old “physical presence doctrine” previously established by the Supreme Court in *Quill Corp. v. North Dakota*, which required a minimum level of physical presence within a state before the state could impose an obligation to register and remit sales tax on revenue derived within that state. This decision may significantly increase the effort, resources and costs associated with the sales tax collection and compliance burden. Since the decision, a number of states have enacted sales tax enabling legislation which has had the effect of significantly expanding the liability of e-commerce companies to register, collect and remit state sales taxes from customers. A successful assertion by one or more states requiring us to collect taxes where we presently do not do so, or to collect more taxes in a jurisdiction in which we currently do collect some taxes, could result in substantial tax liabilities, including taxes on past sales, as well as penalties and interest. The imposition by state governments or local governments of sales tax collection obligations on out-of-state sellers could also create additional administrative burdens for us, put us at a competitive disadvantage if they do not impose similar obligations on our competitors, and decrease our future sales, which could have a material adverse effect on our business and results of operations.

Our ability to use our net operating losses to offset future taxable income may be subject to certain limitations.

As of December 31, 2021, we had federal net operating loss carryforwards (“NOLs”) of approximately \$553.4 million which are available to offset future federal taxable income. In general, under Section 382 of the Internal Revenue Code of 1986, as amended (the “Code”), a corporation that undergoes an “ownership change” (generally defined as a greater than 50-percentage-point cumulative change (by value) in the equity ownership of certain stockholders over a rolling three-year period) is subject to limitations on its ability to utilize its pre-change NOLs to offset post-change taxable income. Under Section 382 of the Code, our existing NOLs may be subject to limitations arising from previous ownership changes, and if we undergo an ownership change in the future, our ability to utilize NOLs could be further limited by Section 382 of the Code, or as a result of a corresponding provision of state law. Future changes in our stock ownership, some of which may be outside of our control, could result in an ownership change under Section 382 of the Code. Federal NOLs generated in taxable years ending on or before December 31, 2017, are eligible to be carried forward for up to 20 tax years (and carried back up to two tax years) following their incurrence. Federal NOLs generated in taxable years ending after December 31, 2017, are eligible to be carried forward indefinitely, but generally may only offset up to 80% of federal taxable income earned in a taxable year. As of December 31, 2021, approximately \$78.2 million of our approximately \$553.4 million of federal NOLs were generated in taxable years ending on or before December 31, 2017. If our ability to utilize federal NOLs were limited by Section 382 of the Code, it could result in NOLs generated on or before December 31, 2017, expiring unused. Our ability to utilize our NOLs is conditioned upon our maintaining profitability in the future and generating U.S. federal taxable income. Since we do not know whether or when we will generate the U.S. federal taxable income necessary to utilize our remaining NOLs, our NOLs generated on or prior to December 31, 2017 could expire unused.

Political, economic, and military conditions in Israel could negatively impact our Israeli operations.

A substantial portion of our product development staff, help desk and online sales support operations are located in Israel. As of December 31, 2021, we had 204 full-time employees in Israel. Although substantially all of our sales to date have been made to customers outside Israel, we are directly influenced by the political, economic and military conditions affecting Israel. Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its neighboring countries, Hamas (an Islamist militia and political group that controls the Gaza Strip), Hezbollah (an Islamist militia and political group based in Lebanon) and other armed groups. Furthermore, Iran has threatened to attack Israel and may be developing nuclear weapons.

In addition, the State of Israel and Israeli companies have been subject to economic boycotts. Several countries still restrict business with the State of Israel and with Israeli companies. These restrictive laws and policies may have an adverse impact on our results of operations, financial condition or the expansion of our business. A campaign of boycotts, divestment, and sanctions has been undertaken against Israel, which could also adversely affect our business. Actual or perceived political instability in Israel or any negative changes in the political environment, may individually or in the aggregate adversely affect the Israeli economy and, in turn, our business, financial condition and results of operations.

Parties with whom we do business may sometimes decline to travel to Israel during periods of heightened unrest or tension, forcing us to make alternative arrangements when necessary in order to meet our business partners face to face. In addition, the political and security situation in Israel may result in parties with whom we have agreements involving performance in Israel claiming that they are not obligated to perform their commitments under those agreements pursuant to force majeure provisions in such agreements.

Further, shifting economic and political conditions in the U.S. and in other countries may result in changes in how the U.S. and other countries conduct business and other relations with Israel, which may have an adverse impact on our Israeli operations and a material adverse impact on our business.

Our commercial insurance may not cover losses that could occur as a result of events associated with the security situation in the Middle East. Any losses or damages incurred by us could have a material adverse effect on our business. Armed conflicts or political instability in the region could negatively affect our business and could harm our results of operations.

Continued hostilities between Israel and its neighbors and any future armed conflict, terrorist activity or political instability in the region could adversely affect our operations in Israel and adversely affect the market price of our securities. In addition, escalation of tensions or violence might require more widespread military reserve service by some of our Israeli employees and might result in a significant downturn in the economic or financial condition of Israel, either of which could have a material adverse effect on our operations in Israel and our business.

Risks Related to our Outstanding Convertible Notes

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

In March 2019, we issued \$230.0 million in aggregate principal amount of 0.75% Convertible Senior Notes due 2024 in a private placement. The interest rate on the 2024 Notes is fixed at 0.75% per annum and is payable semi-annually in arrears on March 1 and September 1 of each year. In December 2020, we issued \$517.5 million in aggregate principal amount of 0% Convertible Senior Notes due 2026 in a private placement. The 2026 Notes do not bear any regular interest payments.

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.

Holder 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.

Provisions in the indentures for the Notes may deter or prevent a business combination that may be favorable to you.

If a fundamental change occurs prior to the maturity date of the Notes, the holders of the Notes will have the right, at their option, to require us to repurchase all or a portion of their Notes. In addition, if a make-whole fundamental change occurs prior the maturity date of the Notes, we will in some cases be required to increase the conversion rate for a holder that elects to convert its Notes in connection with such make-whole fundamental change. Furthermore, the indentures for the Notes prohibit us from engaging in certain mergers or acquisitions unless, among other things, the surviving entity assumes our obligations under the Notes. These and other provisions in the indentures governing the Notes could deter or prevent a third party from acquiring us even when the acquisition may be favorable to you.

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 ASC 470-20, *Debt with Conversion and Other Options*, 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 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 August 2020, the FASB issued ASU 2020-06, ASC Subtopic 470-20 “Debt - Debt with Conversion and Other Options” and ASC Subtopic 815-40 “Hedging - Contracts in Entity’s Own Equity” that changes the accounting for the convertible debt instruments described above. Under the new standard, an entity may no longer separately account for the liability and equity components of convertible debt instruments. Additionally, the treasury stock method for calculating earnings per share will no longer be allowed for convertible debt instruments the principal amount of which may be settled using shares. Rather, the “if-converted” method may be required. Application of the “if converted” method may reduce our reported diluted earnings per share. The standard is effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years and early adoption is permitted. We cannot be sure whether other changes may be made to the accounting standards related to the 2024 Notes and 2026 Notes, or otherwise, that could have an adverse impact on our financial statements.

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 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 call transactions.

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.

Risks Related to our Common Stock

Our stock price has been, and may continue to be, highly volatile, which could reduce the value of your investment and subject us to litigation.

The price of our common stock has fluctuated significantly in the past and may continue to be highly volatile, with extreme price and volume fluctuations. Our trading price could fluctuate substantially in the future, including in response to the following factors, some of which are beyond our control:

- quarterly variations in our operating results or those of our competitors;
- earnings announcements that are not in line with analyst expectations;
- changes in recommendations or financial estimates by securities analysts;
- announcements or rumors about mergers or strategic acquisitions by us or by our competitors;
- announcements about customer additions and cancellations or failure to complete significant sales;
- changes in market valuations of companies that investors believe are comparable to us;
- additions or departures of key personnel;
- our exposure, or perceptions or misperceptions of our exposure to cryptocurrencies;
- consequences of unexpected geopolitical events, natural disasters, acts of war or climate change;
- pandemics, epidemics or similar widespread public health concerns; and
- general economic, political and market conditions, such as recessions, political unrest or terrorist attacks, or in the specific locations where we operate, such as the United States, Israel and the United Kingdom.

In addition, extreme price and volume fluctuations in the stock markets generally, and in the markets for technology companies in particular, could cause the market price for our common stock to decline. In the past, companies that have experienced volatility in the market price of their stock have been the subject of securities class action litigation. We may in the future be the target of similar litigation, which could result in substantial costs and distract management's attention and resources.

Our common stock is traded on more than one market and this may result in price variations.

Our common stock is currently traded on the Nasdaq and the TASE. Trading in our common stock on these markets takes place in different currencies (U.S. dollars on the Nasdaq and New Israeli Shekels on the TASE) and at different times (due to different time zones, trading days and public holidays in the United States and Israel). The trading prices of our common stock on these two markets may differ due to these and other factors. Any decrease in the trading price of our common stock on one of these markets could cause a decrease in the trading price of our common stock on the other market. Differences in trading prices on the two markets could negatively impact our trading price.

If our officers, directors, and largest stockholders choose to act together, they may be able to significantly influence our management and operations, acting in their own best interest and not necessarily those of our other stockholders.

As of December 31, 2021, our executive officers, directors and holders of 5% or more of our outstanding common stock and their affiliates in the aggregate beneficially owned approximately 40.8% of our outstanding common stock. As a result, these stockholders, acting together, have the ability to significantly influence all matters requiring approval by our stockholders, including the election of directors and approval of significant corporate transactions. Our executive officers, directors and principal stockholders could also delay or prevent a change in control. The interests of this group of stockholders may not always coincide with LivePerson's interests or the interests of other stockholders, and they may act in a manner that advances their best interests and not necessarily those of our other stockholders.

Future sales of substantial amounts of our common stock may negatively affect our stock price.

If we or our stockholders sell substantial amounts of our common stock, including shares issuable upon the exercise of outstanding options and warrants, or upon the conversion of the Notes, in the public market, or if the market perceives that these sales might occur, the market price of our common stock could fall. These sales also might make it more difficult for us to

sell equity securities in the future at a time and price that we deem appropriate. No prediction can be made as to the effect, if any, that market sales of our common stock will have on the market price of our common stock.

Provisions in our charter documents and Delaware law could discourage, delay, or prevent a takeover that stockholders may consider favorable.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws may have the effect of discouraging, delaying or preventing a change in control or changes in our management that stockholders may deem advantageous. These provisions include the following:

- Our board of directors is divided into three classes, with each class serving three-year staggered terms, which prevents stockholders from electing an entirely new board of directors at any annual meeting;
- Vacancies on our board of directors may only be filled by a vote of a majority of directors then in office, even if less than a quorum;
- Our amended and restated certificate of incorporation prohibits cumulative voting in the election of directors or any other matters. This limits the ability of minority stockholders to elect director candidates;
- Our stockholders may only act at a duly called annual or special meeting and may not act by written consent;
- Stockholders must provide advance notice to nominate individuals for election to our board of directors or to propose other matters that can be acted upon at a stockholders' meeting;
- We require supermajority voting by stockholders to amend certain provisions in our amended and restated certificate of incorporation and to amend our amended and restated bylaws; and
- Our amended and restated bylaws expressly authorize a supermajority of the board of directors to amend our amended and restated bylaws.

As a Delaware corporation, we are also subject to Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with an interested stockholder for a period of three years following the date on which the stockholder became an interested stockholder, unless certain conditions are met. This anti-takeover provision defenses could discourage, delay or prevent a change in control of our company, whether or not it is desired by or beneficial to our stockholders, which in turn could have a material adverse effect on the market price of our common stock.

We cannot assure our stockholders that any stock repurchase programs will be fully consummated or will enhance long-term stockholder value, and stock repurchases could increase the volatility of the price of our common stock and will diminish our cash reserves.

Repurchases pursuant to any stock repurchase program that we may enter could affect our stock price and increase its volatility. The existence of a stock repurchase program could also cause our stock price to be higher than it would be in the absence of such a program and could potentially reduce the market liquidity for our stock. Additionally, repurchases under a stock repurchase program would diminish our cash reserves, which could impact our ability to pursue possible future strategic opportunities and acquisitions and could result in lower overall returns on our cash balances. There can be no assurance that any stock repurchases will enhance stockholder value because the market price of our common stock may decline below the levels at which we repurchased shares of stock.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

LivePerson is headquartered in New York City, and we maintain a globally distributed, remote workforce. In 2020, due to health concerns related to the COVID-19 pandemic, the Company vacated its physical offices around the world, and began transitioning to an "employee-centric" workforce model, leveraging its expertise in AI and asynchronous communication to support operations, culture and productivity in this new environment. During the second quarter of 2021, the Company decided to reoccupy some of its leased space to provide its employees with the option of working in an office space environment if they choose to do so.

As of December 31, 2021, we have data centers in the United States, Europe, and Australia pursuant to various lease agreements. We believe that our current facilities properties are in good condition and are adequate to meet our current needs. If required, we believe that we will be able to obtain suitable additional space on commercially reasonable terms.

Item 3. Legal Proceedings

The Company filed an intellectual property suit against [24]7 Customer, Inc. (“[24]7”) 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 filed suit against the Company in the Northern District of California alleging patent infringement. On December 7, 2015, [24]7 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 and Trademark Office in the Company’s favor have invalidated the majority of [24]7 patents that were asserted in the patent cases. The Company believes the remaining claims filed by [24]7 are entirely without merit and intends to defend them vigorously. Trial for the Company’s intellectual property and other claims asserted against [24]7 related to three of the customers at issue occurred on May 24, 2021 and the jury awarded approximately \$30.3 million in favor of the Company, including approximately \$6.7 million in compensatory damages and approximately \$23.6 million in punitive damages. The Company currently anticipates that [24]7 may elect to pursue challenges to this award on procedural grounds. Accordingly, no amounts for the settlement have been reflected in the Company’s financial statements. Trial for [24]7’s patent infringement claims has been vacated, to be reset by the Court.

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 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 4. Mine Safety Disclosures

Not Applicable.

PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Price Range of Common Stock. The principal United States market on which our common stock is traded is the Nasdaq under the symbol LPSN. Our shares of common stock are also traded on the TASE under the symbol LPSN TA.

Holders. As of February 10, 2022, there were approximately 197 holders of record of our common stock.

Dividends. We have not declared or paid any cash dividends on our capital stock since our inception. We intend to retain earnings, if any, to finance the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future.

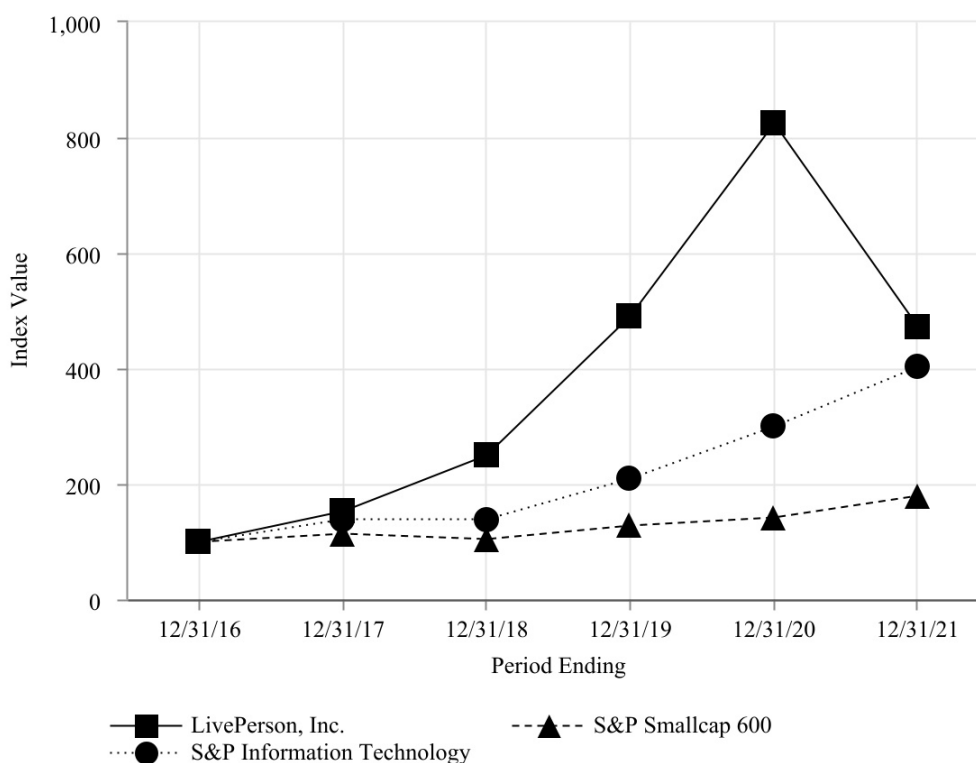
Unregistered Sales of Securities. On October 18, 2021, the Company sold a total of 698,987 shares of its common stock as partial consideration of the Company’s acquisition of Tenfold in a transaction exempted from registration under Section 4(a)(2) of the Securities Act of 1933. On October 25, 2021, the Company sold a total of 1,078,610 shares of its common stock as partial consideration of the Company’s acquisition of VoiceBase in a transaction exempted from registration under Section 4(a)(2) of the Securities Act of 1933.

Issuer Purchases of Equity Securities. A summary of the Company’s repurchase activity for the three months ended December 31, 2021 is as follows:

Period	Total Number of Shares Purchased ⁽¹⁾	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
Oct 1, 2021 - Oct 31, 2021	—	\$ —	—	\$ —
Nov 1, 2021 - Nov 30, 2021	30,344	23.37	—	—
Dec 1, 2021 - Dec 31, 2021	—	—	—	—
Total	30,344	\$ 23.37	—	—

(1) In November 2021, the Company repurchased 30,344 options to buy an aggregate of 30,344 shares from John Collins.

Stock Performance Graph. The graph depicted below compares the annual percentage changes in LivePerson’s cumulative total stockholder return with the cumulative total return of the Standard & Poor’s SmallCap 600 Index and the Standard & Poor’s Information Technology Index.



- (1) The graph covers the period from December 31, 2016 to December 31, 2021.
- (2) The graph assumes that \$100 was invested at the market close on December 31, 2016 in LivePerson’s Common Stock, in the Standard & Poor’s SmallCap 600 Index and in the Standard & Poor’s Information Technology Index, and that all dividends were reinvested. No cash dividends have been declared on LivePerson’s Common Stock.
- (3) Stockholder returns over the indicated period should not be considered indicative of future stockholder returns.

Notwithstanding anything to the contrary set forth in any of our previous or future filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, that might incorporate by reference this Annual Report on Form 10-K or future filings made by the Company under those statutes, the Stock Performance Graph above is not deemed filed with the SEC, is not deemed soliciting material and shall not be deemed incorporated by reference into any of those prior filings or into any future filings made by us under those statutes, except to the extent that we specifically incorporate such information by reference into a previous or future filing, or specifically request that such information be treated as soliciting material, in each case under those statutes.

Item 6. [Reserved]

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

General

You should read the following discussion of our financial condition and results of operations in conjunction with the financial statements and the notes thereto included elsewhere in this report. The following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this report, particularly in “Risk Factors.”

Overview

LivePerson is a leading Conversational AI company creating digital experiences that are Curiously Human. Conversational AI allows humans and machines to interact using natural language, including speech or text. During the past decade, consumers have made mobile devices the center of their digital lives, and they have made mobile messaging the center of communication with friends, family and peers. This trend has been significantly accelerated by the COVID-19 pandemic and we believe can now be viewed as a permanent, structural shift in consumer behavior. Our technology enables consumers to connect with businesses through these same preferred conversational interfaces, including Facebook Messenger, SMS, WhatsApp, Apple Business Chat, Google Rich Business Messenger and Alexa. These messaging conversations harness human agents, bots and AI to power convenient, personalized and content-rich journeys across the entire consumer lifecycle, from discovery and research, to sales, service and support, and increasingly marketing, social, and brick and mortar engagements. For example, consumers can look up product info like ratings, images and pricing, search for stores, see product inventory, schedule appointments, apply for credit, approve repairs, and make purchases or payments - all without ever leaving the messaging channel. These AI and human-assisted conversational experiences constitute the Conversational Space, within which LivePerson has strategically developed one of the industry’s largest ecosystems of messaging endpoints and use cases.

The Conversational Cloud, our enterprise-class cloud-based platform, enables businesses to become conversational by securely deploying AI-powered messaging at scale for brands with tens of millions of customers and many thousands of agents. The Conversational Cloud powers conversations across each of a brand’s primary digital channels, including mobile apps, mobile and desktop web browsers, SMS, social media and third-party consumer messaging platforms. Brands can also use the Conversational Cloud to message consumers when they dial a 1-800 number instead of forcing them to navigate IVRs and wait on hold. Similarly, the Conversational Cloud can ingest traditional emails and convert them into messaging conversations, or embed messaging conversations directly into web advertisements, rather than redirect consumers to static website landing pages. Agents can manage all conversations with consumers through a single console interface, regardless of where the conversations originated.

LivePerson’s robust, cloud-based suite of rich messaging, real-time chat, AI and automation offerings features consumer and agent facing bots, intelligent routing and capacity mapping, real-time intent detection and analysis, queue prioritization, customer sentiment, analytics and reporting, content delivery, PCI compliance, co-browsing and a sophisticated proactive targeting engine. An extensible 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 40 APIs and software development kits are available on the Conversational Cloud.

For your reference:

- **Conversational AI:** Conversational AI allows humans and machines to interact using natural language, including speech or text.
- **Conversational Space:** In the Conversational Space, consumers message with brands on their own schedule, using natural language, to resolve their intents - all on their preferred messaging service. The core capabilities of the Conversational Space are voice and text-based interfaces, powered by AI and humans working together. Conversational Space is the simplest, most intuitive interface of all.
- **Conversational Cloud:** LivePerson’s enterprise-class, AI-powered Conversational Cloud platform empowers consumers to message their favorite brands, just as they do with friends and family.

LivePerson’s Conversational AI offerings put the power of bot development, training, management and analysis 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 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. 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 messaging with our proprietary Conversational AI, as well as third-party bots, the Conversational Cloud offers brands a comprehensive approach to scaling automations across their millions of customer conversations.

Complementing our proprietary messaging and Conversational AI offerings are teams of technical, solutions and consulting professionals that have developed deep domain expertise in the implementation and optimization of conversational services across industries and messaging endpoints. We are a leading authority in the Conversational Space. LivePerson's products, coupled with our domain knowledge, industry expertise and professional services, have been proven to maximize the effectiveness of the Conversational Space and deliver measurable return on investment for our customers. Certain of our customers have achieved the following advantages from our offerings:

- the ability for each agent to 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;
- labor efficiency gains of at least two times that of voice agents, effectively cutting labor costs by at least 50%;
- improving the overall customer experience, thereby fueling customer satisfaction score increases of up to 20 percentage points, and enhancing retention and loyalty;
- more convenient, personalized and content-rich conversations that increase sales conversion by up to 20%, increase average order value and reduce abandonment;
- more satisfied contact center agents, thereby reducing agent churn by up to 50%;
- a valued connection with consumers via mobile devices, either through native applications, websites, text messages, or third-party messaging platforms;
- leveraged spending that drives visitor traffic by increasing visitor conversions;
- refining and improving performance by understanding which initiatives deliver the highest rate of return; and
- increased lead generation by providing a single platform that engages consumers through advertisements and listings on branded and third-party websites.

As a "cloud computing" or 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.

To further enhance our platform, in September 2020 we signed a partnership with a digital services and consulting company to transform our technology infrastructure on the public cloud, to build integrated solutions and a global practice around our Conversational Cloud to sell into this company's channels and global enterprise customer base, and to redefine how the world's top brands communicate.

