Limelight NETWORKS

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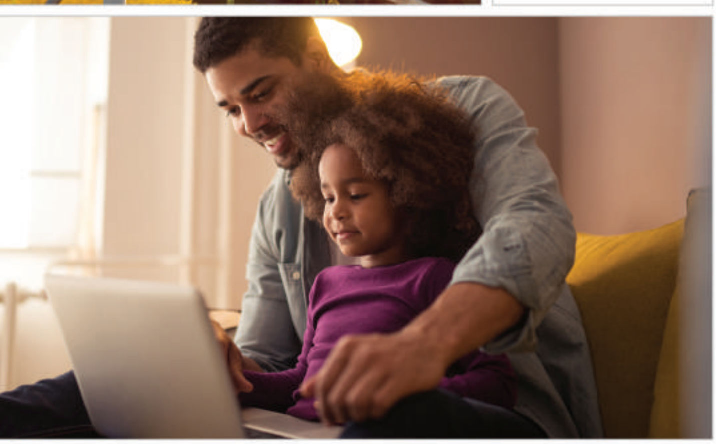
ANNUAL REPORT 2020








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

Form 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2020

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.**
For the transition period from to

Commission file number 001-33508

Limelight Networks, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**20-1677033**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

1465 North Scottsdale Road, Suite 400
Scottsdale, AZ 85257
(Address of principal executive offices, including Zip Code)

(602) 850-5000
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol (s)	Name of each exchange on which registered
Common Stock, par value $0.001 per share	LLNW	NASDAQ Global Select Market

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 15(d) of the Securities Exchange Act of 1934. 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 (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging Growth Company	☐

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

Indicate by check mark whether the registrant 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 Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant was approximately $861.0 million based on the last reported sale price of the common stock on the Nasdaq Global Select Market on June 30, 2020, the last business day of the registrant's most recently completed second fiscal quarter.

The number of shares outstanding of the registrant's Common Stock, par value $0.001 per share, as of February 5, 2021: 124,135,014 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for the Registrant's 2021 Annual Meeting of Stockholders are incorporated by reference in Part III of this Form 10-K.

LIMELIGHT NETWORKS, INC.
ANNUAL REPORT ON FORM 10-K
For the Fiscal Year Ended December 31, 2020
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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). All statements contained in this Annual Report on Form 10-K, other than statements of historical fact, are forward-looking statements. Forward-looking statements generally can be identified by the words “may,” “will,” “expect,” “believe,” “anticipate,” “intend,” “could,” “estimate,” or “continue,” and similar expressions. We have based these forward-looking statements largely on our current expectations and projections about future events, as well as trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives, and financial needs. These statements include, among other things:

- our beliefs regarding delivery traffic growth trends and demands for digital content and edge services;
- our expectations regarding revenue, costs, expenses, gross margin, non-GAAP earnings per share, Adjusted EBITDA and capital expenditures;
- our plans regarding investing in our content delivery network, as well as other products and technologies;
- our beliefs regarding the growth of, and competition within, the content delivery industry;
- our beliefs regarding the growth of our business and how that impacts our liquidity and capital resources requirements;
- our expectations regarding headcount and our ability to recruit personnel;
- the impact of certain new accounting standards and guidance as well as the time and cost of continued compliance with existing rules and standards;
- our expectations and strategies regarding acquisitions;
- our expectations regarding litigation and other pending or potential disputes;
- our estimations regarding taxes and belief regarding our tax reserves;
- our beliefs regarding the use of Non-GAAP financial measures;
- our approach to identifying, attracting and keeping new and existing customers, as well as our expectations regarding customer turnover;
- the sufficiency of our sources of funding;
- the sufficiency of our facilities to meet our needs;
- our belief regarding our interest rate risk;
- our beliefs regarding inflation risks;
- our beliefs regarding expense and productivity of and competition for our sales force;
- our beliefs regarding the diversity of our workforce; and
- our beliefs regarding the significance of our large customers.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described under the caption “Risk Factors” in Part I, Item 1A in this Annual Report on Form 10-K and those discussed in other documents we file with the Securities and Exchange Commission (SEC).

In addition, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the future events and trends discussed in this Annual Report on Form 10-K may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

The forward-looking statements contained herein are based on our current expectations and assumptions and on information available as of the date of the filing of this Annual Report on Form 10-K. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements.