More than 18,000 businesses, including HSBC, Orange, and GM Financial use our conversational solutions to orchestrate humans and AI, at scale, and create a convenient, deeply personal relationship with their customers.

LivePerson's consumer services offering is an online marketplace that connects Experts who provide information and knowledge for a fee via mobile and online messaging with 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.

The key elements of LivePerson's business solutions strategy include:

Build awareness and drive adoption of the Conversational Space. LivePerson brought our first customer live on messaging in June 2016. Since that time, we have been focused on building awareness for conversational experiences 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 (events in 2020 were held virtually in light of the COVID-19 pandemic) that target executives from enterprise customers and prospects, and feature a key theme within the Conversational Space, such as Apple Business Chat, Google Rich Business Messenger, IVR deflection or AI. LivePerson customers are the center point of these summits, presenting why they chose LivePerson for conversational experiences, how they achieved success, and what type of ROI they have realized. Each attendee then receives a blueprint for how they can pursue 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 2021, nearly 75% of messaging conversations had automation attached. We will continue to focus on building awareness for the Conversational Space and driving adoption of messaging and AI across our customer base.

Increase messaging volumes by developing a broad ecosystem, expanding customer use cases, and focusing on AI and automation. Our strategy is to drive higher messaging volumes by going both wide across messaging endpoints, deep across consumer use cases, and focusing on AI and automation as the means to deliver powerful scale. 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 drive broad messaging adoption, it is imperative that the Conversational Cloud integrates to all of the messaging apps that consumers prefer to use for communication and addresses all key use cases. 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 ours has been to build one of the industry's broadest ecosystems of messaging endpoints and use cases. 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. In 2019, we added email, allowing brands to manage emails through the same console they use for messaging, and to convert legacy emails into messaging conversations. We also added social monitoring and conversational tools for Twitter and Facebook, and introduced proactive messaging, allowing brands to transform traditional one-way notifications such as flight cancellations or phone plan overage alerts into two-way conversations. Finally, we connected to Facebook and WhatsApp digital advertisements, enabling consumers to initiate messaging conversations for marketing and customer care directly within the advertisement. In 2020, we added Instagram and Google's Business Messages, allowing brands to bring customer-initiated conversations into the Conversational Cloud directly from Instagram, Google Search, and Google Maps.

Each channel and use case added opens the door to new consumers, providing brands a greater opportunity to shift share away from their legacy contact center channels into messaging. For example, in 2019, leading airlines launched on WhatsApp and Apple Business Chat with the ability to make secure payments; a baseball stadium launched an automated conversational concierge providing answers to a wide range of questions from restroom locations to player stats; and a multinational telecommunications company used proactive two-way messaging for outbound campaigns. In 2020, one of the largest Telcos in Australia fully virtualized their contact centers, a leading U.S. quick-serve restaurant launched on Facebook Messenger to help customers order meals, one of the biggest banks in the world launched an Apple Business Chat channel to provide a secure way to perform day-to-day banking, and one of the world's largest jewelry retailers used the Conversational Cloud and QR codes to sell millions of dollars of product.

LivePerson makes the management of all these disparate channels seamless to the brand. AI-based 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.

We believe LivePerson is leading the structural shift to Conversational AI. In the wake of the COVID-19 pandemic, leading brands are turning to LivePerson's AI-powered messaging to overcome a capacity gap created by voice call agent work-from-home measures and increased demand for digital engagement as consumers practice social distancing. LivePerson is powering Conversational AI, automation and messaging strategies across a growing number of use cases from care and sales, to marketing, social, conversational advertising and brick and mortar. Our Conversational AI leadership and the increase in adoption have 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 exceeded the high end of our target range of 105% to 115% for 2021. The benefit can also be seen in LivePerson's ARPU for our enterprise and mid-market customers,

which increased approximately 31% in 2021 to \$610,000 from approximately \$465,000 in 2020. 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.

Attract the industry's best AI, machine learning and conversational talent. We believe that AI and machine learning are critical to successfully scaling in the Conversational Space, and that in order to develop the industry's leading technology, we need to attract the industry's best talent. Since 2018, LivePerson hired more than 437 of the industry's brightest data scientists, machine learning engineers and automation engineers, many from firms such as Nike, Amazon.com, Microsoft and Target, who are working exclusively on applying AI to the Conversational Space. LivePerson also expanded its development talent base in Germany, and added key development talent through the acquisitions of BotCentral in Mountain View, California; Tenfold in Austin, Texas; e-bot7 in Munich, Germany; and VoiceBase in San Francisco, California.

Bring to market best-in-class AI and machine learning technologies designed for the Conversational Space. We believe that in the last decade many vendors introduced AI and bot offerings that 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 platforms such as the Conversational Cloud. In December 2018, LivePerson announced its 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, LivePerson's Conversational AI 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, LivePerson's Conversational AI 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 LivePerson's Conversational AI include:

- a holistic approach to scaling AI by combining consumer facing bots, agent facing bots, intelligent routing and real-time intent understanding, with an analytics dashboard that helps users focus on the intents that are impacting their business and prioritize which intents to automate next;
- bot building software that is based on dialogue instead of workflow or code, so non-technical employees like contact center agents can design automations;
- leveraging a data moat from hundreds of millions of conversations to feed the machine learning that rapidly and accurately detects consumer sentiment and intents in real-time. Customers of LivePerson can use intent understanding for advanced routing, next-best actions, and to fully contain conversations with automation;
- 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;
- the ability to bootstrap conversations with existing transcripts, reducing design effort and speeding time to market;
- third-party AI NLU integration, so customers are not boxed into one vendor; and
- AI analytics and reporting tailored to the Conversational Space, providing brands with immediate, actionable insights about their businesses and contact center operations.

Our strategy is to continue to enhance the Conversational AI engine and related products, by 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 brands' investment. Over the past four years we have made good progress in developing our conversational AI platform and within the next 12 months, we expect to have a solution in place for our automations to self-heal, which is the ultimate goal of any AI platform. Our acquisitions of VoiceBase and Tenfold provide us with a mechanism for data capture in the voice channel. This additional data and the associated analytics and system integration give us an even greater ability to scale the usage of our platforms, by building on our strength in messaging. 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 correctly, the entire consumer lifecycle with a brand will be maintained within the Conversational Space, and traffic will steadily shift away from lower returning traditional voice calls, websites, emails, and apps to higher returning messaging endpoints.

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

- The Conversational Cloud, LivePerson's 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 the Conversational Space, intent recognition, robust real-time reporting, role-based real-time analytics, predictive intelligence, and innovations in customer satisfaction and connection measurement. Additionally, the Conversational Cloud is an open platform with pre-built, enterprise-grade integrations into back-end systems as well as the ability to work across NLU providers.
- The Company believes it has a data moat built on hundreds of millions of conversations across industries, geographies and use cases that is feeding the machine learning engines that power intent understanding.
- The platform has expanded to power conversations across a broad spectrum of channels and use cases, from traditional sales and customer service, to marketing, social, email, advertising and brick and mortar.
- 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 the Conversational Space. 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.
- The Company has developed Gainshare - 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. Gainshare is a fully managed solution where LivePerson not only provides the messaging and AI automation technology, but also the labor, automation, and end-to-end program management, leveraging the Company's expertise with Conversational AI and messaging operations. Gainshare is an option for brands that want to accelerate a transformation to Conversational AI, or that want a worry-free solution where LivePerson manages the entire operation, from staffing to automation building and optimization, to conversation design and consumer experience. Gainshare pricing is bespoke, and is typically structured around a brand's desired goals, whether driving incremental revenue or reducing operational costs.

We believe that LivePerson's differentiated approach to the Conversational Space, 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 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 our market position by increasing our customer base, and expanding within our installed base. We plan to 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 SMB sector. In 2019, we made strong inroads into new verticals with key wins in the airline, food service and healthcare industries. In 2020, we strengthened our presence in key markets including travel/hospitality and retail, and opened new verticals like healthcare and government. In 2021, we continued to grow in verticals such

as healthcare and financial services, and expanded into new industries. We are experimenting with new conversational businesses, including some that are in regulated industries, like online banking and healthcare. We are increasingly structuring our field organization to emphasize our domain expertise and strengthen customer relationships across target industries.

Continue to build our international presence. We are focused on building our international presence and expanding our international revenue contribution, which accounted for 35% and 38% of total revenue in 2021 and 2020, respectively. We are generating positive results from our recent investments in the Asia Pacific, Europe, and Latin America regions. Expanding go-to-market capacity in international theaters is one of our key strategic focuses and also part of our motivation for our recent acquisition of e-bot7.

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 third-party messaging endpoints including SMS, Facebook Messenger, Apple Business Chat, Google Rich Business Messenger, Line, WhatsApp, Alexa, Google Home, WeChat, Google Ad Lingo, Google Search, Google Maps, Instagram and Twitter, multiple IVR vendors, and dozens of branded apps. The Conversational Cloud integrates our proprietary messaging and Conversational AI with third-party bot offerings, 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 40 APIs and software development kits 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 launched LivePerson Functions, a serverless FaaS integration which enables brands to develop custom behaviors within LivePerson's conversational platform to easily and rapidly tailor conversation flows to their specific needs.

Expand sales partnerships to broaden our presence and accelerate sales cycles. We are focused on broadening our 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. In 2019, we announced strategic partnerships with TTEC, a leading BPO focused on customer experience, and DMI, a digital transformation company, to redefine the customer experience with digital engagement, messaging, and AI-driven automation. In 2020, a digital services and consulting company joined LivePerson's network with a first-of-its-kind 360 degree partnership focusing not only on capturing the global rising demand for conversational commerce and building a personalized experience for customers, but also driving the transformation for internal corporate messaging and the employee experience through Conversational AI. In 2021, we announced strategic integration partnerships with Google Cloud, Adobe and Medallia to help brands make contact center agents more efficient and effective, and empower and enrich the management of customer and employee experience through the power of AI. Our network also expanded with the Tech Mahindra partnership to help brands deliver personalized conversational experiences to consumers at scale.

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. In July 2021, we acquired German conversational AI company e-bot7, which propels our self-service capabilities and continued growth across Europe. In October 2021, we acquired VoiceBase, a leader in real-time speech recognition and conversational analytics; and Tenfold, an advanced customer engagement platform for integrating communication systems with leading CRM and support services. Once fully integrated, we expect these acquisitions to allow LivePerson to deliver our AI and automation capabilities, insights, and integration as a single integrated product offering across all channels including voice and messaging.

Key Metrics

Financial overview of the three and twelve months ended December 31, 2021 compared to the comparable periods in 2020 is as follows:

- Revenue increased 21% and 28% to \$123.8 million and \$469.6 million in the three and twelve months ended December 31, 2021, respectively, from \$102.1 million and \$366.6 million in the comparable periods in 2020.
- Revenue from our Business segment increased 21% and 28% to \$114.1 million and \$431.9 million in the three and twelve months ended December 31, 2021, respectively, from \$94.1 million and \$336.9 million in the comparable periods in 2020.
- Gross profit margin decreased to 64% in the three months ended December 31, 2021 from 73% in the comparable period in 2020. Gross profit margin decreased to 67% in the twelve months ended December 31, 2021 from 71% in the comparable period in 2020.
- Cost and expenses increased 55% and 23% to \$169.1 million and \$562.9 million in the three and twelve months ended December 31, 2021, respectively, from \$108.8 million and \$456.1 million in the comparable periods in 2020.
- Net loss increased to \$49.9 million and to \$125.0 million in the three and twelve months ended December 31, 2021, respectively, from net loss of \$13.3 million and \$107.6 million for the three and twelve months ended December 31, 2020, respectively.
- Trailing-twelve-month average revenue per enterprise and mid-market customer was approximately \$610,000 in 2021, as compared to approximately \$465,000 in 2020.
- Revenue retention rate for enterprise and mid-market customers on Conversational Cloud exceeded the high end of our target range of 105% to 115% in 2021 and 2020.

Adjusted EBITDA and Adjusted Operating Income (Loss)

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

We have included adjusted EBITDA and adjusted operating income (loss) in this Annual Report on Form 10-K 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 (loss) 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 (loss) 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 related 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.

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

	Year Ended December 31,				
	2021	2020	2019	2018	2017
	(In thousands)				
Reconciliation of Adjusted EBITDA:					
GAAP net loss	\$ (124,974)	\$ (107,594)	\$ (96,071)	\$ (25,032)	\$ (18,191)
Amortization of purchased intangibles and finance leases	9,327	3,552	2,932	2,813	4,682
Stock-based compensation	69,656	65,946	44,105	14,841	8,944
Contingent earn-out adjustments	132	263	—	—	—
Restructuring costs ⁽¹⁾	3,397	29,420	2,043	4,468	2,594
Depreciation	27,423	22,826	16,366	14,188	12,358
Other litigation and consulting costs ⁽²⁾	6,665	5,375	7,974	5,928	7,648
(Benefit from) provision for income taxes	(2,404)	2,466	2,845	858	501
Acquisition costs	5,808	—	—	555	—
Interest expense (income), net	37,406	14,334	7,407	(22)	(26)
Other (income) expense, net ⁽³⁾	(3,294)	1,343	(1,213)	493	(110)
Adjusted EBITDA (loss)	\$ 29,142	\$ 37,931	\$ (13,612)	\$ 19,090	\$ 18,400

- (1) Includes severance costs and other compensation related costs of \$2.7 million and lease restructuring costs of \$0.7 million for the year ended December 31, 2021. Includes lease restructuring costs of \$24.3 million and severance and other compensation related costs of \$5.1 million for the year ended December 31, 2020. Includes severance and associated costs of \$2.0 million for the year ended December 31, 2019. Includes severance costs of \$4.5 million for the year ended December 31, 2018. Includes wind down costs of legacy platform of \$1.9 million and severance costs of \$0.7 million for the year ended December 31, 2017. The restructuring costs relate to resource reallocation for the Company's platform transformation.
- (2) Includes litigation costs of \$4.1 million, employee benefit costs of \$0.5 million, consulting costs of \$2.4 million, and a reversal of reserve for sales and use tax liability of \$0.3 million for the year ended December 31, 2021. Includes other litigation costs of \$5.4 million for the year ended December 31, 2020. Includes other litigation costs of \$4.4 million relating to the Company's intellectual property lawsuit against [24]7 Customer, Inc., consulting costs of \$3.2 million, and fair value earn-out adjustment of \$0.3 million for the year ended December 31, 2019. Includes litigation costs of \$4.1 million, consulting costs of \$1.3 million, executive recruitment costs of \$0.3 million, and executive relocation costs of \$0.2 million for the year ended December 31, 2018. Includes litigation costs of \$6.2 million, executive one-time compensation payment of \$1.0 million, and executive separation cost of \$0.5 million for the year ended December 31, 2017. Other litigation costs relate to lease restructuring costs, along with other general legal matters.
- (3) Includes \$3.5 million of other income related to the settlement of leases for the year ended December 31, 2021. The remaining amount of other (income) expense is attributable to currency rate fluctuations.

Our use of adjusted operating income (loss) 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 (loss) does not reflect cash capital expenditure requirements for such replacements or for new capital expenditure requirements;
- adjusted operating income (loss) does not consider the impact of acquisition related costs;
- adjusted operating income (loss) does not consider the impact of restructuring costs;
- adjusted operating income (loss) does not consider the impact of other costs; and
- other companies, including companies in our industry, may calculate adjusted operating income (loss) differently, which reduces its usefulness as a comparative measure.

Because of these limitations, you should consider adjusted operating income (loss) 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 (loss) for each of the periods indicated:

	Year Ended December 31,				
	2021	2020	2019	2018	2017
	(In thousands)				
Reconciliation of Adjusted Operating Income (Loss)					
Loss before provision for income taxes	\$ (127,378)	\$ (105,128)	\$ (93,226)	\$ (24,174)	\$ (17,690)
Amortization of purchased intangibles and finance leases	9,327	3,552	2,932	2,813	4,682
Stock-based compensation	69,656	65,946	44,105	14,841	8,944
Restructuring costs ⁽¹⁾	3,397	29,420	2,043	4,468	2,594
Other litigation and consulting costs ⁽²⁾	6,665	5,375	7,974	5,928	7,648
Contingent earn-out adjustments	132	263	—	—	—
Acquisition costs	5,808	—	—	555	—
Interest expense (income), net	37,406	14,334	7,407	(22)	(26)
Other expense (income), net ⁽³⁾	(3,294)	1,343	(1,213)	493	(110)
Adjusted operating income (loss)	\$ 1,719	\$ 15,105	\$ (29,978)	\$ 4,902	\$ 6,042

- (1) Includes severance costs and other compensation related costs of \$2.7 million and lease restructuring costs of \$0.7 million for the year ended December 31, 2021. Includes lease restructuring costs of \$24.3 million and severance and other compensation related costs of \$5.1 million for the year ended December 31, 2020. Includes severance and associated costs of \$2.0 million for the year ended December 31, 2019. Includes severance costs of \$4.5 million for the year ended December 31, 2018. Includes wind down costs of legacy platform of \$1.9 million and severance costs of \$0.7 million for the year ended December 31, 2017. The restructuring costs relate to resource reallocation for the Company's platform transformation.
- (2) Includes litigation costs of \$4.1 million, employee benefit costs of \$0.5 million, consulting costs of \$2.4 million, and a reversal of reserve for sales and use tax liability of \$0.3 million for the year ended December 31, 2021. Includes other litigation costs of \$5.4 million for the year ended December 31, 2020. Includes other litigation costs of \$4.4 million relating to the Company's intellectual property lawsuit against [24]7 Customer, Inc., consulting costs of \$3.2 million, and fair value earn-out adjustment of \$0.3 million for the year ended December 31, 2019. Includes litigation costs of \$4.1 million, consulting costs of \$1.3 million, executive recruitment costs of \$0.3 million, and executive relocation costs of \$0.2 million for the year ended December 31, 2018. Includes litigation costs of \$6.2 million, executive one-time compensation payment of \$1.0 million, and executive separation cost of \$0.5 million for the year ended December 31, 2017. Other litigation costs relate to lease restructuring costs, along with other general legal matters.
- (3) Includes \$3.5 million of other income related to the settlement of leases for the year ended December 31, 2021. The remaining amount of other (income) expense is attributable to currency rate fluctuations.

Critical Accounting Policies and Estimates

Our 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. For further information on all of our significant accounting policies, see Note 1 – Description of Business and Summary of Significant Accounting Policies in the Notes to the Consolidated Financial Statements under Item 8 of this Annual Report on Form 10-K.

Revenue Recognition

The majority of our revenue is generated from hosted service revenues, which is inclusive of our platform usage pricing model, and related professional services from the sale of our 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. 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.

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, we satisfy a performance obligation.

Total revenue of \$469.6 million, \$366.6 million, and \$291.6 million was recognized during the years ended December 31, 2021, December 31, 2020, and December 31, 2019, respectively.

We defer all incremental commission costs to obtain the contract (contract acquisition costs). The contract acquisition costs consist of prepaid sales commissions and have balances as of December 31, 2021 and December 31, 2020 of \$40.7 million and \$41.0 million, respectively. We amortize these costs over the related period of benefit using the expected life of the customer contract, which we determine to be three to five years, consistent with the transfer to the customer of the services to which the asset relates. We classify contract acquisition costs as long-term unless they have an original amortization period of one year or less.

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 the Conversational Cloud. 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 Conversational Cloud 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. 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 its 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 arrangements, we act as a principal in a transaction if we control the specified goods or services before they are transferred to the customer.

Revenue attributable to our monthly hosted Business services accounted for 78% of total revenue for the years ended December 31, 2021 and 2020, and 77% of total revenue for the year ended December 31, 2019.

Professional Services Revenue

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 and is recognized at a point in time. Professional Services revenue is 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 Conversational Cloud 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 time and materials as the measure of progress toward complete satisfaction of the performance obligation. Our Professional Services 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.

Revenue attributable to Professional Services accounted for 14% of total revenue for the years ended December 31, 2021, 2020, and 2019.

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 primarily because the Expert is the primary obligor. We do not act as a principal in a transaction since we do not control the specified goods or services before they are transferred to the customer. Additionally, we perform as an agent without any risk of loss for collection, and we 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.

Revenue from our Consumer segment accounted for approximately 8% of total revenue for each of the years ended December 31, 2021, 2020, and 2019, respectively.

Remaining Performance Obligation

As of December 31, 2021, the aggregate amount of the total transaction price allocated in contracts with original duration of one year or greater to the remaining performance obligations was \$362.8 million. Approximately 94% of our remaining performance obligations is expected to be recognized during the next 24 months, with the balance recognized thereafter. The aggregate balance of unsatisfied performance obligations represents contracted revenue that has not yet been recognized, and does not include contract amounts that are cancellable by the customer, amounts associated with optional renewal periods, and any amounts related to performance obligations, which are billed and recognized as they are delivered. We have elected the optional exemption, which allows for the exclusion of the amounts for remaining performance obligations that are part of contracts with an original expected duration of less than one year. Such remaining performance obligations represent unsatisfied or partially unsatisfied performance obligations pursuant to ASC 606.

Deferred Revenues

We record deferred revenues when cash payments are received or due in advance of our performance. The increase of \$9.6 million in the deferred revenue balance for the year ended December 31, 2021 is primarily driven by cash payments received or due in advance of satisfying our performance obligations, partially offset by approximately \$75.5 million of revenues recognized that were included in the deferred revenue balance as of December 31, 2020.

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 the consumer and SMB services; 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, sales commissions, public relations, promotional materials, travel expenses, global customer summits 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, litigation, 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.

During 2021, we increased our allowance for doubtful accounts from approximately \$5.3 million to approximately \$6.3 million. During 2020, we increased our allowance for doubtful accounts from approximately \$3.1 million to approximately \$5.3 million. We perform a detailed assessment of the collectability of our accounts receivable. In estimating the allowance for doubtful accounts, management considers, among other factors, the aging of the accounts receivable, historical write-offs and the creditworthiness of each customer. A large proportion of receivables are due from larger corporate customers that typically have longer payment cycles.

Non-Cash Compensation Expense

The net non-cash compensation amounts are as follows:

	Year Ended December 31,		
	2021	2020	2019
	(In thousands)		
Stock-based compensation expense	\$ 69,656	\$ 65,946	\$ 44,105

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.

Our forfeiture rate assumptions, which estimate the share-based awards that will ultimately vest, requires judgment, and to the extent actual results or updated estimates differ from our current estimates, such amounts will be recorded as a cumulative adjustment in the period of change and could be materially different from share-based compensation expense recorded in prior periods.

For the year ended December 31, 2021, we accrued approximately \$18.4 million for cash awards related to bonus 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 consolidated financial statements. For the year ended December 31, 2020, we accrued approximately \$20.4 million and \$8.9 million for cash awards related to bonus and for the achievement of long term incentive plan awards, respectively, 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 consolidated financial statements.

As of December 31, 2021, there was approximately \$44.8 million of total unrecognized compensation cost related to nonvested stock options. That cost is expected to be recognized over a weighted average period of approximately 2.7 years. As of December 31, 2021, there was approximately \$141.9 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 3.2 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, if we experience a significant write-off from one of our large customers, it could have a material adverse impact on our consolidated financial statements. No single customer accounted for or exceeded 10% of our total revenue in 2021, 2020 and 2019. During 2021, we increased our allowance for doubtful accounts from approximately \$5.3 million to approximately \$6.3 million. A large proportion of receivables are due from larger corporate customers that typically have longer payment cycles. Accounts receivable is presented net of an allowance for doubtful accounts and sales reserve of \$6.3 million and \$4.1 million as of December 31, 2021, respectively, and \$5.3 million and \$3.4 million as of December 31, 2020, respectively.

An allowance for doubtful accounts is established for losses expected to be incurred on accounts receivable balances. Judgment is required in the estimation of the allowance and we evaluate the collectability of our accounts receivable based on a combination of factors. If we become aware of a customer's inability to meet its financial obligations, a specific allowance is recorded to reduce the net receivable to the amount reasonably believed to be collectible from the customer. For all other customers, we use an aging schedule and recognize allowances for doubtful accounts based on the creditworthiness of the debtor, the age and status of outstanding receivables, the current business environment and our historical collection experience adjusted for current expectations for the customer or industry. Accounts receivable are written off against the allowance for uncollectible accounts when we determine amounts are no longer collectible.

Goodwill

Goodwill represents the excess of the aggregate purchase price over the fair value of net identifiable assets acquired in a business combination. During 2021, we added \$198.2 million to goodwill with the acquisition of e-bot7, VoiceBase, Inc., and Tenfold. Goodwill is not amortized and is tested for impairment at least annually or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. We have determined that we operate as two reporting units and have selected September 30 as the date to perform our annual impairment test. In the valuation of goodwill, management must make assumptions regarding estimated future cash flows to be derived from our business. If these estimates or their related assumptions change in the future, the Company may be required to record impairment for these assets.

We have the option to first perform a qualitative assessment to determine if it is more likely than not that the fair value of a reporting unit is less than its carrying amount. However, we may elect to bypass the qualitative assessment and proceed directly to the quantitative impairment tests. The impairment test involves comparing the fair value of the reporting unit to its carrying value, including goodwill. A goodwill impairment will be the amount by which a reporting unit's carrying value exceeds its fair value. The impairment is limited to the carrying amount of goodwill.

No goodwill impairment charges have been recorded for any period presented.

Impairment of Long-Lived Assets

The carrying amounts of our long-lived assets, including property and equipment, lease right-of-use assets, capitalized internal-use software, costs to obtain customer contracts, and acquired intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable or that the useful lives are shorter than originally estimated. Recoverability of assets to be held and used is measured by comparing the carrying amount of an asset to future undiscounted net cash flows the asset is expected to generate over its remaining life. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. If the useful life is shorter than originally estimated, we amortize the remaining carrying value over the new shorter useful life. There was a loss on disposal of approximately \$5.1 million in October 2020. We recognized accelerated depreciation of fixed assets that were determined to no longer be of future economic benefit to us based on the decision to vacate the leased office space.

Income Taxes

Income taxes are accounted for under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences are expected to become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. The Company includes interest accrued on the underpayment of income taxes in interest expense and penalties, if any, related to unrecognized tax benefits in general and administrative expenses. The Company recorded a valuation allowance against its U.S. and Germany deferred tax assets as it considered its cumulative loss in recent years as a significant piece of negative evidence. Since valuation allowances are evaluated on a jurisdiction by jurisdiction basis, we believe that the deferred tax assets related to LivePerson Australia, LivePerson UK, Kasamba Israel, LivePerson Japan and LivePerson LTD Israel are more likely than not to be realized as these jurisdictions have positive cumulative pre-tax book income after adjusting for permanent and one-time items. During the year ended December 31, 2021, there was an increase in the valuation recorded of \$51.7 million.

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 15 – Legal Matters in the Notes to the Consolidated Financial Statements under Item 8 of this Annual Report on Form 10-K for additional information on our legal proceedings and litigation.

Recently Issued Accounting Standards

See Note 1 – Description of Business and Summary of Significant Accounting Policies in the Notes to the Consolidated Financial Statements under Item 8 of this Annual Report on Form 10-K for a full description of recently issued accounting standards.

Recently Adopted Accounting Pronouncements

See Note 1 – Description of Business and Summary of Significant Accounting Policies in the Notes to the Consolidated Financial Statements under Item 8 of this Annual Report on Form 10-K for a full description of recently adopted accounting pronouncements.

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 the Conversational Cloud 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 Experts and Users seeking information and knowledge for a fee via mobile and online messaging.

Revenue

The following tables set forth our results of operations for the years presented and as a percentage of our revenues for those periods. The period-to-period comparison of financial results is not necessarily indicative of future results.

	Year Ended December 31,			Year Ended December 31,		
	2021	2020	% Change	2020	2019	% Change
(Dollars in thousands)						
Revenue by Segment:						
Business	\$ 431,929	\$ 336,856	28 %	\$ 336,856	\$ 267,129	26 %
Consumer	37,695	29,764	27 %	29,764	24,480	22 %
Total	\$ 469,624	\$ 366,620	28 %	\$ 366,620	\$ 291,609	26 %

Business revenue increased by 28% to \$431.9 million for the year ended December 31, 2021, from \$336.9 million for the year ended December 31, 2020. This increase in Business revenue is driven primarily by increases in hosted services of approximately \$77.6 million and an increase in Professional Services of approximately \$17.4 million. Included in hosted services is an increase in revenue that is variable based on interactions and usage of approximately \$37.6 million.

Business revenue increased by 26% to \$336.9 million for the year ended December 31, 2020, from \$267.1 million for the year ended December 31, 2019. This increase in Business revenue is primarily attributable to an increase in hosted services of approximately \$60.9 million and an increase in Professional Services of approximately \$8.8 million. Included in hosted services is an increase in revenue that is variable based on interactions and usage of approximately \$30.1 million.

The increase in Business revenue was driven in nearly equal parts by existing and new customers as we generated greater demand for its Conversational Commerce software and Gainshare solutions. In the wake of the COVID-19 pandemic, leading brands are turning to our AI-powered messaging to overcome a capacity gap created by voice call agent work-from-home measures and increased demand for digital engagement as consumers practice social distancing. We are powering Conversational AI, automation and messaging strategies across a growing number of use cases from care and sales, to marketing, social, conversational advertising, and brick and mortar. As adoption increases, we are seeing higher revenue per customer. However, in the fourth quarter of 2021, we observed that pandemic-specific shopping trends began to normalize within the Gainshare portfolio, including the type and frequency of purchases and a more balanced interest in physical, in-store experiences. Our ARPU for our enterprise and mid-market customers was approximately \$610,000 in 2021, as compared to approximately \$465,000 in 2020. Similarly, we are seeing strong revenue retention rates. Revenue retention rate for enterprise and mid-market customers on Conversational Cloud exceeded the high end of our target range of 105% to 115% in 2021 and 2020.

Consumer revenue increased by 26.6% to \$37.7 million for the year ended December 31, 2021, from \$29.8 million for the year ended December 31, 2020. This improvement was driven by an increasingly effective user value and higher demand by consumers to engage with experts and advisors through conversational messaging channels. Consumer revenue increased by 22% to \$29.8 million for the year ended December 31, 2020, from \$24.5 million for the year ended December 31, 2019. This increase is primarily attributable to an increase in chat minutes and price per minute.

Cost of Revenue - Business

Cost of revenue - business 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.

	Year Ended December 31,			Year Ended December 31,		
	2021	2020	% Change	2020	2019	% Change
(Dollars in thousands)						
Cost of revenue - business	\$ 149,983	\$ 99,394	51 %	\$ 99,394	\$ 74,460	33 %
Percentage of total revenue	32 %	27 %		27 %	26 %	
Headcount (at period end)	280	245	14 %	245	257	(5)%

Cost of revenue increased by 51% to \$150.0 million for the year ended December 31, 2021, from \$99.4 million for the year ended December 31, 2020. This increase in expense is primarily attributable to an increase in business services and outsourced subcontracted labor of approximately \$30.5 million driven by Health and Gainshare services, which power Conversational Commerce programs on behalf of customers. We also recognized an increase in expenses for backup server facilities of approximately \$11.2 million, in salary and employee related expenses of approximately \$3.0 million, and in amortization expense of approximately \$5.4 million.

Cost of revenue increased by 33% to \$99.4 million for the year ended December 31, 2020, from \$74.5 million for the year ended December 31, 2019. This increase in expense is primarily attributable to an increase in business services and outsourced subcontracted labor of approximately \$17.0 million as the Company saw a significant increase in demand for its Gainshare services, which power Conversational Commerce programs on behalf of customers. The Company also recognized an increase in salary and employee related expenses of approximately \$5.0 million, in expenses for backup server facilities of approximately \$1.6 million, in depreciation expense of approximately \$1.2 million, and in amortization expense of approximately \$0.8 million.

Cost of Revenue - Consumer

Cost of revenue - consumer 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.

	Year Ended December 31,			Year Ended December 31,		
	2021	2020	% Change	2020	2019	% Change
	(Dollars in thousands)					
Cost of revenue - consumer	\$ 6,897	\$ 6,874	— %	\$ 6,874	\$ 4,418	56 %
Percentage of total revenue	1 %	2 %		2 %	2 %	
Headcount (at period end)	15	21	(29)%	21	17	24 %

Cost of revenue - consumer remained flat at \$6.9 million for the year ended December 31, 2021 compared to the year ended December 31, 2020.

Cost of revenue - consumer increased by 56% to \$6.9 million for the year ended December 31, 2020, from \$4.4 million for the year ended December 31, 2019. This increase in expense is primarily related to an increase in outsourcing subcontracted labor of approximately \$1.3 million is due to the investment in technology infrastructure. We increased outside labor to accelerate a technology change which assisted us in the rollout of HeyExpert, a leading platform for online expert guidance. In addition, there was an increase in salary and employee related expenses of approximately \$0.4 million, in credit card processing fees of approximately \$0.3 million, in depreciation expense of approximately \$0.3 million, and backup server facilities of approximately \$0.1 million.

Sales and Marketing - Business

Our Sales and marketing - business 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.

	Year Ended December 31,			Year Ended December 31,		
	2021	2020	% Change	2020	2019	% Change
	(Dollars in thousands)					
Sales and marketing - business	\$ 139,866	\$ 128,752	9 %	\$ 128,752	\$ 140,880	(9)%
Percentage of total revenue	30 %	35 %		35 %	48 %	
Headcount (at period end)	460	309	49 %	309	449	(31)%

Sales and marketing - business expenses increased by 9% to \$139.9 million for the year ended December 31, 2021, from \$128.8 million for the year ended December 31, 2020. This is primarily related to an increase in salary and employee related expenses of approximately \$7.7 million, an increase in marketing events, advertising, and public relations of approximately

\$6.6 million, and an increase in depreciation expense of approximately \$0.2 million, partially offset by a decrease in business services and outsourcing subcontracted labor of approximately \$3.4 million.

We have adjusted our marketing and hiring efforts to account for the impact of the COVID-19 pandemic. In particular, we have adapted our marketing strategy to include targeted digital experiences that emphasize the unique positioning of our messaging and AI offerings to help brands succeed in this new environment. Our marketing message has shifted to include business continuity and virtualization of the contact center in addition to business improvement.

Sales and marketing - business expenses decreased by 9% to \$128.8 million for the year ended December 31, 2020, from \$140.9 million for the year ended December 31, 2019. This is primarily related to a decrease in salary and employee related expenses of approximately \$7.5 million, a decrease in marketing events, advertising, public relations, and trade show exhibit expenses of approximately \$3.3 million, and a decrease in business services and outsourcing subcontracted labor of approximately \$2.6 million. These decreases were offset in part by an increase in backup server facilities of approximately \$0.7 million and in depreciation expense of approximately \$0.6 million.

Sales and Marketing - Consumer

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

	Year Ended December 31,			Year Ended December 31,		
	2021	2020	% Change	2020	2019	% Change
	(Dollars in thousands)					
Sales and marketing - consumer	\$ 25,555	\$ 21,021	22 %	\$ 21,021	\$ 15,934	32 %
Percentage of total revenue	5 %	6 %		6 %	5 %	
Headcount (at period end)	17	19	(11)%	19	18	6 %

Sales and marketing - consumer expenses increased by 22% to \$25.6 million for the year ended December 31, 2021, from \$21.0 million for the year ended December 31, 2020. This increase is primarily attributable to an increase in marketing expense of approximately \$4.2 million, an increase in outsourcing subcontracted labor of approximately \$0.2 million, and an increase in salary and employee related expenses of approximately \$0.2 million.

Sales and marketing - consumers expenses increased by 32% to \$21.0 million for the year ended December 31, 2020, from \$15.9 million for the year ended December 31, 2019. This increase is primarily attributable to an increase in marketing expense of approximately \$4.8 million, in outsourcing subcontracted labor of approximately \$0.2 million, and credit card processing fees of approximately \$0.1 million.

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.

	Year Ended December 31,			Year Ended December 31,		
	2021	2020	% Change	2020	2019	% Change
	(Dollars in thousands)					
General and administrative	\$ 76,757	\$ 60,557	27 %	\$ 60,557	\$ 56,967	6 %
Percentage of total revenue	16 %	17 %		17 %	20 %	
Headcount (at period end)	166	140	19 %	140	149	(6)%

General and administrative expenses increased by 27% to \$76.8 million for the year ended December 31, 2021, from \$60.6 million for the year ended December 31, 2020. This is primarily related to an increase in in business services and outsourced labor of approximately \$7.1 million, an increase in acquisition related costs of \$5.8 million, an increase in one time charges of \$3.9 million, an increase in salary and employee related expenses of approximately \$0.2 million, and an increase in amortization of approximately \$0.4 million. These increases were offset in part by a decrease in facilities of approximately \$1.1 million and depreciation expense of approximately \$0.1 million.

General and administrative expenses increased by 6% to \$60.6 million for the year ended December 31, 2020, from \$57.0 million for the year ended December 31, 2019. This is primarily related to an increase in salary and employee related expenses of approximately \$4.3 million and in business services and outsourced labor of approximately \$2.6 million. These increases were offset in part by a decrease in facilities of approximately \$2.7 million and depreciation expense of approximately \$0.7 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.

	Year Ended December 31,			Year Ended December 31,		
	2021	2020	% Change	2020	2019	% Change
	(Dollars in thousands)					
Product development	\$ 158,390	\$ 108,414	46 %	\$ 108,414	\$ 82,145	32 %
Percentage of total revenue	34 %	30 %		30 %	28 %	
Headcount (at period end)	602	467	29 %	467	451	4 %

Product development costs increased by 46% to \$158.4 million for the year ended December 31, 2021, from \$108.4 million for the year ended December 31, 2020. This is primarily related to an increase in salaries and employee related expenses of approximately \$34.4 million, in business services and outsourcing subcontracted labor of approximately \$7.6 million, in backup server facilities of approximately \$3.5 million related to costs supporting our backup servers and in depreciation expense of approximately \$4.4 million. We continued to make investments in public cloud migration, and in enhancing and expanding new features of the Conversational Cloud, including Voice. Also, we continued to invest in bringing more data scientists and machine learning engineers to focus on Conversational AI.

Product development costs increased by 32% to \$108.4 million for the year ended December 31, 2020, from \$82.1 million for the year ended December 31, 2019. This is primarily related to an increase in salaries and employee related expenses of approximately \$11.9 million, in business services and outsourcing subcontracted labor of approximately \$8.6 million, in backup server facilities of approximately \$1.1 million related to costs supporting our backup servers and in depreciation expense of approximately \$5.0 million. We made investments in public cloud migration, and in enhancing and expanding new features of the Conversational Cloud. Also, we invested in bringing more data scientists and machine learning engineers to focus on Conversational AI.

We continue to invest in new product development efforts to expand the capability of the Conversational Cloud. In accordance with ASC 350-40, "Internal-Use Software", as new projects are initiated that provide functionality to the Conversational Cloud platform, the associated development and employee costs will be capitalized. Upon completion, the project costs will be depreciated over five years. During the years ended December 31, 2021, 2020, and 2019, \$36.1 million, \$33.9 million, and \$29.1 million was capitalized, respectively.

Restructuring Costs

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

	Year Ended December 31,			Year Ended December 31,		
	2021	2020	% Change	2020	2019	% Change
	(Dollars in thousands)					
Restructuring Costs	\$ 3,397	\$ 29,420	(89)%	\$ 29,420	\$ 2,043	1,340 %
Percentage of total revenue	1 %	8 %		8 %	1 %	

Restructuring costs decreased by 89% to \$3.4 million for the year ended December 31, 2021, from \$29.4 million for the year ended December 31, 2020. This decrease is attributable primarily as a result of a decrease in restructuring costs related to lease abandonment recorded in 2020.

Restructuring costs increased by 1,340% to \$29.4 million for the year ended December 31, 2020, from \$2.0 million for the year ended December 31, 2019. This increase is attributable to an increase in restructuring costs related to lease abandonment of approximately \$24.1 million, along with severance and other compensation costs of approximately \$5.3 million.

In response to the COVID-19 pandemic, the Company went through a re-evaluation of our real estate needs. In connection with this re-evaluation, and the success we have had working remotely, it was decided in July 2020 that we would significantly reduce the real estate space we lease. This decision resulted in the significant reduction of the real estate space we lease and the removal of the associated right of use assets (“ROU assets”). Furthermore, this resulted in various one-time expenses in connection with the abandonment of the majority of our leased facilities. The lease restructuring costs noted above are a result of this transition to an employee-centric workforce model that does not rely on traditional offices. During the second quarter of 2021, the Company decided to reoccupy some of its leased space to provide its employees with the option of working in an office space environment if they choose to do so.

Amortization of Purchased Intangibles

	Year Ended December 31,			Year Ended December 31,		
	2021	2020	% Change	2020	2019	% Change
	(Dollars in thousands)					
Amortization of purchased intangibles \$	2,045	\$ 1,639	25 %	\$ 1,639	\$ 1,794	(9)%
Percentage of total revenue	— %	— %		— %	1 %	

Amortization expense for purchased intangibles increased by 25% to \$2.0 million for the year ended December 31, 2021, from \$1.6 million for the year ended December 31, 2020, and decreased by 9% to \$1.6 million for the year ended December 31, 2020, from \$1.8 million for the year ended December 31, 2019. The year over year variance is primarily attributable to amortization of patents and customer relationships as well as the intangible assets acquired in the three acquisitions that occurred in 2021.

Additional amortization expense in the amount of \$7.3 million, \$1.9 million, and \$1.1 million for the years ended December 31, 2021, 2020, and 2019, respectively, is included in cost of revenue. The increase from 2020 to 2021 was due to the three acquisitions that occurred in 2021. See Note 9 – Acquisitions in the Notes to the Consolidated Financial Statements under Item 8 of this Annual Report on Form 10-K for a full description of the acquisitions.

Other Expense, net

Other expense, 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.

	Year Ended December 31,			Year Ended December 31,		
	2021	2020	% Change	2020	2019	% Change
	(Dollars in thousands)					
Interest expense	\$ (37,406)	\$ (14,334)	161 %	\$ (14,334)	\$ (7,407)	94 %
Other income (expense)	3,294	(1,343)	345 %	(1,343)	1,213	(211)%
Other expense, net	\$ (34,112)	\$ (15,677)	118 %	\$ (15,677)	\$ (6,194)	153 %

Other expense, net increased by \$18.4 million to an expense of \$34.1 million for the year ended December 31, 2021, from an expense of \$15.7 million for the year ended December 31, 2020. This increase was primarily attributable to an increase in interest expense attributable to the 2024 Notes and the 2026 Notes, partially offset by interest income on cash and cash equivalents and financial income which is attributable to currency rate fluctuations.

Other expense, net increased by \$9.5 million to an expense of \$15.7 million for the year ended December 31, 2020, from an expense of \$6.2 million for the year ended December 31, 2019. This increase was primarily attributable to an increase in interest expense attributable to the 2024 Notes, partially offset by interest income on cash and cash equivalents and financial income which is attributable to currency rate fluctuations.

(Benefit From) Provision For Income Taxes

	Year Ended December 31,			Year Ended December 31,		
	2021	2020	% Change	2020	2019	% Change
	(Dollars in thousands)					
Provision for (benefit from) income taxes	\$ (2,404)	\$ 2,466	(198)%	\$ 2,466	\$ 2,845	(13)%

We had a tax benefit from income taxes of \$2.4 million for the year ended December 31, 2021 and a provision for income taxes of \$2.5 million for the year ended December 31, 2020. Our consolidated effective tax rate was impacted by the statutory income tax rates applicable to each of the jurisdictions in which we operate. During 2021, the Company recorded a benefit of \$3.2 million for a release of valuation allowance on certain LivePerson, Inc. net operating losses in connection with the acquisitions of Tenfold and VoiceBase. The decrease in tax expense is primarily due to these factors.

Income tax expense decreased by 13% to \$2.5 million for the year ended December 31, 2020, from \$2.8 million for the year ended December 31, 2019. Our consolidated effective tax rate was impacted by the statutory income tax rates applicable to each of the jurisdictions in which we operate. During 2020, we recognized a benefit of \$0.6 million due to net operating loss and research and development credits carryback resulting from the CARES Act. The decrease in tax expense is primarily due to these factors.

Net Loss

We had a net loss of \$125.0 million for the year ended December 31, 2021 compared to a net loss of \$107.6 million for the year ended December 31, 2020. Revenue increased approximately \$103.0 million, operating expenses increased by approximately \$106.8 million, the benefit from income taxes increased approximately \$4.9 million, and other expense, net increased by \$18.4 million, contributing to a net increase in net loss of approximately \$17.4 million.

We had a net loss of \$107.6 million for the year ended December 31, 2020 compared to a net loss of \$96.1 million for the year ended December 31, 2019. Revenue increased approximately \$75.0 million, operating expenses increased by approximately \$77.4 million, the provision for income taxes decreased approximately \$0.4 million, and other expense, net increased by approximately \$9.5 million, contributing to a net increase in net loss of approximately \$11.5 million.

Liquidity and Capital Resources

	Year Ended December 31,		
	2021	2020	2019
	(In thousands)		
Consolidated Statements of Cash Flows Data:			
Cash flows provided by (used in) operating activities	\$ 3,247	\$ 33,605	\$ (59,158)
Cash flows used in investing activities	(140,249)	(43,476)	(48,506)
Cash flows provided by financing activities	11,843	483,843	217,851

As of December 31, 2021, we had approximately \$521.8 million in cash and cash equivalents, a decrease of approximately \$130.6 million from December 31, 2020. The decrease is primarily attributable to cash used in investing activities related to the acquisitions of e-bot7, VoiceBase, and Tenfold partially offset by proceeds from issuance of common stock in connection with the exercise of options and the ESPP.

Net cash provided by operating activities was \$3.2 million in the year ended December 31, 2021. Our net loss was \$125.0 million, which includes the effect of non-cash expenses related to stock-based compensation, amortization of purchased intangibles and finance leases, depreciation, provision for doubtful accounts, and gain on termination of lease, as well as increases in accrued expenses and deferred revenue. This was partially offset by increases in accounts receivable, prepaid expenses and decrease in operating lease liability. Net cash provided by operating activities was \$33.6 million in the year ended December 31, 2020. Our net loss was \$107.6 million, which includes the effect of non-cash expenses related to stock-based compensation, amortization of purchased intangibles and finance leases, depreciation, and provision for doubtful accounts, as well as increases in operating lease liability due to the transition to an employee centric model under which employees will

work remotely, and increase in accrued expenses and decrease in accounts receivable. This was partially offset by increases in prepaid expenses and other current assets and decrease in deferred revenue.

Net cash used in investing activities was \$140.2 million in the year ended December 31, 2021 was driven primarily by the acquisition costs related to goodwill for the purchase of e-bot7, VoiceBase, and Tenfold, the purchase of fixed assets for our co-location facilities, capitalization of internally developed software, and the repayment of the indebtedness acquired with e-bot7, VoiceBase, and Tenfold. Net cash used in investing activities was \$43.5 million in the year ended December 31, 2020 due primarily to the purchase of fixed assets for our co-location facilities and capitalization of internally developed software.