Unless expressly indicated or the context requires otherwise, the terms "Limelight," "we," "us," and "our" in this document refer to Limelight Networks, Inc., a Delaware corporation, and, where appropriate, its wholly owned subsidiaries. All information is presented in thousands, except per share amounts, customer count and where specifically noted.

PART I

Item 1. Business

We were incorporated in Delaware in 2003 and have operated in the Phoenix metropolitan area since 2001 and elsewhere throughout the United States since 2003. We began international operations in 2004. Our principal executive offices are located at 1465 North Scottsdale Road, Suite 400, Scottsdale, Arizona, 85257, and our main telephone number is (602) 850-5000. We operate and report on a calendar year basis with our fiscal quarters ending March 31, June 30, September 30, and December 31st.

Overview

At Limelight we believe in the power of content to change the world. We enable our customers to deliver entertainment, experiences, knowledge, and information where they want to, how they want to, and when they want to. Limelight provides industry-leading content delivery and Edge services to many of the biggest brands in the world.

The services we provide help our customers optimize and deliver digital content to a wide variety of connected devices. This includes a wide range of digital content delivery, online video delivery, cloud security, edge computing, cloud storage, and professional services. In addition, we also derive revenue from relationships with resellers that purchase our services for resale to their end customers.

Limelight's edge services platform includes a globally distributed, high-performance private network, intelligent software, and support services. We provide advanced features to enable digital workflows for live and on-demand video publishing, online gaming, content distribution, and website and web application acceleration. Limelight services incorporate content and application security, video transformation, distributed storage functionality, and analytics and reporting. These services leverage our high capacity, high speed private global network with distributed computing resources and extensive connectivity to last-mile broadband network providers, ideal for emerging edge compute workloads where rapid response times are needed.

Limelight's customers include traditional and emerging media companies operating in the television, music, radio, newspaper, magazine, movie, gaming, software, and social media industries, as well as technology companies and various other entities conducting business online. We work with the biggest brands in the world and approach customer relationships as a true partnership with consultative and highly responsive customer service and solutions.

Segments

We operate in one industry segment, content delivery and related services and we operate in three geographic areas Americas, Europe, Middle East, and Africa (EMEA), and Asia Pacific.

Industry Trends

The Internet of the future requires the highest quality digital experiences around the world. Specific trends include:

- **Fast growing *consumption of online video.*** Online video viewership continues to accelerate. In our October 2020 *State of Online Video* consumer report, we found that over-the-top video viewing around the world reached an all-time high of seven hours, 55 minutes a week, a 16 percent increase year over year. And in the first six months of 2020, nearly half (47 percent) of people subscribed to a new streaming service. As consumption of video content continues to shift to Internet-based delivery, it puts an increasing strain on the Internet, placing additional pressure on content distributors to protect the quality of the end-user experience as this increasing segment of traffic competes with other Internet activities, such as browsing websites and downloading digital content.
- ***Broadcast quality online video.*** Online video is becoming a primary choice for people to watch video content, whether its via their personal computers, smartphones, tablets, smart televisions, or other connected devices. Consumers expect the same quality experience online as they would have in viewing broadcast television. This puts a significant burden on publishers to not just produce compelling content, but also to deliver it in a way that meets high consumer expectations. To add to the complexity, several large-scale online video providers are streaming video in 4K resolution. In most cases, this requires four times the bandwidth of a traditional high-definition stream. We believe that as more content is made available in 4K resolution (coupled with increasing sales of 4K-ready devices like televisions and computer monitors), more consumers will want to consume the higher-quality content, resulting in increased strain on Internet architecture and infrastructure.

- ***Growth of digital downloads.*** Consumers are increasingly making purchases of movies, music, video games, and applications digitally from a variety of retailers and download sizes have increased, especially for video games. For example, releases of popular games have topped 50 gigabytes (GBs) in size. As digital purchases of massive files increase further, we believe this will cause more strain on the Internet's infrastructure. We believe this will result in additional pressure on organizations and service providers to take steps to avoid congestion, latency, lengthening download times, and increasingly interrupted downloads, all of which we believe would undermine an organization's ability to deliver the best possible digital experience.

- ***Live video.*** Live streaming latency can lead to lost viewers and lost revenue opportunities. The internet was not designed for streaming video. Yet, the future of online video will increasingly include live online interactive experiences. For companies to maximize the opportunity here, sub-second latency will become essential.