Net cash provided by financing activities was \$11.8 million in the year ended December 31, 2021 due primarily to the proceeds from issuance of common stock in connection with the exercise of stock options by employees partially offset by the finance lease payment. Net cash provided by financing activities was \$483.8 million in the year ended December 31, 2020 due primarily to the proceeds from issuance of the 2026 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 payment of our finance lease. The net proceeds of the 2026 Notes was approximately \$506.6 million, after deducting initial purchaser debt issuance costs paid or payable by us, from issuance of the 2026 Notes, as described in Note 8 – Convertible Senior Notes and Capped Call Transactions of the Notes to the Consolidated Financial Statements.

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 December 31, 2021, we had an accumulated deficit of approximately \$516.9 million.

In response to the COVID-19 pandemic, we had undertaken a re-evaluation of our real estate needs. In connection with this re-evaluation, and the success we have had working remotely for the past several months, we significantly reduced the real estate space we lease. This resulted in various one-time cash expenses in connection with early termination of some of our leases. During the second quarter of 2021, we decided to reoccupy some of our leased space to provide our employees with the option of working in an office space environment if they choose to do so as well as provide some remote shared space working locations globally.

Our principal sources of liquidity are 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 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 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.

Capital Expenditures

Total capital expenditures in 2021 were approximately \$45.7 million, primarily related to software capitalization and to the continued expansion of our co-location facilities. Our total capital expenditures are not currently expected to exceed \$49.5 million in 2022. We anticipate that our current cash and cash equivalents and cash from operations will be sufficient to fund these capital expenditures.

Indemnifications

We enter into service and license agreements in the ordinary course of business. Pursuant to some of these agreements, we agree to indemnify certain customers from and against certain types of claims and losses suffered or incurred by them as a result of using our products.

We also have agreements whereby our executive officers and directors are indemnified for certain events or occurrences while the officer or director is, or was serving, at our request in such capacity. The maximum potential amount of future payments we could be required to make under these indemnification agreements is unlimited; however, we have a directors and officers insurance policy that reduces our exposure and enables us to recover a portion of any future amounts paid. As a result of our insurance policy coverage, we believe the estimated fair value of these indemnification agreements is minimal. Currently, we have no liabilities recorded for these agreements as of December 31, 2021.

Off Balance Sheet Arrangements

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

Item 7A. 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 NIS. For the year ended December 31, 2021, the U.S. dollar depreciated as compared to the NIS by an average of 6% as compared to December 31, 2020. For the year ended December 31, 2021, expenses generated by our Israeli operations totaled approximately \$69.5 million. Based on our exposure to NIS exchange rate fluctuation against a dollar as of December 31, 2021, a 1% increase or decrease in the value of the NIS would increase or decrease our income before income taxes by approximately \$0.7 million.

We actively monitor the movement of the U.S. dollar against the NIS, Pound Sterling, Euro, Australian 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 2021, we increased our allowance for doubtful accounts from approximately \$5.3 million to approximately \$6.3 million. During 2020, we increased our allowance for doubtful accounts from approximately \$3.1 million to approximately \$5.3 million. A large proportion of 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 the applicable recorded allowance when we have exhausted collection efforts without success. We adjust our allowance for doubtful accounts when accounts previously reserved have been collected.

An allowance for doubtful accounts is established for losses expected to be incurred on accounts receivable balances. Judgment is required in the estimation of the allowance and we evaluate the collectability of our accounts receivable and contract assets based on a combination of factors. If we become aware of a customer's inability to meet its financial obligations, a specific allowance is recorded to reduce the net receivable to the amount reasonably believed to be collectible from the customer. For all other customers, we use an aging schedule and recognize allowances for doubtful accounts based on the creditworthiness of the debtor, the age and status of outstanding receivables, the current business environment and our historical collection experience adjusted for current expectations for the customer or industry. Accounts receivable are written off against the allowance for uncollectible accounts when we determine amounts are no longer collectible.

Interest Rate Risk

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

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 8. Consolidated Financial Statements and Supplementary Data

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
LivePerson, Inc.
New York, New York

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of LivePerson, Inc. and subsidiaries (the “Company”) as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive loss, stockholders’ equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Company’s internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) and our report dated February 28, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Revenue Contracts with Multiple Performance Obligations

As described in Note 1 to the Company’s consolidated financial statements, certain of the Company’s revenue contracts contain multiple performance obligations primarily relating to the sale of hosted subscription and professional services. For these revenue contracts, the Company is required to assess all services promised in its contracts with customers and identify separate performance obligations. The Company accounts for the individual performance obligations separately if they are distinct or represent a series of distinct services that are substantially the same and that have the same pattern of recognition.

We identified revenue recognition related to contracts that contain multiple performance obligations as a critical audit matter. The determination of whether multiple services within a contract are distinct performance obligations that should be accounted for separately requires management to exercise significant judgment that includes a high degree of subjectivity. Auditing this element involved especially challenging auditor judgment due to the nature and extent of audit effort required to address this matter.

The primary procedures we performed to address this critical audit matter included:

- Testing the design and operating effectiveness of certain controls relating to management’s determination of separately identified performance obligations.
- Evaluating management’s technical accounting conclusions and assessing the reasonableness of management’s judgments and assumptions in the determination of whether the services are distinct performance obligations.
- Testing a sample of revenue contracts to evaluate the determination of the identification of distinct performance obligations made by management.

Business Combinations – Valuation of Acquired Intangible Asset and Accounting for Contingent Consideration

As described in Note 9 to the Company’s consolidated financial statements, during fiscal year 2021, the Company completed acquisitions of e-bot7, VoiceBase, Inc. and Callinize, Inc. dba Tenfold for \$50.7 million, \$111.4 million and \$112.2 million, respectively. The Company accounted for these acquisitions under the acquisition method of accounting for business combinations. Accordingly, the purchase price of each acquisition was allocated to the assets acquired and liabilities assumed based on their respective fair values, including intangible assets related to acquired technology and customer relationships and liabilities related to contingent consideration.

The fair value determination of the intangible assets required management to make subjective estimates and assumptions, specifically related to forecasts of future cash flows and the selection of the discount rates. Additionally, management had to evaluate the accounting for contingent consideration to determine if the amounts should be included as a component of the purchase price or as transactions separate from the business combinations.

We identified the valuation of the intangible assets and the accounting for contingent consideration as a critical audit matter. The principal consideration for our determination included the subjectivity and judgment required to determine the fair value of acquired technology and customer relationships and the judgment management uses to determine the accounting for contingent consideration. Auditing the valuation of acquired technology and customer relationships and evaluating the application of the accounting standard for contingent consideration involved a high degree of auditor judgment due to the subjectivity and judgment used in evaluating management’s assumptions used in determining the fair value of acquired technology and customer relationships and the evaluation of management’s accounting assessment of contingent consideration.

The primary procedures we performed to address this critical audit matter included:

- Testing the design and operating effectiveness of controls over the valuation of the intangible assets, including management’s controls over forecasts of future cash flows and selection of discount rates and management’s evaluation of the accounting for contingent consideration.
- Testing assumptions used to develop forecasts of future cash flows such as revenue growth rates and operating margins.
- Utilizing personnel with specialized knowledge and skill with valuation to assist in: (i) assessing the reasonableness of discount rates incorporated into the various valuation models (ii) assessing the appropriateness of various valuation models utilized by management to determine the fair values of the acquired technology and customer relationships.
- Evaluating the application of the accounting standard in the determination of the recording of contingent consideration.
- Testing the mathematical accuracy of the future cash flows used in the fair value calculations of acquired technology and customer relationships.

/s/ BDO USA, LLP

We have served as the Company’s auditor since 2005.
New York, New York
February 28, 2022

LIVEPERSON, INC.
CONSOLIDATED BALANCE SHEETS

	December 31,	
	2021	2020
(In thousands)		
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 521,846	\$ 654,152
Accounts receivable, net of allowances of \$6,338 and \$5,344, as of December 31, 2021 and 2020, respectively	93,804	80,423
Prepaid expenses and other current assets	20,626	14,236
Total current assets	636,276	748,811
Operating lease ROU asset (Note 10)	1,977	614
Property and equipment, net (Note 6)	124,726	106,055
Contract acquisition costs	40,675	41,021
Intangibles, net (Note 5)	85,554	10,927
Goodwill (Note 5)	291,215	95,192
Deferred tax assets	5,034	2,032
Other assets	1,199	1,780
Total assets	\$ 1,186,656	\$ 1,006,432
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 16,942	\$ 14,115
Accrued expenses and other current liabilities (Note 7)	104,297	99,870
Deferred revenue (Note 2)	98,808	88,848
Operating lease liability (Note 10)	3,380	5,718
Total current liabilities	223,427	208,551
Deferred revenue, net of current portion (Note 2)	54	409
Convertible senior notes, net (Note 8)	574,238	538,432
Operating lease liability, net of current portion (Note 10)	2,733	7,180
Deferred tax liability	2,049	1,622
Other liabilities	34,718	6,304
Total liabilities	837,219	762,498
Commitments and contingencies (Note 12)		
Stockholders' equity:		
Preferred stock, \$0.001 par value - 5,000,000 shares authorized, none issued	—	—
Common stock, \$0.001 par value - 200,000,000 and 200,000,000 shares authorized, 74,980,546 and 70,264,265 shares issued, and 72,234,303 and 67,554,435 shares outstanding as of December 31, 2021 and 2020, respectively	75	70
Additional paid-in capital	871,788	635,672
Treasury stock, at cost; 2,746,243 and 2,709,830 shares as of December 31, 2021 and 2020, respectively	(3)	(3)
Accumulated deficit	(516,859)	(391,885)
Accumulated other comprehensive (loss) income	(5,564)	80
Total stockholders' equity	349,437	243,934
Total liabilities and stockholders' equity	\$ 1,186,656	\$ 1,006,432

See accompanying notes to consolidated financial statements.

LIVEPERSON, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2021	2020	2019
	(In thousands, except share and per share amounts)		
Revenue	\$ 469,624	\$ 366,620	\$ 291,609
Costs and expenses: ^{(1) (2)}			
Cost of revenue ⁽³⁾	156,880	106,268	78,878
Sales and marketing	165,421	149,773	156,814
General and administrative	76,757	60,557	56,967
Product development	158,390	108,414	82,145
Restructuring costs	3,397	29,420	2,043
Amortization of purchased intangibles	2,045	1,639	1,794
Total costs and expenses	562,890	456,071	378,641
Loss from operations	(93,266)	(89,451)	(87,032)
Other expense, net:			
Interest expense, net	(37,406)	(14,334)	(7,407)
Other income (expense), net	3,294	(1,343)	1,213
Total other expense, net	(34,112)	(15,677)	(6,194)
Loss before (benefit from) provision for income taxes	(127,378)	(105,128)	(93,226)
(Benefit from) provision for income taxes	(2,404)	2,466	2,845
Net loss	\$ (124,974)	\$ (107,594)	\$ (96,071)
Net loss per share of common stock:			
Basic	\$ (1.80)	\$ (1.63)	\$ (1.53)
Diluted	\$ (1.80)	\$ (1.63)	\$ (1.53)
Weighted-average shares used to compute net loss income per share:			
Basic	69,606,105	65,888,450	62,593,026
Diluted	69,606,105	65,888,450	62,593,026
(1) Amounts include stock-based compensation expense, as follows:			
Cost of revenue	\$ 6,497	\$ 6,511	\$ 4,218
Sales and marketing	16,942	16,106	10,010
General and administrative	15,487	15,772	12,216
Product development	30,730	27,557	17,661
(2) Amounts include depreciation expense, as follows:			
Cost of revenue	\$ 10,186	\$ 10,082	\$ 8,557
Sales and marketing	2,448	2,268	1,642
General and administrative	160	239	908
Product development	14,629	10,237	5,259
(3) Amounts include amortization of purchased intangibles and finance leases, as follows:			
Cost of revenue	\$ 7,282	\$ 1,913	\$ 1,138

See accompanying notes to consolidated financial statements.

LIVEPERSON, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

	Year Ended December 31,		
	2021	2020	2019
	(In thousands)		
Net loss	\$ (124,974)	\$ (107,594)	\$ (96,071)
Foreign currency translation adjustment	(5,644)	4,604	(93)
Comprehensive loss	<u>\$ (130,618)</u>	<u>\$ (102,990)</u>	<u>\$ (96,164)</u>

See accompanying notes to consolidated financial statements.

LIVEPERSON, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Common Stock		Treasury Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total
	Shares	Amount	Shares	Amount				
(In thousands, except share data)								
Balance at December 31, 2018	63,676,229	\$ 64	(2,681,285)	\$ (3)	\$ 362,590	\$ (187,491)	\$ (4,431)	\$ 170,729
Common stock issued upon exercise of stock options	1,523,018	2	—	—	16,916	—	—	16,918
Common stock issued upon vesting of restricted stock units	1,197,576	1	—	—	999	—	—	1,000
Stock-based compensation	—	—	—	—	25,083	—	—	25,083
Common stock issued under ESPP	146,250	—	—	—	4,142	—	—	4,142
Common stock repurchase	—	—	(28,545)	—	(903)	—	—	(903)
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	—	—	—	—	—	(96,071)	—	(96,071)
Other comprehensive loss	—	—	—	—	—	—	(93)	(93)
Balance at December 31, 2019	66,543,073	\$ 67	(2,709,830)	\$ (3)	\$ 436,557	\$ (283,562)	\$ (4,524)	\$ 148,535
Common stock issued upon exercise of stock options	1,683,315	1	—	—	21,353	—	—	21,354
Common stock issued upon vesting of restricted stock units	915,827	1	—	—	—	—	—	1
Common stock as earnout payment in connection with AdvantageTec Inc.	11,508	—	—	—	293	—	—	293
Stock-based compensation	—	—	—	—	36,132	—	—	36,132
Bonus cash payment settled in shares of the Company's common stock	991,905	1	—	—	24,656	—	—	24,657
ASU 2016-13 (Topic 326) adjustment	—	—	—	—	—	(729)	—	(729)
Common stock issued under ESPP	118,637	—	—	—	4,002	—	—	4,002
Equity component of convertible senior notes	—	—	—	—	162,534	—	—	162,534
Equity component of convertible senior notes issuance costs	—	—	—	—	(3,797)	—	—	(3,797)
Purchase of capped call option	—	—	—	—	(46,058)	—	—	(46,058)
Net loss	—	—	—	—	—	(107,594)	—	(107,594)
Other comprehensive income	—	—	—	—	—	—	4,604	4,604
Balance at December 31, 2020	70,264,265	\$ 70	(2,709,830)	\$ (3)	\$ 635,672	\$ (391,885)	\$ 80	\$ 243,934
Common stock issued upon exercise of stock options	864,227	1	—	—	11,700	—	—	11,701
Common stock issued upon vesting of restricted stock units	1,058,361	1	—	—	(1)	—	—	—
Stock-based compensation	—	—	—	—	58,422	—	—	58,422
Bonus cash payment settled in shares of the Company's common stock	538,000	1	—	—	33,502	—	—	33,503
Common stock repurchase	30,344	—	(36,413)	—	(709)	—	—	(709)
Issuance of common stock in connection with acquisitions (Note 9)	2,130,213	2	—	—	128,793	—	—	128,795
Common stock issued under ESPP	95,136	—	—	—	4,409	—	—	4,409
Net loss	—	—	—	—	—	(124,974)	—	(124,974)
Other comprehensive loss	—	—	—	—	—	—	(5,644)	(5,644)
Balance at December 31, 2021	74,980,546	\$ 75	(2,746,243)	\$ (3)	\$ 871,788	\$ (516,859)	\$ (5,564)	\$ 349,437

See accompanying notes to consolidated financial statements.

LIVEPERSON, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2021	2020	2019
	(In thousands)		
OPERATING ACTIVITIES:			
Net loss	\$ (124,974)	\$ (107,594)	\$ (96,071)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Stock-based compensation expense	69,656	65,946	44,105
Depreciation	27,423	22,826	16,366
Loss on disposal	—	5,147	—
Amortization of tenant allowance	—	—	(516)
Amortization of purchased intangibles	5,609	2,780	2,932
Amortization of finance leases	3,718	772	—
Amortization of debt issuance costs	2,499	1,340	956
Accretion of debt discount on convertible senior notes	33,309	11,564	7,605
Change in fair value of contingent consideration	—	(263)	(328)
Allowance for credit losses	4,879	3,211	2,159
Gain on settlement of leases	(3,483)	—	—
Deferred income taxes	(6,239)	579	(1,207)
Changes in operating assets and liabilities, net of acquisitions:			
Accounts receivable	(17,309)	6,371	(43,757)
Prepaid expenses and other current assets	(3,178)	23	(4,712)
Contract acquisition costs noncurrent	(1,876)	(6,463)	(13,718)
Other assets	547	(37)	(30)
Accounts payable	801	(733)	3,808
Accrued expenses and other current liabilities	8,626	22,931	(10,882)
Deferred revenue	7,774	(3,118)	33,953
Operating lease liabilities	(4,590)	8,276	388
Other liabilities	55	47	(209)
Net cash provided by (used in) operating activities	<u>3,247</u>	<u>33,605</u>	<u>(59,158)</u>
INVESTING ACTIVITIES:			
Purchases of property and equipment, including capitalized software	(45,703)	(41,641)	(47,582)
Payments for acquisitions, net of cash acquired	(70,759)	—	—
Purchases of intangible assets	(2,610)	(1,835)	(924)
Repayment of debt acquired in acquisition	(21,177)	—	—
Net cash used in investing activities	<u>(140,249)</u>	<u>(43,476)</u>	<u>(48,506)</u>
FINANCING ACTIVITIES:			
Principal payments for financing leases	(3,554)	(1,154)	—
Repurchase of common stock	(709)	—	(903)
Proceeds from issuance of common stock in connection with the exercise of options and ESPP	16,110	25,355	21,060
Proceeds from issuance of convertible senior notes	(4)	517,500	230,000
Payment of issuance costs in connection with convertible senior notes	—	(11,800)	(8,635)
Payment related to contingent consideration	—	—	(487)
Purchase of capped call option	—	(46,058)	(23,184)
Net cash provided by financing activities	<u>11,843</u>	<u>483,843</u>	<u>217,851</u>
Effect of foreign exchange rate changes on cash and cash equivalents	(5,461)	3,657	(113)
Net (decrease) increase in cash, cash equivalents, and restricted cash	<u>(130,620)</u>	<u>477,629</u>	<u>110,074</u>
Cash, cash equivalents, and restricted cash - beginning of year	654,152	176,523	66,449
Cash, cash equivalents, and restricted cash - end of year	<u>\$ 523,532</u>	<u>\$ 654,152</u>	<u>\$ 176,523</u>

	Year Ended December 31,		
	2021	2020	2019
	(In thousands)		
Reconciliation of cash, cash equivalents, and restricted cash to consolidated balance sheets			
Cash and cash equivalents	\$ 521,846	\$ 654,152	\$ 176,523
Restricted cash in prepaid expenses and other current assets	1,686	—	—
Total cash, cash equivalents, and restricted cash	<u>\$ 523,532</u>	<u>\$ 654,152</u>	<u>\$ 176,523</u>
Supplemental disclosure of other cash flow information:			
Cash paid for income taxes	\$ 582	\$ 4,651	\$ 3,304
Cash paid for interest	2,090	1,931	848
Supplemental disclosure of non-cash investing and financing activities:			
Purchase of property and equipment recorded in accounts payable	\$ 470	\$ 1,638	\$ 1,198
ROU assets obtained in exchange for operating lease liabilities	2,125	—	21,588
ROU assets obtained in exchange for finance lease liabilities	—	10,818	—
Issuance of 38,462 shares of common stock in connection with the Conversable transaction on December 13, 2019	—	—	1,000
Issuance of 11,508 shares of common stock as earn-out payment in connection with AdvantageTec Inc.	—	293	—
Issuance of 400,700 and 991,905 shares of common stock to settle cash awards for the years 2021 and 2020, respectively	33,503	24,657	—
Supplemental disclosure of non-cash financing activities related to the e-bot7 acquisition:			
Issuance of 351,462 shares of common stock in connection with the e-bot7 transaction in July 2021	20,012	—	—
Fair value of contingent earn-out recorded in other long-term liabilities	6,170	—	—
Supplemental disclosure of non-cash financing activities related to the Tenfold acquisition:			
Issuance of 698,219 shares of common stock in connection with the Tenfold transaction in November 2021	41,224	—	—
Fair value of contingent earn-out recorded in other long-term liabilities	6,946	—	—
Supplemental disclosure of non-cash financing activities related to the VoiceBase acquisition:			
Issuance of 1,080,532 shares of common stock in connection with the VoiceBase transaction in November 2021	67,557	—	—
Fair value of contingent earn-out recorded in other long-term liabilities	16,714	—	—

See accompanying notes to consolidated financial statements.

Note 1. Description of Business and Summary of Significant Accounting Policies

LivePerson, Inc. (“LivePerson”, the “Company”, “we” or “our”) is a leading Conversational AI company creating digital experiences that are Curiously Human. Conversational AI allows humans and machines to interact using natural language, including speech or text. During the past decade, consumers have made mobile devices the center of their digital lives, and they have made mobile messaging the center of communication with friends, family and peers. This trend has been significantly accelerated by the COVID-19 pandemic and we believe can now be viewed as a permanent, structural shift in consumer behavior. Our technology enables consumers to connect with businesses through these same preferred conversational interfaces, including Facebook Messenger, SMS, WhatsApp, Apple Business Chat, Google Rich Business Messenger and Alexa. These messaging conversations harness human agents, bots and AI to power convenient, personalized and content-rich journeys across the entire consumer lifecycle, from discovery and research, to sales, service and support, and increasingly marketing, social, and brick and mortar engagements. For example, consumers can look up product info like ratings, images and pricing, search for stores, see product inventory, schedule appointments, apply for credit, approve repairs, and make purchases or payments - all without ever leaving the messaging channel. These AI and human-assisted conversational experiences constitute the Conversational Space, within which LivePerson has strategically developed one of the industry’s largest ecosystems of messaging endpoints and use cases.

The Conversational Cloud, our enterprise-class cloud-based platform, enables businesses to become conversational by securely deploying AI-powered messaging at scale for brands with tens of millions of customers and many thousands of agents. The Conversational Cloud powers conversations across each of a brand’s primary digital channels, including mobile apps, mobile and desktop web browsers, SMS, social media and third-party consumer messaging platforms. Brands can also use the Conversational Cloud to message consumers when they dial a 1-800 number instead of forcing them to navigate IVRs and wait on hold. Similarly, the Conversational Cloud can ingest traditional emails and convert them into messaging conversations, or embed messaging conversations directly into web advertisements, rather than redirect consumers to static website landing pages. Agents can manage all conversations with consumers through a single console interface, regardless of where the conversations originated.

LivePerson’s robust, cloud-based suite of rich messaging, real-time chat, AI and automation offerings features consumer and agent facing bots, intelligent routing and capacity mapping, real-time intent detection and analysis, queue prioritization, customer sentiment, analytics and reporting, content delivery, PCI compliance, co-browsing and a sophisticated proactive targeting engine. An extensible 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 40 APIs and software development kits are available on the Conversational Cloud.

LivePerson’s Conversational AI offerings put the power of bot development, training, management and analysis 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 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. 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 messaging with our proprietary Conversational AI, as well as third-party bots, the Conversational Cloud offers brands a comprehensive approach to scaling automations across their millions of customer conversations.

LivePerson’s consumer services offering is an online marketplace that connects Experts who provide information and knowledge for a fee via mobile and online messaging with 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.

LivePerson was incorporated in the State of Delaware in November 1995 and the LivePerson service was introduced in November 1998. The Company completed an initial public offering in April 2000 and is currently traded on the Nasdaq and the TASE. LivePerson is headquartered in New York City. In light of the COVID-19 pandemic and the company’s strong performance working remotely, LivePerson has adopted an “employee-centric” workforce model that does not rely on traditional offices. During the second quarter of 2021, the Company decided to reoccupy some of its leased space to provide its employees with the option of working in an office space environment if they choose to do so.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Principles of Consolidation

The consolidated financial statements reflect the operations of LivePerson and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting period.