Our Services

We believe our powerful edge services platform combined with our extensive global private IP network, intelligent software, and intense focus on our customers' success differentiate and position Limelight to addresses the trends driving Internet growth and viewers high expectations. Our primary services include the following:

- ***Content delivery.*** Limelight operates one of the world's largest and best-connected private networks with the capacity, coverage, and performance to deliver websites, mobile applications, videos, music, software, games, and APIs quickly, reliably, and securely. Over the past two decades, we built and refined our own delivery system with a private network and dense architecture to provide a better experience that is reliable, secure and offers sub-second low latency. We have developed and optimized our own software stack to deliver maximum performance over any connection type with a fully integrated suite of software services.

- ***Video delivery.*** Limelight's live, real-time, on-demand video delivery services and online video platform help organizations manage, publish, syndicate, analyze, and monetize video content. Limelight Real-Time Streaming offers the widest range of low latency online streaming solutions in the industry that allow bidirectional data sharing and make interactive online video experiences possible. To help customers monetize video, Limelight simplifies the process of delivering video to any device and makes it easy to integrate advertising into online video content.

- ***Edge.*** Limelight's comprehensive, flexible, and powerful edge services include a full spectrum of serverless, virtual machine and bare metal with edge compute capabilities. Our edge cloud reduces latencies and enables real time and highly interactive applications by moving processing power from a central point to the network edge and closer to the originators and consumers of data.

- ***Cloud security.*** Limelight's cloud security services offer a layered defense against malicious app and website attacks and unauthorized content access. Limelight DDoS Attack Interceptor defends against denial-of-service attacks, and Limelight Web Application Firewall protection guards against attacks that are intended to compromise the back-end services of applications and web sites, in order to deface, disable or steal data. TLS/SSL capabilities encrypt data so it cannot be intercepted in transit, and multiple content security methods are available so only authorized users have access to content.

- ***Cloud storage.*** Limelight's scalable, redundant, geographically diverse cloud storage has the flexibility and automation to support any content delivery workflow. Limelight simplifies and automates the process of ingesting and managing content while delivering fast performance and high availability.

Limelight Global Network

Our extensive private global network makes it possible to position content and applications right next to end users for the most dynamic, real-time interactions. It provides highly available, highly redundant storage, bandwidth, and computing resources in support of our services and solutions. This dense architecture, managed by our proprietary software, automatically responds to network and data center outages and disruptions. All our delivery locations are interconnected via our global network and are connected to multiple Internet backbone and broadband Internet service provider (ISP) networks. This global network has three main features:

- ***Densely configured, high capacity.*** Our global private network includes a fiber backbone that connects our delivery Points-of-Presence (PoPs) and enables content to bypass the congested public Internet as it is distributed to the end-user. Each Limelight PoP has a high density of fast servers that enable high cache-hit efficiency, providing faster delivery performance.

- ***Global scalability.*** Limelight's global network infrastructure includes more than 100 PoPs around the world. This allows us to cache and deliver content from locations close to where it is being requested. Limelight's network is also directly interconnected with more than 1,000 major ISPs and last-mile network providers, shortening the distance and number of hops that content needs to take.
- ***Intelligent software to manage the network.*** We have developed proprietary software that manages our global network. This software manages, among other things, the delivery of digital content, the retrieval of dynamic content, storage and retrieval of objects, activity logging, and information reporting.

Sales, Service, and Marketing

Our sales and service professionals are located in five offices in the United States with an additional seven office locations in EMEA and Asia Pacific. We target media, high tech, software, gaming, enterprise, and other organizations for which the delivery of digital content is critical to the success of their business.

Our sales and service organization includes employees in telesales and field sales, professional services, account management, and solutions engineering. As of December 31, 2020, we had approximately 146 employees in our sales organization. Our ability to achieve revenue growth in the future will depend in large part on whether we successfully recruit, train, and retain sufficient sales, technical, and global services personnel, and how well we establish and maintain our distribution and reseller relationships. We believe that the complexity of our services will continue to require highly trained global sales and services personnel.

To support our sales efforts and promote the Limelight brand, we conduct marketing programs. Our marketing strategies include extensive digital marketing, public relations campaigns, advertisements, events and trade shows, strategic alliances, and on-going customer communication programs. As of December 31, 2020, we had 35 employees in our global marketing organization.

Customers

Our customers operate in the media, entertainment, gaming, technology and software, enterprise, retail and other sectors. As of December 31, 2020, we had approximately 527 active customers worldwide, including many of the biggest brands in the world in the fields of online video, live sports, digital music, news media, games, rich media applications, and software delivery.

During 2020, we had two customers, Amazon and Sony, who represented approximately 36% and 11%, respectively, of our total revenue. During 2019 and 2018, Amazon represented approximately 30%, and 30%, respectively, of our total revenue. In the past, the customers that comprise our top 20 customers have continually changed, and our large customers may not continue to be as significant going forward as they have been in the past.

From time to time, we have discontinued service to customers for non-payment. Although we did not receive continuing revenue from these former customers, these changes provided for a stronger mix of customers across our base, decreased our days sales outstanding, and allowed us to recoup network capacity to help meet future growth needs. We continue to focus on acquiring and retaining high quality customers across all market segments.

Competition

We operate in the digital content delivery market, which is rapidly evolving and highly competitive. We expect this competitive environment to continue.

The principal methods of competition in this market include scale, performance, service, ease of use, product features, and price. We primarily face competition from Akamai, Lumen Technologies, Amazon, CDNetworks, Fastly, StackPath, and Verizon Digital Media Services.

Product feature competition is intense, requiring continuous investment in innovation. We believe our future success will depend on our ability to continue to innovate and enhance the performance, integration, and functionality of our existing suite of services and of our global network, and on our ability to add additional services and functionality to meet the market's increasing expectations regarding digital content delivery.

We believe our established edge services platform is the broadest offering available. Our cloud-based software and flexible serverless computing combined with our high-speed private global network infrastructure, solves multiple challenges for customers by removing the need to install, manage, or provision software and hardware to satisfy the requirements for storing and delivering digital content. In addition, the market for digital content delivery can sometimes require multiple vendors to provide customers with a complete set of tools and services to manage and deliver all of their digital content to all audiences as part of a global digital presence. We also believe that in those situations where multiple vendors are required, Limelight offers one of the few CDNs with the scale, performance, and reach required to deliver digital content to global audiences.

Research and Development

Our research and development organization is responsible for the design, development, testing, and certification of the software, hardware, and network architecture of our global network and support of our content delivery and other Limelight solutions. As of December 31, 2020, we had 181 employees and employee equivalents in our research and development group. Our research and development personnel are primarily located in Boston, Massachusetts; Lexington, Kentucky; Lviv, Ukraine, and at our headquarters in Scottsdale, Arizona. Our engineering efforts support product development across all of our service areas, as well as innovation related to the global network itself. We test our services to ensure scalability in times of peak demand. We use internally developed and third-party software to monitor and to improve the performance of our network in the major Internet consumer markets around the world where we provide services for our customers. Our research and development expenses were $21,680, $22,534, and $24,075 in 2020, 2019, and 2018, respectively, including stock-based compensation expense of $2,589, $1,922, and $2,720 in 2020, 2019, and 2018, respectively.

Intellectual Property

Our success depends in part upon our ability to protect our core technology and other intellectual capital. To accomplish this, we rely on a combination of intellectual property rights, including patents, trade secrets, copyrights, trademarks, domain registrations, and contractual protections.

As of December 31, 2020, we had received 129 patents in the United States, expiring between 2023 and 2036, and we had 1 U.S. patent application pending. We do not have any issued patents in foreign countries. We do not know whether any of our patent applications will result in the issuance of a patent or whether the examination process will require us to narrow our claims. Any patents that may be issued to us may be contested, circumvented, found unenforceable or invalidated, and we may not be able to prevent third parties from infringing them. Therefore, we cannot predict the exact effect of having a patent with certainty.

As of December 31, 2020, we had received three trademarks in the United States. Our name, Limelight Networks, has been filed for multiple classes in the United States, Australia, Brazil, Canada, China, the European Union (including Benelux and New Zealand), India, Japan, Singapore and South Korea. We have 22 non United States trademarks registered. There is a risk that pending trademark applications may not issue, and that those trademarks that have issued may be challenged by others who believe they have superior rights to the marks.

We generally control access to and use of our proprietary software and other confidential information through the use of internal and external controls, including physical and electronic security, contractual protections with employees, contractors, customers and partners, and domestic and foreign copyright laws.

Human Capital

It is crucial that we continue to attract and retain top talent in order to continue to produce innovative technologies. To facilitate talent attraction and retention, we strive to achieve a diverse, inclusive, and safe workplace, with opportunities for our employees to grow and develop in their careers, supported by strong compensation, benefits, and health and wellness programs, and by programs that build connections between our employees and their communities.