Significant items subject to such estimates and assumptions include:

- revenue recognition;
- stock-based compensation;
- accounts receivable;
- valuation of goodwill;
- valuation of intangible assets;
- income taxes; and
- legal contingencies.

Many of the Company's estimates require increased judgment due to the significant volatility, uncertainty and economic disruption of the COVID-19 pandemic. The Company continues to monitor the effects of the COVID-19 pandemic, and its estimates and judgments may change materially as new events occur or additional information becomes available.

As of the date of issuance of the financial statements, the Company is not aware of any material specific events or circumstances that would require it to update its estimates, judgments, or to revise the carrying values of its assets or liabilities. These estimates may change, as new events occur and additional information is obtained, and are recognized in the consolidated financial statements as soon as they become known. Actual results could differ from those estimates and any such differences may be material to the Company's financial statements.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash and cash equivalents and accounts receivable which approximate fair value at December 31, 2021 because of the short-term nature of these instruments. The Company invests its cash and cash equivalents with financial institutions that it believes are of high quality, and the Company performs periodic evaluations of these instruments and the relative credit standings of the institutions with which it invests. At certain times, the Company's cash balances with any one financial institution may exceed Federal Deposit Insurance Corporation insurance limits. The Company believes it mitigates its risk by depositing its cash balances with high credit, quality financial institutions.

The Company performs ongoing credit evaluations of its customers' financial condition (except for customers who purchase the LivePerson services by credit card via Internet download) and has established an allowance for doubtful accounts based upon factors surrounding the credit risk of customers, historical trends and other information. Concentration of credit risk is limited due to the Company's large number of customers. No single customer accounted for or exceeded 10% of revenue in 2021, 2020, and 2019.

Foreign Currency Translation

The Company's operations are conducted in various countries around the world and the financial statements of its foreign subsidiaries are reported in the applicable foreign currencies (functional currencies). Financial information is translated from the applicable functional currency to the U.S. dollar (the reporting currency) for inclusion in the Company's consolidated financial statements. Income, expenses, and cash flows are translated at weighted average exchange rates prevailing during the fiscal period, and assets and liabilities are translated at fiscal period-end exchange rates. Resulting translation adjustments are included as a component of accumulated other comprehensive (loss) income in stockholders' equity. Foreign exchange

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

transaction gain or losses are included in other income (expense), net in the accompanying consolidated statements of operations.

Cash and Cash Equivalents

The Company considers all highly liquid securities with original maturities of three months or less when acquired to be cash equivalents. Cash equivalents, which primarily consist of money market funds, are recorded at cost, which approximates fair value.

Accounts Receivable

Accounts receivable are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in the Company's existing accounts receivable. The Company determines the allowance based on historical write-off experience. The Company reviews its allowance for doubtful accounts monthly. Past due balances over 90 days and over a specified amount are reviewed individually for collectability. All other balances are reviewed on a pooled basis. Account balances are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. The Company does not have any off-balance sheet credit exposure related to its customers. The activity in the allowance for doubtful accounts is as follows:

	Year Ended December 31,		
	2021	2020	2019
	(In thousands)		
Balance, beginning of period	\$ 5,344	\$ 3,070	\$ 2,276
Additions charged to costs and expenses	4,879	3,211	2,159
Deductions/write-offs	(3,885)	(1,666)	(1,365)
ASU 2016-13 (Topic 326) adjustment	—	729	—
Balance, end of period	<u>\$ 6,338</u>	<u>\$ 5,344</u>	<u>\$ 3,070</u>

Property and Equipment

Property and equipment are stated at cost, net of accumulated depreciation, and amortization. Depreciation and amortization is calculated using the straight-line method over the estimated useful lives of the related assets, generally three to five years for equipment and software. Leasehold improvements are amortized using the straight-line method over the shorter of the lease term or the estimated useful life of the asset. Depreciation expense, which includes amortization of internal use software totaled \$27.4 million, \$22.8 million, and \$16.4 million for the years ended December 31, 2021, 2020, and 2019, respectively.

Internal-Use Software Development Costs

In accordance with ASC 350-40, "Internal-Use Software", the Company capitalizes its costs to develop its internal use software when preliminary development efforts are successfully completed, management has authorized and committed project funding, and it is probable that the project will be completed and the software will be used as intended. These costs are included in property and equipment in the Company's consolidated balance sheets and are amortized on a straight-line basis over the estimated useful life of the related asset, which approximates five years. Costs incurred prior to meeting these criteria, together with costs incurred for training and maintenance, are expensed as incurred.

The Company capitalized internal-use software costs of \$36.0 million, \$33.9 million, and \$29.1 million for the years ended December 31, 2021, 2020, and 2019, respectively.

Goodwill and Intangible Assets

Goodwill represents the excess of the aggregate purchase price over the fair value of net identifiable assets acquired in a business combination. During 2021, the Company recorded \$198.2 million of goodwill with the acquisition of e-bot7, VoiceBase, and Tenfold. Goodwill is not amortized and is tested for impairment at least annually or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. The Company has determined that it operates as two reporting units and has selected September 30 as the date to perform its annual impairment test. In the valuation of

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

goodwill, management must make assumptions regarding estimated future cash flows to be derived from the Company's business. If these estimates or their related assumptions change in the future, the Company may be required to record impairment for these assets.

The Company has the option to first perform a qualitative assessment to determine if it is more likely than not that the fair value of a reporting unit is less than its carrying amount. However, the Company may elect to bypass the qualitative assessment and proceed directly to the quantitative impairment tests. The impairment test involves comparing the fair value of the reporting unit to its carrying value, including goodwill. A goodwill impairment will be the amount by which a reporting unit's carrying value exceeds its fair value. The impairment is limited to the carrying amount of goodwill.

No goodwill impairment charges have been recorded for any period presented.

Intangible assets with estimable useful lives are amortized over their respective estimated useful lives to their estimated residual values, and reviewed for impairment in accordance with ASC 360-10-35, "Accounting for Impairment or Disposal of Long-Lived Assets."

Acquired intangible assets consist of identifiable intangible assets, primarily developed technology and customer relationships, resulting from our acquisitions. Intangible assets are recorded at fair value on the date of acquisition.

Business Combinations

Business combinations are accounted for using the acquisition method and accordingly, the assets acquired (including identified intangible assets), the liabilities assumed and any noncontrolling interest in the acquired business are recorded at their acquisition date fair values. The Company's acquisition model typically provides for an initial payment at closing and for future additional contingent purchase price obligations. Contingent purchase price obligations are recorded as deferred acquisition consideration on the balance sheet at the acquisition date fair value and are remeasured at each reporting period. Changes in such estimated values are recorded in the results of operations. For further information, see Note 9 – Acquisitions.

For each acquisition, the Company undertakes a detailed review to identify intangible assets and a valuation is performed for all such identified assets. The Company uses several market participant measurements to determine estimated value. This approach includes consideration of similar and recent transactions, as well as utilizing discounted expected cash flow methodologies. A substantial portion of the intangible asset value that the Company acquires is the specialized know-how of the workforce, which is treated as part of goodwill and is not required to be valued separately. The majority of the value of the identifiable intangible assets acquired is derived from customer relationships, including the related customer contracts, as well as trade names. In executing the Company's overall acquisition strategy, one of the primary drivers in identifying and executing a specific transaction is the existence of, or the ability to, expand the existing client relationships. The expected benefits of the Company's acquisitions are typically shared across multiple agencies and regions.

Impairment of Long-Lived Assets

The carrying amounts of our long-lived assets, including property and equipment, lease right-of-use assets, capitalized internal-use software, costs to obtain customer contracts, and acquired intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable or that the useful lives are shorter than originally estimated. Recoverability of assets to be held and used is measured by comparing the carrying amount of an asset to future undiscounted net cash flows the asset is expected to generate over its remaining life. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. If the useful life is shorter than originally estimated, we amortize the remaining carrying value over the new shorter useful life. There was a loss on disposal of approximately \$5.1 million in September 2020. The Company recognized accelerated depreciation of fixed assets that were determined to no longer be of future economic benefit to the Company based on the decision to vacate the leased office space. Please refer to Note 14 – Restructuring.

Advertising

The Company expenses the cost of advertising and promoting its services as incurred in the sales and marketing expense on the consolidated statement of operations. Such costs totaled approximately \$41.2 million, \$29.1 million, and \$28.6 million for the years ended December 31, 2021, 2020, and 2019, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Stock-Based Compensation

In accordance with ASC 718-10, "Stock Compensation", the Company measures stock based awards at fair value and recognizes compensation expense for all share-based payment awards made to its employees and directors, including employee stock options.

The Company estimates the fair value of stock options granted using the Black-Scholes valuation model. This model requires the Company to make estimates and assumptions including, among other things, estimates regarding the length of time an employee will retain vested stock options before exercising them, the estimated volatility of its common stock price and the number of options that will be forfeited prior to vesting. The fair value is then recognized on a straight line basis over the requisite service period of the award, which is generally three to four years. Changes in these estimates and assumptions can materially affect the determination of the fair value of the stock-based compensation and consequently, the related amount recognized in the consolidated statement of operations.

Deferred Rent

The Company records rent expense on a straight-line basis over the term of the related lease. The difference between the rent expense recognized for financial reporting purposes and the actual payments made in accordance with the lease agreement is recognized as deferred rent liability included in other liabilities on the Company's consolidated balance sheets.

Income Taxes

Income taxes are accounted for under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in results of operations in the period that the tax change occurs. In evaluating our ability to recover our deferred tax assets in the jurisdiction from which they arise, we consider all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax-planning strategies, and results of recent operations. We include interest accrued on the underpayment of income taxes in interest expense and penalties, if any, related to unrecognized tax benefits in general and administrative expenses. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount expected to be realized.

Comprehensive Loss

In accordance with ASC 220, "Comprehensive Income", the Company reports by major components and as a single total, the change in its net assets during the period from non-owner sources. Comprehensive loss consists of net loss and accumulated other comprehensive (loss) income, which includes certain changes in equity that are excluded from net loss. The Company's comprehensive loss for all periods presented is related to the effect of foreign currency translation.

Recently Issued Accounting Standards

Earnings Per Share (Topic 260), Debt—Modifications and Extinguishments (Subtopic 470-50), Compensation—Stock Compensation, (Topic 718), and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options. In May 2021, the FASB issued ASU 2021-04 to clarify and reduce diversity in an issuer's accounting for modifications or exchanges of freestanding equity-classified written call options (for example, warrants) that remain equity classified after modification or exchange. The guidance is effective for fiscal years beginning after December 15, 2021, and interim periods within those fiscal years. The Company does not expect the adoption of ASU 2021-04 to have a significant impact on its consolidated financial statements.

Debt - Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging - Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity. In August 2020, the FASB issued Accounting Standards Update ("ASU") 2020-06 which simplifies the accounting for convertible instruments by eliminating existing accounting models that require separation of a cash conversion or beneficial conversion feature from the host contract. Accordingly, a convertible debt instrument will be accounted as a single liability measured at its

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

amortized cost and a convertible preferred stock will be accounted as a single equity instrument measured at its historical cost, as long as no other embedded features require bifurcation as derivatives and the convertible debt was not issued at a substantial premium. The ASU also simplifies the derivative scope exception for accounting for contracts in an entity's own equity by:

- removing certain conditions required to meet the settlement criterion;
- clarifying that instruments that are not indexed to the issuer's own stock must be remeasured at fair value through earnings at each reporting period; and
- clarifying the scope of reassessment guidance and disclosure requirements in Subtopic 815-40.

The ASU also makes targeted improvements to the disclosure requirements for convertible instruments and earnings-per-share guidance. There will no longer be a debt discount representing the difference between the carrying value, excluding issuance costs, and the principal of the convertible debt instrument and, as a result, there will no longer be interest expense from the amortization of the debt discount over the term of the convertible debt instrument. The amendments in this update also require the if-converted method to be applied for all convertible instruments when calculating diluted earnings per share.

For SEC filers, excluding smaller reporting companies, the ASU is effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. The ASU specifies that the guidance should be adopted as of the beginning of the annual fiscal year. The Company will adopt the standard on January 1, 2022 using the modified retrospective method, which would result in a cumulative effect adjustment as of the date of adoption. The Company expects a material change on its consolidated balance sheet related to the recognition of convertible senior notes that was previously classified as equity. The Company also expects interest expense to decrease as non-cash interest expense due to the discount created by the separation of the equity component of its convertible instruments will be eliminated. The Company will also need to assume share settlement of the entire convertible debt instrument under the if-converted method therefore increasing the potentially dilutive common stock equivalents for the diluted earnings per share calculation. This will only have an impact on the Company if it is profitable.

Recently Adopted Accounting Standards

Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers. In October 2021, the FASB issued ASU 2021-08 which provides guidance for recognizing and measuring contract assets and contract liabilities in a business combination.

This ASU amendment is to improve comparability after the business combination by providing consistent recognition and measurement guidance for revenue contracts with customers acquired in a business combination and revenue contracts with customers not acquired in a business combination.

This ASU requires entities to apply Topic 606 to recognize and measure contract assets and contract liabilities in a business combination beginning after December 15, 2022 for public business entities. This includes interim periods within those fiscal years. Early adoption is permitted. Entities are instructed to apply this ASU prospectively if the business combination occurs after the effective date and/or date of adoption if early adoption is elected. We elected to early adopt this standard in the third quarter of 2021 and there was no impact on the Company's consolidated financial statements. The Company applied the standard prospectively to the acquisitions of e-bot7, VoiceBase, and Tenfold.

With the exception of the new standards discussed above, there have been no other recent accounting pronouncements or changes in accounting pronouncements during the year ended December 31, 2021, that are of significance or potential significance to the Company.

Note 2. Revenue Recognition

The majority of the Company's revenue is generated from hosted 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;

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- 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 \$469.6 million, \$366.6 million, and \$291.6 million was recognized during the years ended December 31, 2021, 2020, and 2019, respectively.

Under ASC 606, the Company defers all incremental commission costs (“contract acquisition costs”) to obtain the contract. The contract acquisition costs, which are comprised of prepaid sales commissions, have balances at December 31, 2021 and 2020 of \$40.7 million and \$41.0 million, respectively. The Company amortizes these costs over the related period of benefit using the customer expected life that the Company determined to be three to five years which is consistent with the transfer to the customer of the services to which the asset relates. The Company classifies contract acquisition costs as long-term unless they have an original amortization period of one year or less.

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 the Conversational Cloud, 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 Conversational Cloud 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 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 Revenue

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 and is recognized at a point in time. Professional Services revenue is 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 Conversational Cloud 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 time and materials as the measure of progress toward complete satisfaction of the performance obligation. Our Professional Services 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.

Remaining Performance Obligation

As of December 31, 2021, the aggregate amount of the total transaction price allocated in contracts with original duration of one year or greater to the remaining performance obligations was \$362.8 million. Approximately 94% of the Company’s remaining performance obligations is expected to be recognized during the next 24 months, with the balance recognized thereafter. The aggregate balance of unsatisfied performance obligations represents contracted revenue that has not yet been recognized, and does not include contract amounts that are cancellable by the customer, amounts associated with optional renewal periods, and any amounts related to performance obligations, which are billed and recognized as they are delivered.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The Company has elected the optional exemption, which allows for the exclusion of the amounts for remaining performance obligations that are part of contracts with an original expected duration of less than one year. Such remaining performance obligations represent unsatisfied or partially unsatisfied performance obligation pursuant to ASC 606.

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 of \$9.6 million in the deferred revenue balance for the year ended December 31, 2021 is primarily driven by cash payments received or due in advance of satisfying performance obligations, partially offset by approximately \$75.5 million of revenues recognized that were included in the deferred revenue balance as of December 31, 2020.

The following table presents deferred revenue by revenue source:

	December 31,	
	2021	2020
(In thousands)		
Hosted services – Business	\$ 94,107	\$ 86,144
Hosted services – Consumer	870	835
Professional services – Business	3,831	1,869
Total deferred revenue - current	<u>\$ 98,808</u>	<u>\$ 88,848</u>
Professional services – Business	\$ 54	\$ 409
Total deferred revenue - non-current	<u>\$ 54</u>	<u>\$ 409</u>

Disaggregated Revenue

The following table presents the Company's revenues disaggregated by revenue source:

	Year Ended December 31,		
	2021	2020	2019
(In thousands)			
Revenue:			
Hosted services – Business	\$ 364,231	\$ 286,588	\$ 225,705
Hosted services – Consumer	37,695	29,764	24,480
Professional services – Business	67,698	50,268	41,424
Total revenue	<u>\$ 469,624</u>	<u>\$ 366,620</u>	<u>\$ 291,609</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Revenue by Geographic Location

The Company is domiciled in the United States and has international operations around the globe. The following table presents the Company's revenues attributable to domestic and foreign operations for the periods presented:

	Year Ended December 31,		
	2021	2020	2019
	(In thousands)		
United States	\$ 306,700	\$ 230,557	\$ 170,815
Other Americas ⁽¹⁾	18,128	13,420	11,462
Total Americas	324,828	243,977	182,277
EMEA ⁽²⁾	91,227	83,326	78,301
APAC	53,569	39,317	31,031
Total revenue	<u>\$ 469,624</u>	<u>\$ 366,620</u>	<u>\$ 291,609</u>

(1) Canada, Latin America, and South America.

(2) Includes revenue from the United Kingdom of \$56.7 million, \$53.4 million, and \$50.4 million for the years ended December 31, 2021, 2020, and 2019, respectively, and from the Netherlands of \$4.8 million, \$3.2 million, and \$10.0 million for the years ended December 31, 2021, 2020, and 2019, 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 the Conversational Cloud 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:

	Accounts Receivable	Unbilled Receivable	Contract Acquisition Costs (Non-current)	Deferred Revenue (Current)	Deferred Revenue (Non-current)
	(In thousands)				
Opening balance as of December 31, 2020	\$ 61,801	\$ 18,622	\$ 41,021	\$ 88,848	\$ 409
Increase (decrease), net	7,458	5,923	(346)	9,960	(355)
Ending balance as of December 31, 2021	<u>\$ 69,259</u>	<u>\$ 24,545</u>	<u>\$ 40,675</u>	<u>\$ 98,808</u>	<u>\$ 54</u>

Note 3. Net Loss Per Share

Basic earnings per share ("EPS") excludes dilution for common stock equivalents and is computed by dividing net income or loss attributable to common stockholders by the weighted average number of shares of common stock 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 "if-converted" method. The "if-converted" method is only assumed in periods where such application would be dilutive. In applying the "if-converted" method for diluted net income per share, the Company would assume conversion of the 2024 Notes at ratio of 25.9182 shares of our stock per \$1,000 principal amount of the 2024 Notes. The Company would assume conversion of the 2026 Notes at a ratio of 13.2933 shares of our stock per \$1,000 principal amount of the 2026 Notes. Assumed converted shares of our common stock are weighted for the period the Notes were outstanding. The shares of common stock underlying the conversion option of the Notes were not included in the calculation of diluted income per share for the year ended December 31, 2021.

See Note 8 – Convertible Senior Notes and Capped Call Transactions for a full description of the Notes.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

	Year Ended December 31,		
	2021	2020	2019
Net loss (in thousands)	\$ (124,974)	\$ (107,594)	\$ (96,071)
Weighted average number of shares outstanding, basic and diluted	69,606,105	65,888,450	62,593,026
Net loss per share, basic and diluted	\$ (1.80)	\$ (1.63)	\$ (1.53)

The anti-dilutive securities excluded from the shares used to calculate diluted net loss per share are as follows:

	December 31,	
	2021	2020
Shares subject to outstanding common stock options and employee stock purchase plan	4,782,487	4,330,686
Restricted stock units	3,732,013	2,953,252
Conversion option of the 2024 Notes	5,961,186	5,961,186
Conversion option of the 2026 Notes	6,879,283	6,879,283
	21,354,969	20,124,407

Note 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 the Conversational Cloud 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 Experts and 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 policies used in the preparation of the Company's 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 periods presented, based on the Company's internal financial reporting system utilized by the Company's chief operating decision maker, follows:

	Year Ended December 31, 2021			
	Business	Consumer	Corporate	Consolidated
	(In thousands)			
Revenue:				
Hosted services – Business	\$ 364,231	\$ —	\$ —	\$ 364,231
Hosted services – Consumer	—	37,695	—	37,695
Professional services – Business	67,698	—	—	67,698
Total revenue	431,929	37,695	—	469,624
Cost of revenue	149,983	6,897	—	156,880
Sales and marketing	139,866	25,555	—	165,421
Amortization of purchased intangibles	2,045	—	—	2,045
Unallocated corporate expenses	—	—	238,544	238,544
Operating income (loss)	\$ 140,035	\$ 5,243	\$ (238,544)	\$ (93,266)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

	Year Ended December 31, 2020			
	Business	Consumer	Corporate	Consolidated
	(In thousands)			
Revenue:				
Hosted services – Business	\$ 286,588	\$ —	\$ —	\$ 286,588
Hosted services – Consumer	—	29,764	—	29,764
Professional services – Business	50,268	—	—	50,268
Total revenue	336,856	29,764	—	366,620
Cost of revenue	99,394	6,874	—	106,268
Sales and marketing	128,752	21,021	—	149,773
Amortization of purchased intangibles	1,639	—	—	1,639
Unallocated corporate expenses	—	—	198,391	198,391
Operating income (loss)	\$ 107,071	\$ 1,869	\$ (198,391)	\$ (89,451)

	Year Ended December 31, 2019			
	Business	Consumer	Corporate	Consolidated
	(In thousands)			
Revenue:				
Hosted services – Business	\$ 225,705	\$ —	\$ —	\$ 225,705
Hosted services – Consumer	—	24,480	—	24,480
Professional services – Business	41,424	—	—	41,424
Total revenue	267,129	24,480	—	291,609
Cost of revenue	74,460	4,418	—	78,878
Sales and marketing	140,880	15,934	—	156,814
Amortization of purchased intangibles	1,794	—	—	1,794
Unallocated corporate expenses	—	—	141,155	141,155
Operating income (loss)	\$ 49,995	\$ 4,128	\$ (141,155)	\$ (87,032)

Geographic Information

The Company is domiciled in the United States and has international operations around the globe. The following table presents the Company's long-lived assets by geographic region for the periods presented:

	December 31,	
	2021	2020
	(In thousands)	
United States	\$ 444,318	\$ 202,275
Germany	52,342	1,597
Israel	20,754	16,657
Australia	12,771	13,792
Netherlands	4,566	8,301
Other ⁽¹⁾	15,629	14,999
Total long-lived assets	\$ 550,380	\$ 257,621

(1) United Kingdom, Japan, France, Italy, Spain, Canada, and Singapore

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 5. Goodwill and Intangible Assets

Goodwill

The changes in the carrying amount of goodwill for the periods presented are as follows:

	Business	Consumer	Total
	(In thousands)		
Balance as of December 31, 2020	\$ 87,168	\$ 8,024	\$ 95,192
Adjustments to goodwill:			
Acquisitions	198,205	—	198,205
Foreign exchange adjustments	(2,182)	—	(2,182)
Balance as of December 31, 2021	<u>\$ 283,191</u>	<u>\$ 8,024</u>	<u>\$ 291,215</u>

The total accumulated goodwill impairment charges are \$23.5 million through December 31, 2021. No impairment was recognized for the years ended December 31, 2021, 2020, and 2019.

Intangible Assets

Intangible assets are summarized as follows (for details about the intangible assets acquired see Note 9 – Acquisitions):

	December 31, 2021			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Amortization Period
	(In thousands)			
Amortizing intangible assets:				
Technology	\$ 90,626	\$ (30,757)	\$ 59,869	5.1 years
Customer relationships	32,162	(15,164)	16,998	10.0 years
Patents	7,988	(1,137)	6,851	11.8 years
Trademarks	1,474	(135)	1,339	5.0 years
Trade names	460	(43)	417	2.1 years
Other	314	(234)	80	2.2 years
Total	<u>\$ 133,024</u>	<u>\$ (47,470)</u>	<u>\$ 85,554</u>	

	December 31, 2020			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Amortization Period
	(In thousands)			
Amortizing intangible assets:				
Technology	\$ 30,499	\$ (26,818)	\$ 3,681	5.4 years
Customer relationships	16,981	(13,982)	2,999	8.4 years
Patents	5,076	(908)	4,168	12.5 years
Other	314	(235)	79	2.2 years
Total	<u>\$ 52,870</u>	<u>\$ (41,943)</u>	<u>\$ 10,927</u>	

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Amortization expense is calculated over the estimated useful life of the asset. Aggregate amortization expense for intangible assets was \$5.6 million, \$2.8 million, and \$2.9 million for the years ended December 31, 2021, 2020, and 2019, respectively. For the years ended December 31, 2021, 2020, and 2019, a portion of this amortization is included in cost of revenue. Estimated amortization expense for the next five years is as follows:

	Estimated Amortization Expense (In thousands)
2022	\$ 16,446
2023	15,162
2024	14,980
2025	14,579
2026	11,570
Thereafter	12,817
Total	\$ 85,554

Note 6. Property and Equipment

The following table presents the detail of property and equipment for the periods presented:

	December 31,	
	2021	2020
	(In thousands)	
Computer equipment and software	\$ 120,685	\$ 107,666
Internal-use software development costs	122,479	86,454
Finance lease right-of-use assets	6,797	10,045
Furniture, equipment, and building improvements	258	—
	250,219	204,165
Less: accumulated depreciation	(125,493)	(98,110)
Total	\$ 124,726	\$ 106,055

In accordance with its policy, the Company reviews the estimated useful lives of its fixed assets on an ongoing basis. As of December 31, 2021 and 2020, there was approximately \$36.1 million and \$30.5 million, respectively, of internal-use software development costs related to projects currently still in development, which are, therefore, not yet subject to amortization. Aggregate depreciation and amortization expense for property and equipment was \$27.4 million, \$22.8 million, and \$16.4 million for the years ended December 31, 2021, 2020, and 2019, respectively.

Note 7. Accrued Expenses and Other Current Liabilities

The following table presents the detail of accrued liabilities and other current liabilities for the periods presented:

	December 31,	
	2021	2020
	(In thousands)	
Professional services, consulting and other vendor fees	\$ 58,811	\$ 38,796
Payroll and other employee related costs	29,855	39,820
Sales commissions	4,269	6,988
Financing lease liability (Note 10)	3,738	3,488
Unrecognized tax benefits	2,424	2,039
Restructuring (Note 14)	1,694	4,732
Non income tax	918	2,954
Other	2,588	1,053
Total accrued expenses and other current liabilities	\$ 104,297	\$ 99,870

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 8. Convertible Senior Notes and Capped Call Transactions*Convertible Senior Notes due 2024 and Capped Calls*

In March 2019, the Company issued \$230.0 million aggregate principal amount of its 0.750% Convertible Senior Notes due 2024 in a private placement, which amount includes \$30.0 million aggregate principal amount of such Notes issued pursuant to the exercise in full by the initial purchasers of their option to purchase additional 2024 Notes. 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 2024 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 offering of the 2024 Notes, after deducting debt issuance costs, paid, or payable by the Company, was approximately \$221.4 million.

Each \$1,000 in principal amount of the 2024 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 2024 Notes in connection with such a corporate event. The 2024 Notes are not redeemable prior to the maturity date of the 2024 Notes and no sinking fund is provided for the 2024 Notes. If the Company undergoes a fundamental change (as defined in the indenture governing the 2024 Notes) prior to the maturity date, holders may require the Company to repurchase for cash all or any portion of their Notes in principal amounts of \$1,000 or a multiple thereof at a fundamental change repurchase price equal to 100% of the principal amount of the 2024 Notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

Holders of the 2024 Notes may convert their 2024 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 2024 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 2024 Notes) per \$1,000 principal amount of 2024 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 2024 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 2024 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.

During the three months ended December 31, 2021, the conditions allowing holders of the 2024 Notes to convert were not met.

The 2024 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 2024 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 2024 Notes, the Company separated the 2024 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 2024 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 term of the 2024 Notes.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

In accounting for the transaction costs related to the 2024 Notes, the Company allocated the total amount incurred of approximately \$8.6 million to the liability and equity components of the 2024 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 term of the 2024 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.

In connection with the offering of the 2024 Notes, the Company entered into privately-negotiated capped call option transactions with certain counterparties (the "2024 capped call"). The 2024 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 2024 Notes. The 2024 capped calls have initial cap prices of \$57.16 per share, subject to certain adjustment events. The 2024 capped calls cover, subject to anti-dilution adjustments, approximately 5.96 million shares of common stock. The 2024 capped calls are generally intended to reduce or offset the potential dilution to the common stock upon any conversion of the 2024 Notes with such reduction or offset, as the case may be, subject to a cap based on the cap price. The 2024 capped calls expire on March 1, 2024, subject to earlier exercise. The 2024 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 2024 capped calls are subject to certain specified additional disruption events that may give rise to a termination of the 2024 capped calls, including changes in law, failure to deliver, and hedging disruptions. The 2024 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 2024 capped calls was recorded as a reduction to additional paid-in capital in the accompanying consolidated balance sheet.

The remaining term over which the 2024 Notes' debt discount and debt issuance costs will be amortized is 2.2 years. The effective interest rate on the debt was 3.43% for the period ended December 31, 2021.

Convertible Senior Notes due 2026 and Capped Calls

In December 2020, the Company issued \$517.5 million aggregate principal amount of its 0% Convertible Senior Notes due 2026 in a private placement, which amount includes \$67.5 million aggregate principal amount of such Notes issued pursuant to the exercise in full by the initial purchasers of their option to purchase additional 2026 Notes.

The 2026 Notes will mature on December 15, 2026, unless earlier repurchased or redeemed by the Company or converted pursuant to their terms. The total net proceeds from the offering of the 2026 Notes, after deducting debt issuance costs, paid or payable by the Company, was approximately \$505.3 million.

Each \$1,000 in principal amount of the 2026 Notes is initially convertible into 13.2933 shares of the Company's common stock par value \$0.001, which is equivalent to an initial conversion price of approximately \$75.23 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 special 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 2026 Notes in connection with such a corporate event. The 2026 Notes are not redeemable prior to the maturity date of the 2026 Notes and no sinking fund is provided for the 2026 Notes. If the Company undergoes a fundamental change (as defined in the indenture governing the 2026 Notes) prior to the maturity date, holders may require the Company to repurchase for cash all or any portion of their Notes in principal amounts of \$1,000 or a multiple thereof at a fundamental change repurchase price equal to 100% of the principal amount of the 2026 Notes to be repurchased, plus accrued and unpaid special interest to, but excluding, the fundamental change repurchase date.

Holders of the 2026 Notes may convert their 2026 Notes at their option at any time prior to the close of business on the business day immediately preceding August 15, 2026, in multiples of \$1,000 principal amount, only under the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on March 31, 2021 (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 2026 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 2026 Notes) per \$1,000 principal amount of 2026 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 2026 Notes on each such trading day; (3) with respect to any Notes that the Company calls for redemption, at any time prior to the close of business on the scheduled

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

trading day immediately preceding the redemption date; or (4) upon the occurrence of specified corporate events. On or after August 15, 2026, holders may convert all or any portion of their 2026 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.

During the three months ended December 31, 2021, the conditions allowing holders of the 2026 Notes to convert were not met.

The 2026 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 2026 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 2026 Notes, the Company separated the 2026 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 \$162.5 million and was determined by deducting the fair value of the liability component from the par value of the 2026 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 term of the 2026 Notes.

In accounting for the transaction costs related to the 2026 Notes, the Company allocated the total amount incurred of approximately \$12.2 million to the liability and equity components of the 2026 Notes based on the proportion of the proceeds allocated to the debt and equity components. Issuance costs attributable to the liability component were approximately \$8.5 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 2026 Notes. Issuance costs attributable to the equity component were approximately \$3.7 million and recorded as a reduction of additional paid in capital in stockholders' equity.

The remaining term over which the 2026 Notes' debt discount and debt issuance costs will be amortized is 4.9 years. The effective interest rate on the debt was 5.49% for the period ended December 31, 2021.

In connection with the offering of the 2026 Notes, the Company entered into privately-negotiated capped call option transactions with certain counterparties (the "2026 capped call"). The 2026 capped calls each have an initial strike price of approximately \$75.23 per share, subject to certain adjustments, which corresponds to the initial conversion price of the 2026 Notes. The 2026 capped calls have initial cap prices of \$105.58 per share, subject to certain adjustment events. The 2026 capped calls cover, subject to anti-dilution adjustments, approximately 6.88 million shares of common stock. The 2026 capped calls are generally intended to reduce or offset the potential dilution to the common stock upon any conversion of the 2026 Notes with such reduction or offset, as the case may be, subject to a cap based on the cap price. The 2026 capped calls expire on December 15, 2026, subject to earlier exercise. The 2026 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 2026 capped calls are subject to certain specified additional disruption events that may give rise to a termination of the 2026 capped calls, including changes in law, failure to deliver, and hedging disruptions. The 2026 capped calls are recorded in stockholders' equity and are not accounted for as derivatives. The net cost of \$46.1 million incurred to purchase the 2026 capped calls was recorded as a reduction to additional paid-in capital in the accompanying consolidated balance sheet.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The net carrying amount of the liability component of the Notes was as follows:

	December 31,	
	2021	2020
	(In thousands)	
Principal	\$ 747,500	\$ 747,500
Unamortized discount	(162,960)	(196,269)
Unamortized issuance costs	(10,302)	(12,799)
Net carrying amount	<u>\$ 574,238</u>	<u>\$ 538,432</u>

The net carrying amount of the equity component of the Notes was as follows:

	December 31,	
	2021	2020
	(In thousands)	
Proceeds allocated to the conversion options (debt discount)	\$ 215,434	\$ 215,434
Issuance costs	(5,783)	(5,783)
Net carrying amount	<u>\$ 209,651</u>	<u>\$ 209,651</u>

The following table sets forth the interest expense recognized related to the Notes:

	Year Ended December 31,		
	2021	2020	2019
	(In thousands)		
Contractual interest expense	\$ 1,725	\$ 1,725	\$ 1,438
Amortization of issuance costs	2,499	1,340	956
Amortization of debt discount	33,309	11,564	7,605
Total interest expense	<u>\$ 37,533</u>	<u>\$ 14,629</u>	<u>\$ 9,999</u>

Interest expense of \$37.5 million, \$14.6 million, and \$10.0 million is reflected as a component of interest expense, net in the accompanying consolidated statement of operations for the years ended December 31, 2021, 2020, and 2019, respectively.

Note 9. Acquisitions

e-bot7 Acquisition

In July 2021, the Company acquired e-bot7, a Conversational AI company based in Germany for a purchase price of \$50.7 million. This acquisition is accounted for as a part of the Company's Business segment. This transaction was accounted for as a business combination. The purchase price consisted of approximately \$24.3 million in cash, \$20.2 million in shares of common stock of the Company, and potential earn-out consideration of up to \$8.8 million in common stock of the Company, which is based on achieving certain objectives and milestones and is included as part of the purchase price. The current fair value of the earn-out is \$6.2 million. Also as part of the transaction, there is a potential earn-out consideration of up to \$4.4 million payable in common stock of the Company that is being treated as compensation expense over the next two years. The earn-out consideration cannot exceed the maximum base earn-out consideration of \$3.9 million. The base earn-out payment consists of the revenue earn-out payment only. The fair value of the revenue earn-out consideration is approximately \$3.1 million of the current fair value of the earn-out of \$6.2 million. The Company incurred \$1.5 million in acquisition costs for this transaction that were expensed in the year ended December 31, 2021, and are included in General and administrative expense in the accompanying consolidated statements of operations.

The purchase price allocation resulted in approximately \$45.1 million of goodwill and \$7.7 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table summarizes the fair value amounts of identifiable assets acquired and liabilities assumed at the acquisition date:

	e-bot7 Acquisition	
	(In thousands)	
Assets acquired		
Cash	\$	1,325
Other current assets		706
Intangible assets		7,714
Other assets		221
Assets acquired	\$	9,966
Liabilities assumed		
Current liabilities assumed	\$	(1,055)
Long-term liabilities assumed		(3,063)
Deferred tax liabilities, non-current		(315)
Total liabilities assumed	\$	(4,433)
Net assets acquired		5,533
Total acquisition consideration		50,678
Goodwill	\$	45,145

Other current assets acquired in connection with the acquisition consisted primarily of accounts receivable and other short term assets. Current liabilities assumed in connection with the acquisition consisted primarily of accounts payable and other short term liabilities. Long-term liabilities assumed in connection with the acquisition consisted of the long-term portion of deferred revenue, other long-term liabilities, and long-term debt, which was paid in full subsequent to the acquisition date.

The following is the breakout of the intangible assets acquired:

Amortizing intangible assets:	Fair Value	Useful life
	(In thousands)	
Technology	\$ 3,560	5 years
Customer relationships	2,611	10 years
Trademark	1,543	5 years
Total	\$ 7,714	

The Company applied a relief from royalty method of the income approach to estimate the present values of the intangible assets acquired. The intangible assets acquired in the business acquisition were technology, customer relationships, and trademark for the fair value of \$7.7 million, determined based on the present value of royalty savings after-tax benefits, attributable to total revenue of the Company. The Company applied various estimates and assumptions with respect to forecasted revenue growth rates, the revenue attributable to the existing customers over time and the discount rate. The fair values assigned to the other tangible and identifiable intangible assets acquired and liabilities assumed as part of the business combination were based on management's estimates and assumptions. The Company began amortizing the customer relationships on the date of acquisition over a period of ten years based on expected future cash flow attributable to existing revenue by customer type. The amortization expense is recorded to amortization of purchased intangibles in the consolidated statements of operations.

VoiceBase, Inc. Acquisition

In October 2021, the Company acquired VoiceBase, Inc., a voice analytics platform operating in the United States for a purchase price of \$111.4 million. This acquisition is accounted for as a part of the Company's Business segment. This transaction was accounted for as a business combination. The purchase price consisted of approximately \$17.1 million in cash,

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

\$63.8 million in shares of common stock of the Company, a management retention plan (“MIP”) of \$9.3 million to be paid in shares of common stock of the Company, potential earn-out consideration of up to \$16.7 million in common stock of the Company, which is based on achieving certain objectives and milestones and is included as part of the purchase price, and replacement options of \$4.5 million, which means an option granted by LivePerson to purchase its common stock granted under the VoiceBase, Inc. 2010 Equity Incentive Plan, as amended (the “VoiceBase Stock Plan”), whether vested or unvested. The current fair value of the earn-out is \$22.5 million, of which \$5.8 million payable in common stock of the Company is being treated as compensation expense over the next two years. The earn-out consideration cannot exceed the maximum earn-out consideration of \$29.5 million. The MIP is a retention plan for the VoiceBase employees payable in two installments; 50% after the Company shares are registered with the SEC and 50% after January 1, 2022, but no later than March 15, 2022.

As part of the acquisition, we also assumed the VoiceBase Stock Plan and the outstanding vested and unvested options to purchase shares of common stock of VoiceBase thereunder, and such options become exercisable to purchase shares of LivePerson’s common stock, subject to appropriate adjustments to the number of shares and the exercise price of each such option. In connection with the above, we registered 16,322,217 vested shares and 5,167,530 unvested shares under the VoiceBase Stock Plan.

We estimated the fair value of the aforementioned vested and unvested options at the completion of the acquisition at \$5.9 million. Of the total consideration, \$4.5 million was allocated to the purchase price, \$0.8 million was accelerated and expensed immediately following the closing, and \$0.7 million was allocated to future services and will be expensed over the remaining requisite service periods. Vesting schedules vary based on the VoiceBase Stock Plan. The estimated fair value of the stock options was determined using the Black-Scholes option pricing model. The share conversion ratio of 0.0091 was applied to convert VoiceBase’s outstanding stock awards into shares of LivePerson’s common stock.

The purchase price allocation resulted in approximately \$81.3 million of goodwill and \$28.8 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.

The following table summarizes the fair value amounts of identifiable assets acquired and liabilities assumed at the acquisition date:

	VoiceBase, Inc. Acquisition
	(In thousands)
Assets acquired	
Cash	\$ 2,367
Other current assets	611
Intangible assets	28,810
Other assets	56
Assets acquired	\$ 31,844
Liabilities assumed	
Current liabilities assumed	\$ (1,473)
Deferred tax liabilities	(267)
Total liabilities assumed	\$ (1,740)
Net assets acquired	30,104
Total acquisition consideration	111,369
Goodwill	\$ 81,265

Other current assets acquired in connection with the acquisition consisted primarily of accounts receivable and other short term assets. Current liabilities assumed in connection with the acquisition consisted primarily of accounts payable and other short term liabilities.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following is the breakout of the intangible assets acquired:

Amortizing intangible assets:	Fair Value	Useful life
	(In thousands)	
Developed technology	\$ 24,900	5 years
Customer relationships	3,700	5 years
Trade name	210	2 years
Total	\$ 28,810	

The Company applied a multi-period excess earnings method of the income approach to estimate the fair values of the intangible assets acquired. The intangible assets acquired in the business acquisition were developed technology, customer relationships, and trademark for the fair value of \$28.8 million, determined based on the estimated fair value of expected after-tax cash flows attributable to annual recurring revenue from enterprise and API customers. The Company applied various estimates and assumptions with respect to forecasted revenue growth rates, the revenue attributable to the existing customers over time and the discount rate. The fair values assigned to the other tangible and identifiable intangible assets acquired and liabilities assumed as part of the business combination were based on management's estimates and assumptions. The Company began amortizing the customer relationships on the date of acquisition over a period of five years based on expected future cash flow attributable to existing customers. The amortization expense is recorded to amortization of purchased intangibles in the consolidated statements of operations.

The Company incurred \$2.8 million in acquisition costs for this transaction that were expensed in the year ended December 31, 2021, and are included in General and administrative expense in the accompanying consolidated statements of operations.

Tenfold Acquisition

In October 2021, the Company acquired Callinize Inc., dba Tenfold, a leading customer experience integration platform operating in the United States. Tenfold was built to integrate the world's leading communication service providers with the leading CRM and support systems. The purchase price was \$112.2 million. This acquisition is accounted for as a part of the Company's Business segment. This transaction was accounted for as a business combination. The purchase price consisted of approximately \$56.9 million in cash, \$42.0 million in shares of common stock of the Company, potential earn-out consideration of up to \$6.9 million in common stock of the Company, which is based on achieving certain objectives and milestones and is included as part of the purchase price, and replacement options of \$6.4 million, which means an option granted by LivePerson to purchase its common stock granted under the Callinize Inc. dba Tenfold 2015 Stock Plan, as amended most recently as of June 26, 2019 (the "Tenfold Stock Plan"), whether vested or unvested. The current fair value of the earn-out is \$10.1 million, of which \$3.1 million payable in common stock of the Company is being treated as compensation expense over the next two years. The earn-out consideration cannot exceed the maximum earn-out consideration of \$14.3 million.

As part of the acquisition, the Company also assumed the Tenfold Stock Plan and the outstanding vested and unvested options to purchase shares of common stock of Tenfold thereunder, and such options become exercisable to purchase shares of LivePerson's common stock, subject to appropriate adjustments to the number of shares and the exercise price of each such option. In connection with the above, we registered 60,082,513 vested shares and 42,964,711 unvested shares under the Tenfold Stock Plan.

We estimated the fair value of the aforementioned vested and unvested options at the completion of the acquisition at \$31.5 million. Of the total consideration, \$13.5 million was allocated to the purchase price (with \$7.1 million of this paid in cash instead of shares), \$4.0 million was related to earn-outs and escrow that were held back, \$2.4 million was accelerated and expensed immediately following the closing, and \$11.6 million was allocated to future services and will be expensed over the remaining requisite service periods of approximately four years on a straight-line basis. The estimated fair value of the stock options was determined using the Black-Scholes option pricing model. The share conversion ratio of 0.0055 was applied to convert Tenfold's outstanding stock awards into shares of LivePerson's common stock.

The purchase price allocation resulted in approximately \$71.8 million of goodwill and \$41.2 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table summarizes the fair value amounts of identifiable assets acquired and liabilities assumed at the acquisition date:

	Tenfold Acquisition
	(In thousands)
Assets acquired	
Cash	\$ 3,770
Other current assets	2,339
Intangible assets	41,150
Other assets	1,144
Assets acquired	\$ 48,403
Liabilities assumed	
Current liabilities assumed	\$ (1,470)
Long-term liabilities assumed	(3,524)
Deferred tax liabilities, non-current	(3,005)
Liabilities assumed	\$ (7,999)
Net assets acquired	40,404
Total acquisition consideration	112,187
Goodwill	<u>\$ 71,783</u>

Other current assets acquired in connection with the acquisition consisted primarily of accounts receivable and other short term assets. Current liabilities assumed in connection with the acquisition consisted primarily of accounts payable and other short term liabilities. Long-term liabilities assumed in connection with the acquisition consisted of the long-term portion of deferred revenue.

The following is the breakout of the intangible assets acquired:

Amortizing intangible assets:	Fair Value	Useful life
	(In thousands)	
Developed technology	\$ 31,900	5 years
Customer relationships	9,000	15 years
Trade name	250	2 years
Total	<u>\$ 41,150</u>	

The Company applied a multi-period excess earnings method of the income approach to estimate the fair values of the intangible assets acquired. The intangible assets acquired in the business acquisition were developed technology, customer relationships, and trademark for the fair value of \$41.2 million, determined based on the estimated fair value of expected after-tax cash flows attributable to annual recurring revenue from commercial, enterprise, and partner customer segments. The Company applied various estimates and assumptions with respect to forecasted revenue growth rates, the revenue attributable to the existing customers over time and the discount rate. The fair values assigned to the other tangible and identifiable intangible assets acquired and liabilities assumed as part of the business combination were based on management's estimates and assumptions. The Company began amortizing the customer relationships on the date of acquisition over a period of 15 years based on expected future cash flow attributable to existing customers. The amortization expense is recorded to amortization of purchased intangibles in the consolidated statements of operations.

The Company incurred \$1.5 million in acquisition costs for this transaction that were expensed in the year ended December 31, 2021, and are included in General and administrative expense in the accompanying consolidated statements of operations.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Pro Forma Financial Information

The following unaudited pro forma information presents the combined results of operations as if the acquisitions of e-bot7, VoiceBase, and Tenfold had been completed as of the beginning of the Company's fiscal year 2020. The unaudited pro forma results include adjustments primarily related to the amortization of intangible assets and the inclusion of acquisition costs as of the earliest period presented. There were no transactions between the Company and the acquired companies during the periods presented that would need to be eliminated.

The unaudited pro forma results do not reflect any cost saving synergies from operating efficiencies, or the effect of the incremental costs incurred from integrating these companies. For pro forma purposes, 2021 earnings were adjusted to exclude acquisition-related costs, and 2020 earnings were adjusted to include these costs. Accordingly, these unaudited pro forma results are presented for informational purposes only and are not necessarily indicative of what the actual results of operations of the combined company would have been if the acquisition had occurred at the beginning of the period presented, nor are they indicative of future results of operations.