At December 31, 2020, we had 618 employees and employee equivalents. During fiscal 2020, the number of employees increased by 8. Our employees are represented by approximately 13 self-identified nationalities working in approximately 20 locations in 12 different countries around the world. Collectively, we speak approximately 14 different languages. Our global workforce is highly educated, with the substantial majority of our employees working in research and development, operations, and sales. During the year ended December 31, 2020, our voluntary turnover rate was less than 11%, below the technology industry benchmark, which is comprised of certain of our key competitors (Aon, 2020 Salary Increase and Turnover Study — Second Edition, September 2020).

- ***Diversity and inclusion.*** We believe that a diverse workforce is critical to our success, and we continue to focus on the hiring, retention, and advancement of women and underrepresented populations. Our recent efforts have been focused in three areas: giving back and supporting the social issues impacting our communities and people, expanding our efforts to recruit and hire world-class diverse talent, and identifying strategic partners to accelerate our inclusion and diversity programs. Our Diversity and Inclusion Employee Resource Group is comprised of employees across the company, representing the unique cultures and needs of our employees and who ensure that we commit the time and resources needed to maintain a robust and diverse population.

- ***Health, safety, and wellness.*** The success of our business is fundamentally connected to the well-being of our people. Accordingly, we are committed to the health, safety and wellness of our employees. We provide our employees and their families with access to a variety of innovative, flexible, and convenient health and wellness programs. These include benefits that provide protection and security so our people can have peace of mind concerning events that may require time away from work or that impact their financial well-being, benefits that support our people's physical and mental health by providing tools and resources to help them improve or maintain their health status and encourage engagement in healthy behaviors, and benefits that offer choice, where possible, so our people can customize benefits to meet their needs and the needs of their families. In response to the COVID-19 pandemic, we implemented significant changes that we determined were in the best interest of our employees and their families, as well as the communities in which we operate, and which comply with government regulations. This includes having the vast majority of our employees work from home, while implementing additional safety measures for employees continuing critical on-site work.
- ***Compensation and benefits.*** We provide robust compensation and benefits programs to help meet the needs of our employees. In addition to salaries, these programs (which vary by country/region) include annual bonuses, stock awards, an employee stock purchase plan, a 401(k) plan, healthcare and insurance benefits, health savings and flexible spending accounts, paid time off, family leave, family care resources, and flexible work schedules. In addition to our broad-based equity award programs, we have used targeted equity-based grants with vesting conditions to facilitate retention of personnel, particularly those with critical engineering skills and experience.
- ***Talent development.*** We invest significant resources to develop the talent needed to continue to be a leading provider of digital content delivery, online video delivery, cloud security, edge, and cloud storage services. We deliver numerous training opportunities, provide rotational assignment opportunities, have expanded our focus on continuous learning and development, and implemented industry-leading methodologies to manage performance, provide feedback and develop talent. Our talent development programs provide employees with the resources they need to help achieve their career goals, build management skills and lead their organizations. We provide a series of employee workshops around the globe that support professional growth and development. Additionally, our manager and employee forum programs provide an ongoing opportunity for employees to practice and apply learning around conversations aligned with our annual review process. We also have an employee development website that provides quick access to learning resources that are personalized to the individual's development needs.
- ***Building connections — with each other and our communities.*** We believe that building connections between our employees, their families, and our communities creates a more meaningful, fulfilling and enjoyable workplace. Our employees are passionate about many causes, so our corporate giving and volunteering programs support and encourage employees by engaging with those causes. During 2020, our Diversity and Inclusion Employee Resource Group selected the following organizations; Black Girls Code, National Action Council for Minorities in Education and Black Lives Matter, to utilize our charitable match program.

Available Information

We maintain a website at www.limelight.com. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to such reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as well as our annual reports to shareholders and Section 16 reports on Forms 3, 4 and 5, are available free of charge on this site through the "Investors" link as soon as reasonably practicable after we file or furnish these reports with the SEC. All reports we file with the SEC are also available free of charge via EDGAR through the SEC's website at https://www.sec.gov. Our Guidelines on Corporate Governance and charters for our Board committees are also available on our website. The information contained on and linked from our website is not incorporated by reference into this Annual Report on Form 10-K.