The unaudited pro forma financial information was as follows:

	(Unaudited) December 31,	
	2021	2020
	(In thousands)	
Revenue	\$ 482,152	\$ 382,683
Net loss	\$ (159,697)	\$ (131,826)

The amounts of revenue and net loss of acquisitions included in the Company's consolidated statement of operations from the acquisition date to December 31, 2021 were \$4.9 million and \$14.1 million, respectively.

Note 10. Leases

We have operating and finance leases for our corporate offices and other service agreements. Our leases have remaining lease terms of less than one to five years, some of which include options to extend.

In connection with the leases, we recognized operating lease right of use assets of \$2.0 million and \$0.6 million and an aggregate lease liability of \$6.1 million and \$12.9 million in our consolidated balance sheet as of December 31, 2021 and December 31, 2020, respectively.

On July 13, 2020, the Company announced its decision to transition to an employee-centric model under which employees will work remotely rather than in traditional offices. In connection with this decision, the Company abandoned 14 leases in its global portfolio of office leases during 2020. As a result, the Company recognized accelerated amortization to fully reduce the carrying value of the associated right of use assets between the decision date and the cease use date. During the second quarter of 2021, the Company decided to reoccupy some of its leased space to provide its employees with the option of working in an office space environment if they choose to do so. There were no changes to the accounting for the lease liabilities associated with the leased office spaces. During 2021, we had a \$3.5 million gain resulting from the settlement of leases.

As of December 31, 2021, due to a dispute with one of the leases in Israel, the Company was required to pledge cash as collateral security to be maintained at an Israeli bank. The collateral security would remain in control of the bank, to be available in order to satisfy outstanding obligations under the lease contracts. Accordingly, the Company had cash at an Israeli bank of approximately \$1.5 million at December 31, 2021, which is recorded as restricted cash in Prepaid expenses and other current assets in the consolidated balance sheets. In the third quarter of 2021, the Company entered into a new lease in Australia and was required to pledge \$0.2 million in cash as collateral security.

We continue to actively assess our global lease portfolio. However, any additional de-recognition of right of use assets and incurrence of various one-time expenses in connection with early termination of additional leases are not expected to be material to our financial condition or results of operations.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Supplemental cash flow information related to leases for the periods listed are as follows:

	Year Ended December 31,		
	2021	2020	2019
	(In thousands)		
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows for operating leases	\$ 2,927	\$ 4,901	\$ 6,963
Operating cash flows for finance leases	362	88	—
Financing cash flows for finance leases	3,554	1,154	—

The components of lease costs for the periods listed are as follows:

	Year Ended December 31,		
	2021	2020	2019
	(In thousands)		
Finance lease cost			
Amortization of right-of-use assets	\$ 3,718	\$ 772	\$ —
Interest	362	88	—
Operating lease cost	8,912	12,649	12,984
Total lease cost	\$ 12,992	\$ 13,509	\$ 12,984

	December 31,	December 31,
	2021	2020
Weighted Average Remaining Lease Term:		
Operating leases	2.5 years	3.0 years
Finance leases	2.0 years	2.8 years
Weighted Average Discount Rate:		
Operating leases	7 %	7 %
Finance leases	4 %	4 %

Supplemental balance sheet information related to leases is as follows:

	Classification on the Consolidated Balance Sheet	December 31,	December 31,
		2021	2020
(In thousands)			
Assets			
Operating ROU assets	Operating lease ROU assets	\$ 1,977	\$ 614
Finance ROU assets	Property and equipment, net	6,797	10,045
Liabilities			
Current liabilities:			
Operating lease liability	Operating lease liability	\$ 3,380	\$ 5,718
Finance lease liability	Accrued expenses and other current liabilities	3,738	3,488
Non-current liabilities:			
Operating lease liability	Operating lease liability, net of current portion	2,733	7,180
Finance lease liability	Other liabilities	2,780	6,176

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Future minimum lease payments under non-cancellable operating and finance leases (with an initial or remaining lease terms in excess of one year) are as follows:

Year Ending December 31,	December 31, 2021	
	Operating Leases	Finance Leases
	(In thousands)	
2022	\$ 3,773	\$ 3,936
2023	1,578	2,623
2024	526	123
2025	625	92
2026	261	—
Thereafter	—	—
Total minimum lease payments	6,763	6,774
Less: present value adjustment	(650)	(256)
Present value of lease liabilities	\$ 6,113	\$ 6,518

Rental expense for operating leases and other service agreements was approximately \$13.0 million, \$13.5 million and \$13.0 million for the years ended December 31, 2021, 2020, and 2019, respectively.

Note 11. 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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 December 31, 2021 and December 31, 2020, are summarized as follows:

	December 31, 2021			
	Level 1	Level 2	Level 3	Total
	(In thousands)			
Assets:				
Cash equivalents:				
Money market funds	\$ 416,178	\$ —	\$ —	\$ 416,178
Total assets	\$ 416,178	\$ —	\$ —	\$ 416,178
Liabilities:				
Contingent earn-out				
Total liabilities	\$ —	\$ —	\$ 29,686	\$ 29,686
December 31, 2020				
	Level 1	Level 2	Level 3	Total
(In thousands)				
Assets:				
Cash equivalents:				
Money market funds	\$ 328,195	\$ —	\$ —	\$ 328,195
Total assets	\$ 328,195	\$ —	\$ —	\$ 328,195
Liabilities:				
Contingent earn-out				
Total liabilities	\$ —	\$ —	\$ —	\$ —

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 ASC 820 - Fair Value Measurement 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 a goodwill impairment test. This measurement is classified based on level 3 input.

As of December 31, 2021, the fair value of the Notes issued in the two Convertible Senior Note transactions, as further described in Note 8 – Convertible Senior Notes and Capped Call Transactions above, was approximately \$711.0 million. Management determines the fair value by utilizing an independent valuation specialist using the antithetic variable technique and is considered a Level 2 fair value measurement.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

We recorded contingent earn-outs as of December 2021 in connection with the acquisitions of e-bot7, VoiceBase, and Tenfold. The contingent earn-outs are based on achieving certain targeted objectives and milestones.

The changes in fair value of the Level 3 liabilities are as follows:

	December 31,	
	2021	2020
	(In thousands)	
Balance, Beginning of year	\$ —	557
e-bot7 acquisition (Note 9)	6,170	—
Tenfold acquisition (Note 9)	6,946	—
VoiceBase acquisition (Note 9)	16,714	—
AdvantageTec, Inc. fair value adjustment	132	(263)
Payments	(132)	(294)
Balance, End of year	<u>\$ 29,830</u>	<u>\$ —</u>

Note 12. Commitments and Contingencies

Employee Benefit Plans

The Company has a 401(k) defined contribution plan covering all eligible employees. The Company's 401(k) policy is 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. Total Company matching contributions were \$3.7 million, \$3.1 million, and \$3.2 million for the years ended December 31, 2021, 2020, and 2019, respectively.

Letters of Credit

As of December 31, 2021, the Company had letters of credit totaling \$0.8 million outstanding as a security deposit for the due performance by the Company of the terms and conditions of a supply contract.

Indemnifications

The Company enters into service and license agreements in its ordinary course of business. Pursuant to some of these agreements, the Company agrees to indemnify certain customers from and against certain types of claims and losses suffered or incurred by them as a result of using the Company's products.

The Company also has agreements whereby its executive officers and directors are indemnified for certain events or occurrences while the officer or director is, or was serving, at the Company's request in such capacity. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited; however, the Company has a directors and officers insurance policy that reduces its exposure and enables the Company to recover a portion of any future amounts paid. As a result of its insurance policy coverage, the Company believes the estimated fair value of these indemnification agreements is minimal. The Company has no liabilities recorded for these agreements as of December 31, 2021 and 2020.

Non-Income Related Taxes

The Company is in the process of finalizing its sales tax liability analysis for states in which it has economic nexus. During the first quarter of 2020, the Company determined it was probable the Company would be subject to sales tax liabilities plus applicable interest in these states and has estimated the potential exposure to range between \$2.5 million to \$6.3 million. The Company determined that its best estimate of what would be reasonably expected for the Company to settle the potential exposure was \$2.5 million and accordingly, the Company accrued this amount with a corresponding charge to earnings as of March 31, 2020. As of December 31, 2021, there is a \$0.8 million accrual balance for sales tax liabilities. The decrease in the balance of this accrual is primarily due to payments made for the sales tax liabilities.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

COVID-19 Pandemic

In December 2019, COVID-19 was first reported. On March 11, 2020, due to worldwide spread of the virus, the World Health Organization characterized COVID-19 as a pandemic. The COVID-19 global pandemic has resulted in a widespread health crisis, and the resulting impact on governments, businesses and individuals and actions taken by them in response to the situation have resulted in widespread economic disruptions, significantly affecting broader economies, financial markets, and overall demand for the Company's products. The COVID-19 outbreak also has caused increased uncertainty in estimates and assumptions affecting the reported amounts of assets and liabilities, and the disclosure of contingent assets and liabilities in the Company's consolidated financial statements as the extent and period of recovery from the COVID-19 outbreak and related economic disruption is difficult to forecast.

The extent to which COVID-19 impacts the Company's business and financial results will depend on numerous evolving factors including, but not limited to, the magnitude and duration of COVID-19, the extent to which it will impact worldwide macroeconomic conditions, the speed of the anticipated recovery, and governmental and business reactions to the pandemic. The Company assessed certain accounting matters that generally require consideration of forecasted financial information in context with the information reasonably available to the Company and the unknown future impacts of COVID-19. The accounting matters assessed included, but were not limited to, the Company's allowance for credit losses and the carrying value of the goodwill and other long-lived assets. While there was not any significant impact to the operations of the Company, during the twelve months ended December 31, 2020, the Company moved to an employee-centric model under which employees will work remotely rather than in traditional offices due to concerns about COVID-19. As a result of this decision, the Company recognized accelerated amortization to fully reduce the carrying value of the associated ROU assets for 14 leases within its global lease portfolio, which is a material impact to the Company's consolidated financial statements as of and for the twelve months ended December 31, 2020. Refer to earlier paragraphs of this Note 10 for a detailed discussion of the impacts of this lease restructuring.

The Company's future assessment of the magnitude and duration of COVID-19, as well as other factors, could result in other material impacts to the Company's consolidated financial statements in future reporting periods.

Note 13. Stockholders' Equity*Common Stock*

As December 31, 2021, there were 200,000,000 shares of common stock authorized, and 74,980,546 and 72,234,303 shares issued and outstanding, respectively. As of December 31, 2020, there were 200,000,000 shares of common stock authorized, and 70,264,265 and 67,554,435 shares issued and outstanding, respectively. The par value for the common stock is \$0.001 per share.

Preferred Stock

As of December 31, 2021 and 2020, there were 5,000,000 shares of preferred stock authorized, and zero shares issued and outstanding. The par value for the preferred stock is \$0.001 per share.

Stock-Based Compensation*Stock Option Plans*

The Company's 2019 Stock Incentive Plan, as amended and restated (the "2019 Plan"), became effective on April 11, 2019. The 2019 Plan allows the Company to grant incentive stock options and restricted stock units to its employees and directors to participate in the Company's future performance through stock-based awards at the discretion of the board of directors. On April 19, 2021, the Company's board of directors amended the plan and authorized 5,000,000 new shares for issuance. The number of shares authorized for issuance is 40,067,744 shares in the aggregate. Options to acquire common stock granted thereunder have ten-year terms. As of December 31, 2021, approximately 5.0 million shares of common stock remained available for issuance (taking into account all option exercises and other equity award settlements through December 31, 2021).

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Employee Stock Purchase Plan

There are 1,000,000 shares authorized and reserved for issuance under the 2019 Employee Stock Purchase Plan. As of December 31, 2021, approximately 0.7 million shares of common stock remain available for issuance under the 2019 Employee Stock Purchase Plan (taking into account all share purchases through December 31, 2021).

Inducement Plan

There are 3,368,048 shares of common stock authorized and reserved for issuance under the Inducement Plan. As of December 31, 2021, no more shares of common stock remained available for issuance under the Inducement Plan (taking into account all option exercises and other equity award settlements through December 31, 2021).

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	1,425	29.76		
Exercised	(1,523)	11.12		
Cancelled or expired	(369)	14.76		
Balance outstanding at December 31, 2019	5,799	\$ 16.57	6.79	\$ 119,064
Options vested and expected to vest	5,096	\$ 15.29	6.49	\$ 110,934
Options exercisable at December 31, 2019	2,901	\$ 12.03	4.95	\$ 72,424
Balance outstanding at December 31, 2019	5,799	\$ 16.57		
Granted	737	31.21		
Exercised	(1,683)	12.69		
Cancelled or expired	(521)	23.27		
Balance outstanding at December 31, 2020	4,332	\$ 19.78	6.79	\$ 183,825
Options vested and expected to vest	1,470	\$ 23.88	8.19	\$ 56,382
Options exercisable at December 31, 2020	2,280	\$ 14.80	5.40	\$ 108,128
Balance outstanding at December 31, 2020	4,332	\$ 19.78		
Granted	1,705	48.24		
Exercised	(863)	13.55		
Cancelled or expired	(392)	32.94		
Balance outstanding at December 31, 2021	4,782	\$ 27.52	6.77	\$ 62,300
Options vested and expected to vest	1,419	\$ 36.41	8.61	\$ 11,387
Options exercisable at December 31, 2021	2,564	\$ 17.87	5.05	\$ 46,932

The total fair value of stock options exercised during the years ended December 31, 2021 and 2020 was approximately \$6.6 million and \$10.0 million, respectively. As of December 31, 2021, there was approximately \$44.8 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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		Aggregate Fair Value (In thousands)
	Number of Shares (In thousands)	Weighted Average Grant Date Fair Value (Per Share)	
Balance outstanding at December 31, 2018	2,690	\$ 15.81	\$ 50,756
Awarded	1,979	30.99	
Released	(1,197)	14.24	
Forfeited	(423)	20.28	
Non-vested and outstanding at December 31, 2019	3,049	\$ 24.73	\$ 112,848
Balance outstanding at December 31, 2019	3,049	\$ 24.73	\$ 112,848
Awarded	2,530	26.51	
Released	(1,906)	23.40	
Forfeited	(723)	25.19	
Non-vested and outstanding at December 31, 2020	2,950	\$ 27.00	\$ 183,781
Balance outstanding at December 31, 2020	2,950	\$ 27.00	\$ 183,781
Awarded	3,066		
Released	(1,596)		
Forfeited	(688)		
Non-vested and outstanding at December 31, 2021	3,732	\$ 43.63	\$ 133,308
Expected to vest	2,246	\$ 41.86	\$ 80,242

RSUs granted to employees generally vest over a three to four-year period, or upon achievement of certain performance conditions. As of December 31, 2021, total unrecognized compensation cost, adjusted for estimated forfeitures, related to nonvested RSUs was approximately \$141.9 million and the weighted-average remaining vesting period was 3.2 years.

For the year ended December 31, 2021, the Company accrued approximately \$18.4 million for cash awards related to bonus 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 consolidated financial statements. For the year ended December 31, 2020, the Company accrued approximately \$20.4 million and \$8.9 million for cash awards related to bonus and for the achievement of long term incentive plan awards, respectively, 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 consolidated financial statements.

Stock-based compensation expense recognized in the Company's consolidated statements of operations and cash flows was \$69.7 million, \$65.9 million, and \$44.1 million for the years ended December 31, 2021, 2020, and 2019, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The per share weighted average fair value of stock options granted during the years ended December 31, 2021, 2020 and 2019 was \$28.68, \$13.84, and \$12.12, 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 for the periods presented:

	Year Ended December 31,		
	2021	2020	2019
Dividend yield	—%	—%	—%
Risk-free interest rate	0.46% – 1.33%	0.26% – 0.66%	1.66% – 3.05%
Expected life (in years)	5	5	5
Historical volatility	53.51% – 54.55%	46.50% – 53.91%	43.42% – 44.00%

A description of the methods used in the significant assumptions used to estimate the fair value of stock-based-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.

Note 14. Restructuring

In response to the COVID-19 pandemic, the Company went through a re-evaluation of its real estate needs. In connection with this re-evaluation, and the success the Company has had working remotely, it was decided in July 2020 that the Company would significantly reduce the real estate space it leases. This decision resulted in the significant reduction of the real estate space leased by the Company and the removal of the associated ROU assets. Furthermore, this resulted in various one-time expenses in connection with the abandonment of the majority of the Company's leased facilities. The lease restructuring costs noted below are a result of this transition to an employee-centric workforce model that does not rely on traditional offices.

On top of the lease restructuring costs, the Company went through a further restructuring related to costs associated with re-prioritizing and reallocating resources to focus on areas believed by management to show high growth potential.

The expenses associated with these restructuring events were approximately \$3.4 million, \$29.4 million, and \$2.0 million during the years ended December 31, 2021, 2020, and 2019, respectively, and are classified in the consolidated statements of operations as restructuring costs. The restructuring liability was approximately \$1.7 million and \$4.7 million as of December 31, 2021 and 2020, respectively, and is classified as accrued expenses and other current liabilities on the consolidated balance sheets, as the liability is expected to be settled in the next 12 months.

The following table presents the detail of the liability for the Company's restructuring charges for the periods presented:

	December 31,	
	2021	2020
	(In thousands)	
Balance at January 1	\$ 4,732	\$ 314
Lease restructuring costs	724	5,034
Severance and other associated costs	2,673	5,090
Cash payments	(6,435)	(5,706)
Balance at December 31	\$ 1,694	\$ 4,732

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table presents the detail of expenses for the Company's restructuring charges for the periods presented:

	Year Ended December 31,		
	2021	2020	2019
	(In thousands)		
Lease restructuring costs:			
ROU assets write down	\$ —	\$ 13,938	\$ —
Abandonment of property and equipment	—	5,147	—
Other lease restructuring costs	724	5,245	—
Total lease restructuring costs	724	24,330	—
Severance and other associated costs	2,673	5,090	2,043
Total restructuring costs	\$ 3,397	\$ 29,420	\$ 2,043

Note 15. Legal Matters

The Company filed an intellectual property suit against [24]7 Customer, Inc. (“[24]7”) 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 filed suit against the Company in the Northern District of California alleging patent infringement. On December 7, 2015, [24]7 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 and Trademark Office in the Company's favor have invalidated the majority of [24]7 patents that were asserted in the patent cases. The Company believes the remaining claims filed by [24]7 are entirely without merit and intends to defend them vigorously. Trial for the Company's intellectual property and other claims asserted against [24]7 related to three of the customers at issue occurred on May 24, 2021 and the jury awarded approximately \$30.3 million in favor of the Company, including approximately \$6.7 million in compensatory damages and approximately \$23.6 million in punitive damages. The Company currently anticipates that [24]7 may elect to pursue challenges to this award on procedural grounds. Accordingly, no amounts for the settlement have been reflected in the Company's financial statements. Trial for [24]7's patent infringement claims has been vacated, to be reset by the Court.

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.

Note 16. Income Taxes

Income taxes are accounted for under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences are expected to become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. The Company includes interest accrued on the underpayment of income taxes in interest expense and penalties, if any, related to unrecognized tax benefits in general and administrative expenses. The Company recorded a valuation allowance against its U.S. and Germany deferred tax assets as it considered its cumulative loss in recent years as a significant piece of negative evidence. Since valuation allowances are evaluated on a jurisdiction by jurisdiction basis, we believe that the deferred tax assets related to LivePerson Australia, LivePerson UK, Kasamba Israel, LivePerson Japan and LivePerson LTD Israel are more likely than not to be realized as these jurisdictions have positive cumulative pre-tax book income after adjusting for permanent and one-time items. During the year ended December 31, 2021, there was an increase in the valuation recorded of \$51.7 million.

The Company had a valuation allowance on certain deferred tax assets for the years ended December 31, 2021, 2020, and 2019 of \$107.1 million, \$55.4 million, and \$48.5 million, respectively. An increase in the valuation allowance in the amount of \$34.3 million was recorded as an expense and an additional increase of \$17.4 million was recorded to goodwill against acquired federal and state net operating losses during 2021. An increase in the valuation allowance in the amount of \$35.1 million was recorded as an expense and a decrease of \$28.2 million related to the issuance of convertible notes was charged to equity during 2020.

Under Section 382 of the Internal Revenue Code of 1986, as amended (the "Code"), the Company's use of its federal net operating loss ("NOL") carryforwards may be limited if the Company experiences an ownership change, as defined in Section 382 of the Code. The use of NOLs from acquired businesses may also be limited under Section 382. Such an annual limitation could result in the expiration of the NOL carryforwards before utilization. Corresponding provisions of state law may limit the Company's ability to utilize NOL carryforwards for state tax purposes. As of December 31, 2021, the Company had approximately \$553.4 million of federal NOL carryforwards available to offset future taxable income. Included in this amount is \$5.1 million of federal NOL carryovers from the Company's acquisition of Proficient in 2006, \$51.8 million of federal NOL carryovers from the Company's acquisition of Tenfold in 2021, and \$65.6 million of federal NOL carryovers from the Company's acquisition of VoiceBase in 2021. Approximately \$78.2 million of these federal NOL carryforwards were generated in taxable years ending on or before December 31, 2017 and will expire in various years through 2037. Federal NOL carryforwards generated in taxable years ending after December 31, 2017, do not expire, but generally may only offset up to 80% of federal taxable income earned in a taxable year.

The domestic and foreign components of income (loss) before provision for income taxes consist of the following:

	Year Ended December 31,		
	2021	2020	2019
	(In thousands)		
United States	\$ (128,210)	\$ (113,689)	\$ (105,961)
Israel	1,414	2,214	2,791
United Kingdom	1,145	536	5,377
Netherlands	3,629	3,398	(465)
Australia	755	1,663	716
Germany	(6,450)	243	3,854
Other ⁽¹⁾	339	507	462
	<u>\$ (127,378)</u>	<u>\$ (105,128)</u>	<u>\$ (93,226)</u>

(1) Includes Bulgaria, Canada, Japan, France, India, Italy, Singapore, and Spain

No additional provision has been made for U.S. income taxes on the undistributed earnings of its Israeli subsidiary, LivePerson Ltd. (formerly HumanClick Ltd.), as such earnings have been taxed in the U.S. and accumulated earnings of the Company's other foreign subsidiaries are immaterial through December 31, 2021.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The provision for income taxes consists of the following:

	Year Ended December 31,		
	2021	2020	2019
	(In thousands)		
Current income taxes:			
U.S. Federal	\$ (22)	\$ (581)	\$ (452)
State and local	159	59	89
Foreign	3,698	2,408	4,415
Total current income taxes	3,835	1,886	4,052
Deferred income taxes:			
U.S. Federal	(2,908)	(151)	126
State and local	20	459	135
Foreign	(3,351)	272	(1,468)
Total deferred income taxes	(6,239)	580	(1,207)
Total provision for income taxes	\$ (2,404)	\$ 2,466	\$ 2,845

The difference between the total income taxes computed at the federal statutory rate and the provision for income taxes consists of the following:

	Year Ended December 31,		
	2021	2020	2019
Federal statutory rate	21.00 %	21.00 %	21.00 %
State taxes, net of federal benefit	4.83 %	4.82 %	2.95 %
Non-deductible expenses – stock based compensation	(1.73)%	(1.21)%	1.82 %
Global intangible low tax income inclusion	— %	— %	(2.29)%
Non-deductible expenses – other	(0.54)%	0.14 %	(0.37)%
Non-deductible excess compensation	(2.30)%	(5.52)%	(1.20)%
Foreign taxes	(0.86)%	(3.98)%	(1.86)%
Valuation allowance	(26.92)%	(30.87)%	(26.42)%
Stock based compensation – excess tax benefit	6.58 %	9.93 %	6.18 %
Other	1.83 %	3.34 %	(2.86)%
Total provision	1.89 %	(2.35)%	(3.05)%

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The effects of temporary differences and federal NOL carryforwards that give rise to significant portions of federal deferred tax assets and deferred tax liabilities as of the dates presented:

	Year Ended December 31,	
	2021	2020
(In thousands)		
Deferred tax assets:		
Net operating loss carryforwards	\$ 141,930	\$ 78,651
Foreign tax credit	1,222	1,222
R&D tax credit	1,761	—
Original issue discount	13,530	16,464
Interest	4,188	1,986
Operating lease liability	3,145	5,150
Accounts payable and accrued expenses	7,010	7,289
Non-cash compensation	13,591	7,401
Intangibles amortization	—	3,620
Allowance for doubtful accounts	1,280	954
Total deferred tax assets	187,657	122,737
Less valuation allowance	(107,061)	(55,357)
Deferred tax assets, net of valuation allowance	80,596	67,380
Deferred tax liabilities:		
Property and equipment	(12,586)	(10,048)
Intangibles amortization	(15,361)	—
Goodwill amortization and contingent earn-out adjustments	(6,165)	(5,294)
Convertible notes issuance	(41,666)	(49,118)
Operating lease right of use asset	(1,833)	(2,511)
Total deferred tax liabilities	(77,611)	(66,971)
Net deferred tax assets (liabilities)	\$ 2,985	\$ 409

We have income tax NOL carryforwards related to federal, Australian, and German income tax carryforwards of \$553.4 million, \$1.9 million, and \$10.9 million, respectively. The Australian and German NOLs can be carried forward indefinitely. For the federal NOLs, \$475.2 million can be carried forward indefinitely, \$5.1 million will expire between 2023 and 2026, and \$73.1 million will expire between 2030 and 2037. We have \$387.0 million of state NOLs, of which \$86.3 million can be carried forward indefinitely and \$300.7 million expire between 2022 and 2041.