Information about our Executive Officers

Our executive officers and their ages and positions as of January 24, 2021 are as follows:

Name	Age	Position
Robert Lyons	53	President, Chief Executive Officer and Director
Daniel Boncel	45	Senior Vice President, Chief Financial Officer
Michael DiSanto	48	Senior Vice President, Chief Administrative and Legal Officer and Secretary
Christine Cross	48	Senior Vice President, Chief Marketing Officer
Dan Carney	51	Senior Vice President, Global Development & Operations
Tom Marth	56	Senior Vice President, Sales

Robert Lyons has served as our President, Chief Executive Officer and Director since February 2021. Prior to joining Limelight, from 2018 to 2021, Mr. Lyons was most recently CEO of Alert Logic, a global leader in cybersecurity, specifically in managed threat detection and response. There, he led the company through a multi-year strategic reposition that resulted in becoming a global leader in cybersecurity, specifically in managed threat detection and response. Prior to Alert Logic, from 2014 to 2018, Mr. Lyons held executive positions, including President, at Connexions Loyalty/Affinion Group, a leader in customer engagement and loyalty solutions. Mr. Lyons has also previously held executive positions at Ascend Learning, Stream Global Services, Avaya, Convergys, and United Health Care. Mr. Lyons earned his master's degree in management and technology from Rensselaer Polytechnic Institute in Troy, New York, and a bachelors' degree in business management from Moravian College in Bethlehem, Pennsylvania.

Daniel Boncel has served as our Chief Financial Officer since July 2020 and oversees all finance functions for Limelight worldwide, including accounting and controllership, treasury, tax, and internal audit. Mr. Boncel joined Limelight in May 2013 as Vice President of Finance and Chief Accounting Officer. His responsibilities included management of billing, collections, treasury, payroll, tax, and compliance with SEC and Sarbanes Oxley requirements. He gained additional experience as senior manager of SEC and technical accounts at Republic Services and held increasing levels of supervisory experience as a senior manager at Price Waterhouse Coopers. Mr. Boncel is a Certified Public Accountant and earned his Bachelor's in Business Administration with a major in Accounting from the University of Wisconsin-Milwaukee in 1997.

Michael DiSanto has served as our Senior Vice President, Chief Administrative and Legal Officer and Secretary since April 2015. Prior to joining us, Mr. DiSanto was a partner at the law firm Bingham McCutchen LLP from 2013 to 2014. From 2010 to 2013, Mr. DiSanto was a partner at the law firm Dinsmore & Shohl LLP. From 2008 to 2010, Mr. DiSanto was a partner at the law firm Reed Smith. Mr. DiSanto received a B.A. from Vanderbilt University and his J.D. from Santa Clara University School of Law.

Christine Cross has served as our Senior Vice President, Chief Marketing Officer since June 2020. Ms. Cross has 25 years of experience across marketing, product, sales, and operations, primarily in technology companies prior to joining Limelight. From September 2019 to May 2020, Ms. Cross was the Chief Marketing Officer of PXG (Parsons Xtreme Golf), a designer and manufacturer of high-end, custom-fitted golf clubs, equipment, accessories, and apparel. Prior to that, Ms. Cross spent nearly 10 years at GoDaddy, an Internet domain register and hosting company, serving in a variety of roles, including Vice President of Global Customer Development and Marketing from 2018 to 2019, Vice President of Customer Development from 2016 to 2018, and Vice President of Domains from 2015 to 2016. In her most recent role, Ms. Cross and her team were responsible for all elements of customer marketing to GoDaddy's 18M+ customers. Ms. Cross holds an MBA from the University of Connecticut and a BA in Business/Marketing from Wartburg College.

Dan Carney has served as our Senior Vice President, Global Development & Operations since October 2020 and oversees the development and implementation of Limelight's overall technology strategy and heads up the global network and R&D organizations. Dan has deep architectural, implementation, and operations leadership experience in large enterprises, growing businesses, and startup environments. Prior to joining Limelight in December 2013, he was Chief Technology Officer at Xerox Services, responsible for operating IT infrastructure, applications, and processes. Previously Dan held executive IT management positions at Convergys, Azuki Systems, and Boston Communications Group. He was recently recognized as one of Computerworld's Premier 100 Technology Leaders. Dan holds an MBA from Suffolk University and a B.A. in Computer Science from St. Anselm College.

Tom Marth has served as our Senior Vice President of Sales since January 2019. Prior to joining Limelight, Mr. Marth was Regional Vice President at Workday from 2012 to 2017, where he led six sales teams across 15 states. Prior to that he was Group Vice President at Oracle where he took on increasing responsibility for more than 15 years. In addition, Tom has held sales roles at companies including FASCOR and Xerox. He earned a B.S. in Business Administration from Miami University.

Item 1A. Risk Factors

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this Annual Report on Form 10-K, including the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7, and our consolidated financial statements and related notes, before making a decision to invest in our common stock. The risks and uncertainties described below may not be the only ones we face. If any of the risks actually occur, our business, financial condition, operating results and prospects could be materially and adversely affected. In that event, the market price of our common stock could decline, and you could lose part or all of your investment. All information is presented in thousands, except per share amounts, customer count, head count and where specifically noted.

Risks Related to Industry Dynamics and Competition

We currently face competition from established competitors and may face competition from others in the future.

We compete in markets that are intensely competitive, rapidly changing and characterized by frequently declining prices. In these markets, vendors offer a wide range of alternate solutions. We have experienced and expect to continue to experience increased competition on price, features, functionality, integration and other factors. Several of our current competitors, as well as a number of our potential competitors, have longer operating histories, greater name recognition, broader customer relationships and industry alliances, and substantially greater financial, technical and marketing resources than we do. As a consequence of the competitive dynamics in our markets, we have experienced reductions in our prices, and an increased requirement for product advancement and innovation in order to remain competitive, which in turn have adversely affected and may continue to adversely affect our revenue, gross margin and operating results.

Our primary competitors for our content delivery services include Akamai, Lumen Technologies, Amazon, CDNetworks, Fastly, StackPath, and Verizon Digital Media Services. In addition, a number of companies have recently entered or are currently attempting to enter our market, either directly or indirectly. These new entrants include companies that have built internal content delivery networks to solely deliver their own traffic, rather than relying solely, largely or in part on content delivery specialists, such as us. Some of these new entrants may become significant competitors in the future. Given the relative ease by which customers typically can switch among content delivery service providers, differentiated offerings or pricing by competitors could lead to a rapid loss of customers. Some of our current or potential competitors may bundle their offerings with other services, software or hardware in a manner that may discourage content providers from purchasing the services that we offer. In addition, we face different market characteristics and competition with local content delivery service providers as we expand internationally. Many of these international competitors are very well positioned within their local markets. Increased competition could result in price reductions and revenue shortfalls, loss of customers and loss of market share, which could harm our business, financial condition and results of operations.

We also face competition for our other service offerings. However, the competitive landscape is different from content delivery in this area in that the process of changing vendors can be more costly and complicated for the customer, which could make it difficult for us to attract new customers and increase our market share. Also, several of our competitors have greater financial and sales resources than we do. Many have been offering similar services in the markets in which we compete longer than we have. We may not be able to successfully compete against these or new competitors. If we are unable to increase our customer base and increase our market share, our business, financial condition and results of operations may suffer.

If we are unable to develop new services and enhancements to existing services or fail to predict and respond to emerging technological trends and customers' changing needs, our operating results and market share may suffer.

The market for our services is characterized by rapidly changing technology, evolving industry standards, and new product and service introductions. Our operating results depend on our ability to understand user preferences or predict industry changes. Our operating results also depend on our ability to modify our solutions and services on a timely basis or develop and introduce new services into existing and emerging markets. The process of developing new technologies is complex and uncertain. We must commit significant resources to developing new services or enhancements to our existing services before knowing whether our investments will result in services the market will accept. Furthermore, we may not successfully execute our technology initiatives because of errors in planning or timing, technical hurdles that we fail to overcome in a timely fashion, misunderstandings about market demand or a lack of appropriate resources. As prices for content delivery services fall, we will increasingly rely on new product offerings and other service offerings to maintain or increase our gross margins. Failures in execution, delays in bringing new or improved products or services to market, failure to effectively integrate service offerings, or market acceptance of new services we introduce could result in competitors providing those solutions before we do, which could lead to loss of market share, revenue and earnings.

Risks Relating to Our Operations

Any unplanned interruption or degradation in the functioning or availability of our network or services, or attacks on or disruptions to our internal information technology systems, could lead to increased costs, a significant decline in our revenue, and harm to our reputation.

Our business is dependent on providing our customers with fast, efficient, and reliable distribution of content delivery and digital asset management services over the Internet every minute of every day. Our services could be disrupted by numerous events, including natural disasters, failure or refusal of our third-party network providers to provide the necessary capacity or access, failure of our software or global network infrastructure and power losses. In addition, we deploy our servers in third-party co-location facilities, and these third-party co-location providers could experience system outages or other disruptions that could constrain our ability to deliver our services.