ASC 740-10 clarifies the accounting for uncertainty in income taxes recognized in the financial statements in accordance with other provisions contained within this guidance. This topic prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more likely than not to be sustained upon examination by the taxing authorities. The amount recognized is measured as the largest amount of benefit that is greater than 50% likely of being realized upon ultimate audit settlement. The Company had unrecognized tax benefits of \$2.9 million as of December 31, 2021 and \$3.6 million as of December 31, 2020, respectively. Accrued interest and penalties included in the Company's liability related to unrecognized tax benefits and recorded in accrued expenses and other current liabilities were immaterial at December 31, 2021 and 2020.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	Year Ended December 31,		
	2021	2020	2019
	(In thousands)		
Unrecognized tax benefits balance at January 1	\$ 3,615	\$ 2,053	\$ 1,921
Increase due to business combinations	488	—	—
Gross decrease for tax positions of prior years	—	(438)	—
Gross increase for tax positions of current years	376	2,984	584
Decrease due to expiration of statute	—	—	(452)
Decrease due to settlement	(1,562)	(984)	—
Gross unrecognized tax benefits at December 31	<u>\$ 2,917</u>	<u>\$ 3,615</u>	<u>\$ 2,053</u>

The tax years subject to examination by major tax jurisdictions include the years 2015 and forward for U.S. states and New York City, the years 2016 and forward for U.S. Federal, and the years 2015 and forward for certain foreign jurisdictions.

Tax Legislation

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security (“CARES”) Act was signed into law making several changes to the Code. The changes include, but are not limited to: increasing the limitation on the amount of deductible interest expense, allowing companies to carryback certain net operating losses, and increasing the amount of net operating loss carryforwards that corporations can use to offset taxable income. As a result of the CARES Act, the Company filed refund claims relating to prior years totaling \$0.6 million.

A statutory rate change in the United Kingdom was enacted as of the balance sheet date ending December 31, 2021. Effective April 1, 2023, the tax rate will increase from 19% to 25%. During the period, the Company assessed and concluded the impact of the rate change is immaterial to its deferred taxes.

Note 17. Subsequent Events

WildHealth Acquisition

In February 2022, the Company closed on an acquisition of WildHealth, a precision medicine company. The purchase price was approximately \$150.0 million and consisted of an upfront purchase price of \$30.0 million in cash and common stock and a \$120.0 million contingent earn-out component potentially payable over three years.

The transaction is still being evaluated but most likely will be accounted for under the purchase method of accounting and, if so, the operating results of WildHealth will be included in the Company’s consolidated results of operations from the date of acquisition. Due to the timing of this transaction, the initial accounting for the business combination is incomplete and a preliminary allocation of purchase consideration cannot be estimated. However, the Company does anticipate that a significant portion of the purchase price will be allocated to goodwill and acquired identifiable intangible assets.

Joint Venture Formation

In February 2022, the Company entered into an agreement to form a joint venture (the “JV”), to develop, own, and sell a software platform and applications marketplace.

The Company has agreed to contribute a total of approximately \$19.0 million for approximately 19.2% of the common equity of the JV. The Company also has agreed to provide certain build-out, professional services, and licenses to the JV under a separate agreement.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

Not Applicable.

Item 9A. 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 Exchange Act, as of December 31, 2021. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of December 31, 2021 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.

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.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended December 31, 2021 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.

Management’s Annual Report on Internal Control Over Financial Reporting

Our management, including the Chief Executive Officer and Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting, as that term is defined in Rule 13a-15(f) promulgated under the Exchange Act. Our internal control system is designed to provide reasonable assurance to our management and Board of Directors regarding the preparation and fair presentation of published financial statements. Our management, including the Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our internal control over financial reporting as of December 31, 2021 based on the framework established in “Internal Control — Integrated Framework (2013),” issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). Based on its evaluation, our management, including the Chief Executive Officer and Chief Financial Officer, concluded that as of December 31, 2021, our internal control over financial reporting was effective based on those criteria.

In accordance with guidance issued by the SEC, companies are permitted to exclude acquisitions from their first assessment of internal control over financial reporting for the first fiscal year in which the acquisition occurred. Our evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2021 did not include the internal controls of e-bot7, VoiceBase, or Tenfold as these businesses were acquired in business combinations in July, October, and October 2021 respectively, as discussed in Note 9 – Acquisitions to the consolidated financial statements. These acquisitions represent less than 1% of the total assets excluding goodwill and intangibles, net, 1% of total revenue, and 11% of total net loss of the related consolidated financial statement amounts as of and for the year ended December 31, 2021.

The effectiveness of our internal control over financial reporting as of December 31, 2021 has been audited by BDO USA, LLP, an independent registered public accounting firm. Their attestation report is included herein.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
LivePerson, Inc.
New York, New York

Opinion on Internal Control over Financial Reporting

We have audited LivePerson, Inc.'s (the "Company's") internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "COSO criteria"). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of the Company as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and our report dated February 28, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Item 9A, Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit of internal control over financial reporting in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

As indicated in the accompanying Item 9A, Management's Report on Internal Control over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of e-bot7 GmbH ("e-bot7"), VoiceBase, Inc. ("VoiceBase") and Callinize, Inc. dba Tenfold which were acquired on July 14, 2021, October 18, 2021 and October 25, 2021, respectively, all of which were included in the consolidated balance sheets of the Company as of December 31, 2021, and the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows for the year then ended. These acquisitions constituted less than 1% of total assets as of December 31, 2021, and approximately 1% and 11% of revenues and net loss, respectively, for the year then ended. Management did not assess the effectiveness of internal control over financial reporting of these acquired entities because of the timing of their acquisitions. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of these acquired entities.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the

company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ BDO USA, LLP

New York, New York

February 28, 2022

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not Applicable.

PART III**Item 10. Directors, Executive Officers and Corporate Governance**

The information required by this Item 10 is incorporated by reference to the sections captioned “Matters to be Considered at Annual Meeting — Election of Directors,” “Executive Officers,” “Board Committees and Meetings — Audit Committee,” “Codes of Conduct and Corporate Governance Documents” and “Section 16(a) Beneficial Ownership Reporting Compliance” in the definitive proxy statement for our 2022 Annual Meeting of Stockholders.

There have been no changes to the procedures by which stockholders may recommend nominees to our Board of Directors since our last disclosure of such procedures, which appeared in the definitive proxy statement for our 2021 Annual Meeting of Stockholders.

We have adopted a Code of Ethics that applies to our Chief Executive Officer, who is our principal executive officer, and other senior financial officers. Our Code of Ethics is available at: www.liveperson.com under “Investor Relations / Corporate Governance.” *The Company’s web site address provided above is not intended to function as a hyperlink, and the information on the Company’s web site is not and should not be considered part of this Annual Report on Form 10-K and is not incorporated by reference herein.* The Company will post on this website any amendments to our Code of Ethics.

Item 11. Executive Compensation

The information required by this Item 11 is incorporated by reference to the sections captioned “Compensation Discussion and Analysis,” “Compensation Committee Report” (which information shall be deemed furnished in this Annual Report on Form 10-K), “Executive and Director Compensation” and “Compensation Committee Interlocks and Insider Participation” in the definitive proxy statement for our 2022 Annual Meeting of Stockholders.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item 12 is incorporated by reference to the sections captioned “Ownership of Securities,” “Potential Payments Upon Termination or Change-in-Control” and “Securities Authorized for Issuance Under Equity Compensation Plans” in the definitive proxy statement for our 2022 Annual Meeting of Stockholders.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this Item 13 is incorporated by reference to the sections captioned “Certain Relationships and Related Party Transactions” and “Director Independence” in the definitive proxy statement for our 2022 Annual Meeting of Stockholders.

Item 14. Principal Accountant Fees and Services

The information required by this Item 14 is incorporated by reference to the section captioned “Independent Registered Public Accounting Firm Fees and Pre-Approval Policies and Procedures” in the definitive proxy statement for our 2022 Annual Meeting of Stockholders.

PART IV

Item 15. Exhibits and Financial Statement Schedules

The following documents are filed as part of this Annual Report on Form 10-K:

1. Financial Statements. Incorporated by reference to the index of consolidated financial statements included in Item 8 of this Annual Report on Form 10-K.
2. Financial Statements Schedules. None.
3. Exhibits. Incorporated by reference to the Exhibit Index immediately preceding the exhibits attached to this Annual Report on Form 10-K.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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, on February 28, 2022.

LIVEPERSON, INC.

By: /s/ Robert P. LoCascio
Name: Robert P. LoCascio
Title: Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated on February 28, 2022.

<u>Signature</u>	<u>Title(s)</u>
<u>/s/ Robert P. LoCascio</u> Robert P. LoCascio	Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer)
<u>/s/ John D. Collins</u> John D. Collins	Chief Financial Officer (Principal Financial Officer)
<u>/s/ Norman M. Osumi</u> Norman M. Osumi	Chief Accounting Officer (Principal Accounting Officer)
<u>/s/ Peter Block</u> Peter Block	Director
<u>/s/ Ernest L. Cu</u> Ernest L. Cu	Director
<u>/s/ Kevin C. Lavan</u> Kevin C. Lavan	Director
<u>/s/ Jill Layfield</u> Jill Layfield	Director
<u>/s/ Fred Mossler</u> Fred Mossler	Director
<u>/s/ William G. Wesemann</u> William G. Wesemann	Director

EXHIBIT INDEX

Number	Description
2.1	Agreement and Plan of Merger, dated as of June 22, 2006, among LivePerson, Inc., Soho Acquisition Corp., Proficient Systems, Inc. and Gregg Freishtat as Shareholders' Representative (incorporated by reference to Exhibit 2.1 to LivePerson's Current Report on Form 8-K filed on June 22, 2006 (Filed No. 000-30141))
2.2	Agreement and Plan of Merger, dated as of November 5, 2014, among LivePerson, Inc. Catalyst Lightning LLC, Contact At Once!, LLC and Fulcrum Growth Fund II QP, LLC (incorporated by reference to Exhibit 2.1 to LivePerson's Current Report on Form 8-K filed on November 12, 2014 (File No. 000-30141))
3.1(a)	Fourth Amended and Restated Certificate of Incorporation (incorporated by reference to the Exhibit 3.1(a) to LivePerson's Annual Report on Form 10-K for the year ended December 31, 2000 and filed March 30, 2001 (File No. 000-30141))
3.1(b)	Certificate of Amendment to the Fourth Amended and Restated Certificate of Incorporation effective as of November 12, 2019 (incorporated by reference to Exhibit 4.2 to LivePerson's Registration Statement on Form S-8 filed on November 13, 2019 (File No. 333-234676))
3.2	Second Amended and Restated Bylaws, as amended (incorporated by reference to Exhibit 3.2 to LivePerson's Annual Report on Form 10-K for the year ended December 31, 2000 and filed on March 30, 2011 (File No. 000-30141))
4.1	Specimen common stock certificate (incorporated by reference to Exhibit 4.1 to LivePerson's Registration Statement on Form S-1, as amended (Registration No. 333-96689))
4.2	Second Amended and Restated Registration Rights Agreement, dated as of January 27, 2000, by and among LivePerson, the several persons and entities named on the signature pages thereto as Investors, and Robert LoCascio (incorporated by reference to Exhibit 4.2 to LivePerson's Registration Statement on Form S-1, as amended (Registration No. 333-96689))
4.3	Indenture, dated as of March 4, 2019, by and between LivePerson, Inc. and U.S. Bank National Association, as Trustee (incorporated by reference to Exhibit 4.1 to LivePerson's Current Report on Form 8-K filed on March 5, 2019 (File No. 000-30141))
4.4	Form of 0.750% Convertible Senior Notes due 2024 (included within the Indenture filed as Exhibit 4.3 hereto)
4.5	Description of the Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (incorporated by reference to LivePerson's Annual Report on Form 10-K for the year ended December 31, 2020 and filed on March 8, 2021 (File No. 000-30131))
4.6	Indenture, dated as of December 4, 2020, by and between LivePerson, Inc. and U.S. Bank National Association, as Trustee (incorporated by reference to Exhibit 4.1 to LivePerson's Current Report on Form 8-K/A filed on December 10, 2020 (File No. 000-30141))
4.7	Form of 0% Convertible Senior Notes due 2026 (included within the Indenture filed as Exhibit 4.6 hereto)
10.1(a)*	2009 Stock Incentive Plan (incorporated by reference to Exhibit 99.1 to LivePerson's Registration Statement on Form S-8 filed on June 9, 2009) and Forms of Grant Agreements under the 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to LivePerson's Quarterly Report on Form 10-Q filed on May 6, 2011 (File No. 000-30141))
10.1(b)*	2009 Stock Incentive Plan (amended and restated as of June 7, 2012) (incorporated by reference to Exhibit 99.1 to LivePerson's Current Report on Form 8-K filed on June 8, 2012 (File No. 000-30141))
10.2*	LivePerson, Inc. 2010 Employee Stock Purchase Plan (incorporated by reference to Exhibit 99.1 to LivePerson's Registration Statement on Form S-8 filed on August 19, 2010 (File No. 000-30141))
10.3*	Employment Agreement between LivePerson and Robert P. LoCascio, dated as of January 1, 1999 (incorporated by reference to Exhibit 10.1 to LivePerson's Registration Statement on Form S-1, as amended (Registration No. 333-96689))
10.4*	Agreement between LivePerson and Dan Murphy, dated as of March 27, 2011 (incorporated by reference to Exhibit 10.5 to LivePerson's Annual Report on Form 10-K for the year ended December 31, 2011 and filed March 13, 2012)

- 10.5* [Form of Indemnification Agreement entered into with Executive Officers and Directors of LivePerson \(incorporated by reference to Exhibit 10.6 to LivePerson's Annual Report on Form 10-K for the year ended December 31, 2011 and filed March 13, 2012\)](#)
- 10.6* [Agreement between LivePerson and Monica L. Greenberg, dated as of October 25, 2006 \(incorporated by reference to Exhibit 10.8 to LivePerson's Annual Report on Form 10-K for the year ended December 31, 2011 and filed March 13, 2012\)](#)
- 10.7* [Incentive Plan \(incorporated by reference to Exhibit 10.1 to LivePerson's Current Report on Form 8-K filed on April 28, 2011\)](#)
- 10.8* [Employment Agreement between LivePerson and Eran Vanounou, dated as of February 22, 2014 \(incorporated by reference to Exhibit 10.2 to LivePerson's Quarterly Report on Form 10-Q filed on May 9, 2014\) \(File No. 000-30141\)](#)
- 10.9* [Separation Agreement General Release between LivePerson and Daniel Murphy, dated as of November 9, 2017 \(incorporated by reference to Exhibit 10.5 \(B\) to LivePerson's Quarterly Report on Form 10-Q filed on November 9, 2017\) \(File No. 000-30141\)](#)
- 10.10* [Amendment to Separation Agreement General Release between LivePerson and Daniel Murphy, dated as of February 9, 2018 \(incorporated by reference to Exhibit 10.11 to LivePerson's Annual Report on Form 10-K for the year ended December 31, 2017, filed on March 15, 2018 \(File No. 000-30141\)\)](#)
- 10.11* [Form of Restricted Stock Unit Award Agreement \(incorporated by reference to Exhibit 10.12 to LivePerson's Annual Report on Form 10-K for the year ended December 31, 2017, filed on March 15, 2018 \(File No. 000-30141\)\)](#)
- 10.12* [Form of Restricted Stock Unit Award Agreement for Robert LoCascio \(incorporated by reference to Exhibit 10.13 to LivePerson's Annual Report on Form 10-K for the year ended December 31, 2017, filed on March 15, 2018 \(File No. 000-30141\)\)](#)
- 10.13* [Inducement Plan dated January 19, 2018 \(incorporated by reference to Exhibit 10.14 to LivePerson's Annual Report on Form 10-K for the year ended December 31, 2017, filed on March 15, 2018 \(File No. 000-30141\)\)](#)
- 10.14* [Amended Employment Agreement between LivePerson and Robert LoCascio, dated as of December 27, 2017 \(incorporated by reference to Exhibit 10.15 to LivePerson's Annual Report on Form 10-K for the year ended December 31, 2017, filed on March 15, 2018 \(File No. 000-30141\)\)](#)
- 10.15* [Agreement between LivePerson and Alex Spinelli, dated as of January 12, 2018 \(incorporated by reference to Exhibit 10.1 to LivePerson's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed May 8, 2018 \(File No. 000-30141\)\)](#)
- 10.16* [Agreement between LivePerson and Chris Greiner, dated as of February 19, 2018 \(incorporated by reference to Exhibit 10.2 to LivePerson's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed May 8, 2018 \(File No. 000-30141\)\)](#)
- 10.17* [Long Term Incentive Plan dated July 31, 2018 \(incorporated by reference to Exhibit 10.1 to LivePerson's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018 filed on August 6, 2018 \(File No. 000-30141\)\)](#)
- 10.18* [Separation Agreement General Release between LivePerson and Eran Vanounou, dated as of April 30, 2018 \(incorporated by reference to Exhibit 10.2 to LivePerson's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, filed on August 6, 2018 \(File No. 000-30141\)\)](#)
- 10.19 [Form of Capped Call Transaction Confirmation relating to the 0.750% Convertible Senior Notes due 2024 \(incorporated by reference to Exhibit 10.1 to LivePerson's Form 8-K filed on March 5, 2019 \(000-30141\)\)](#)
- 10.20 [Form of Additional Capped Call Transaction Confirmation relating to the 0.750% Convertible Senior Notes due 2024 \(incorporated by reference to Exhibit 10.1 to LivePerson's Form 8-K filed on March 14, 2019 \(000-30141\)\)](#)
- 10.21* [Nonstatutory Stock Option Agreement, by and between LivePerson, Inc. and Robert P. LoCascio, dated as of February 21, 2019 \(incorporated by reference to Exhibit 10.3 to LivePerson's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, filed on May 7, 2019 \(File No.000-30141\)\)](#)

10.22*	2009 Stock Incentive Plan Restricted Stock Unit Award Agreement, by and between LivePerson, Inc. and Robert P. LoCascio, dated as of February 21, 2019 (incorporated by reference to Exhibit 10.4 to LivePerson's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, filed on May 7, 2019 (File No. 000-30141))
10.23*	LivePerson, Inc. 2019 Stock Incentive Plan (incorporated by reference to Exhibit 99.1 to LivePerson's Registration Statement on Form S-8 filed on August 14, 2020 (File No. 333-245808))
10.24*	LivePerson, Inc. 2019 Employee Stock Purchase Plan (incorporated by reference to Exhibit 99.2 to LivePerson's Registration Statement on Form S-8 filed on November 13, 2019 (File No. 333-234676))
10.25	Form of Base Capped Call Transaction Confirmation relating to the 0% Convertible Senior Notes due 2026 (incorporated by reference to Exhibit 10.1 to LivePerson's Current Report on Form 8-K/A filed on December 10, 2020 (File No. 000-30141))
10.26	Form of Additional Capped Call Transaction Confirmation relating to the 0% Convertible Senior Notes due 2026 (incorporated by reference to Exhibit 10.2 to LivePerson's Current Report on Form 8-K/A filed on December 10, 2020 (File No. 000-30141))
21.1	Subsidiaries of the Registrant
23.1	Consent of BDO USA, LLP, an Independent Registered Public Accounting Firm
31.1	Certification by principal 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 principal 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†	Inline 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†	Inline XBRL Taxonomy Extension Schema Document
101.CAL†	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF†	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB†	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE†	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as inline XBRL)

* Management contract or compensatory plan or arrangement

** The certifications furnished as Exhibit 32.1 and Exhibit 32.2 accompany the Annual Report on Form 10-K pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed "filed" by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

† Pursuant to applicable securities laws and regulations, the Registrant is deemed to have complied with the reporting obligation relating to the submission of interactive data files in such exhibits and is not subject to liability under any anti-fraud provisions of the federal securities laws as long as the Registrant has made a good faith attempt to comply with the submission requirements and promptly amends the interactive data files after becoming aware that the interactive data files fail to comply with the submission requirements. These interactive data files are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise are not subject to liability under these Sections.

SUBSIDIARIES OF LIVEPERSON, INC.

LivePerson Ltd. (formerly HumanClick Ltd.) — Israel
Kasamba Inc. — Delaware
LivePerson Germany GmbH — Germany
LivePerson (UK) Ltd. — United Kingdom
LivePerson Netherlands B.V. — Netherlands
LivePerson Automotive, LLC (formerly Contact At Once!, LLC) — Georgia

Consent of Independent Registered Public Accounting Firm

LivePerson, Inc.
New York, New York

We hereby consent to the incorporation by reference in the Registration Statements on Forms S-3 (No. 333-261124) and Forms S-8 (No. 333-261121 and 333-258578) of LivePerson, Inc. of our reports dated February 28, 2022, relating to the consolidated financial statements and the effectiveness of LivePerson, Inc.'s internal control over financial reporting, which appear in this Annual Report on Form 10-K.

/s/ BDO USA, LLP

New York, New York
February 28, 2022

CERTIFICATIONS

I, Robert P. LoCascio, certify that:

1. I have reviewed this Annual Report on Form 10-K 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: February 28, 2022

By: /s/ ROBERT P. LOCASCIO

Name: Robert P. LoCascio

Title: Chief Executive Officer (principal executive officer)

CERTIFICATIONS

I, John Collins, certify that:

1. I have reviewed this Annual Report on Form 10-K 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: February 28, 2022

By: /s/ John Collins

Name: John Collins

Title: Chief Financial Officer (principal financial officer)

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

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 Annual Report of the Company on Form 10-K for the period ended December 31, 2021, 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: February 28, 2022

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, John Collins, 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 Annual Report of the Company on Form 10-K for the period ended December 31, 2021, 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: February 28, 2022

By: /s/ John Collins

Name: John Collins

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.