We may also experience business disruptions caused by security incidents, such as software viruses and malware, unauthorized hacking, DDoS attacks, security system control failures in our own systems or from vendors we or our customers use, email phishing, software vulnerabilities, social engineering, or other cyberattacks. These types of security incidents have been increasing in sophistication and frequency and sometimes result in the unauthorized access to or use of, and/or loss of intellectual property, customer or employee data, trade secrets, or other confidential information. The economic costs to us to eliminate or alleviate cyber or other security problems, viruses, worms, malicious software programs, and other security vulnerabilities could be significant, and our efforts to address these problems may not be successful and could result in interruptions, delays, cessation of service, and loss of existing or potential customers.

Any material interruption or degradation in the functioning of our services for any reason could reduce our revenue, harm our reputation with existing and potential customers, and thus adversely impact our business and results of operations. This is true even if such interruption or degradation was for a relatively short period of time, but occurred during the streaming of a significant live event, launch by a customer of a new streaming service, or the launch of a new video-on-demand offering.

If we are unable to sell our services at acceptable prices relative to our costs, our revenue and gross margins will decrease and our business and financial results will suffer.

Prices for content delivery services have fallen in recent years and are likely to fall in the future. We invest significant amounts in purchasing capital equipment as part of our effort to increase the capacity of our global content delivery network. Our investments in our infrastructure are based upon our assumptions regarding future demand, as well as prices that we will be able to charge for our services. These assumptions may prove to be wrong. If the price that we are able to charge customers to deliver their content falls to a greater extent than we anticipate, if we over-estimate future demand for our services, or if our costs to deliver our services do not fall commensurate with any future price declines, we may not be able to achieve acceptable rates of return on our infrastructure investments, and our gross profit and results of operations may suffer dramatically.

As we further expand our global network and services, and as we refresh our network equipment, we are dependent on significant future growth in demand for our services to justify additional capital expenditures. If we fail to generate significant additional demand for our services, our results of operations will suffer, and we may fail to achieve planned or expected financial results. There are numerous factors that could, alone or in combination with other factors, impede our ability to increase revenue, moderate expenses, or maintain gross margins, including:

- continued price declines arising from significant competition;
- increasing settlement fees for certain peering relationships;
- failure to increase sales of our services;
- increases in electricity, bandwidth and rack space costs or other operating expenses, and failure to achieve decreases in these costs and expenses relative to decreases in the prices we can charge for our services and products;
- failure of our current and planned services and software to operate as expected;
- loss of any significant or existing customers at a rate greater than our increase in sales to new or existing customers;
- failure to increase sales of our services to current customers as a result of their ability to reduce their monthly usage of our services to their minimum monthly contractual commitment;
- failure of a significant number of customers to pay our fees on a timely basis or at all or to continue to purchase our services in accordance with their contractual commitments; and
- inability to attract high quality customers to purchase and implement our current and planned services.

A significant portion of our revenue is derived collectively from our video delivery services, cloud security, edge compute, and origin storage services. These services tend to have higher gross margins than our content delivery services. We may not be able to achieve the growth rates in revenue from such services that we or our investors expect or have experienced in the past. If we are unable to achieve the growth rates in revenue that we expect for these service offerings, our revenue and operating results could be significantly and negatively affected.

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

Our ability to use our net operating losses to offset future taxable income may be subject to certain limitations. As of December 31, 2020, we had federal and state net operating loss carryforwards, or NOLs, of $229,900 and $154,500, respectively, due to prior period losses. In general, under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an "ownership change" can be subject to limitations on its ability to utilize its NOLs to offset future taxable income. Our existing NOLs may be subject to limitations arising from past ownership changes. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change under Section 382 of the Code. In addition, under the Tax Cuts and Jobs Act (the Tax Act), the amount of post 2017 NOLs that we are permitted to deduct in any taxable year is limited to 80% of our taxable income in such year, where taxable income is determined without regard to the NOL deduction itself. In addition, the Tax Act generally eliminates the ability to carry back any NOL to prior taxable years, while allowing post 2017 unused NOLs to be carried forward indefinitely. There is a risk that due to changes under the Tax Act, regulatory changes, or other unforeseen reasons, our existing NOLs could expire or otherwise be unavailable to offset future income tax liabilities. For these reasons, we may not be able to realize a tax benefit from the use of our NOLs, whether or not we attain profitability.

We may have difficulty scaling and adapting our existing architecture to accommodate increased traffic and technology advances or changing business requirements. This could lead to the loss of customers and cause us to incur unexpected expenses to make network improvements.

Our services and solutions are highly complex and are designed to be deployed in and across numerous large and complex networks. Our global network infrastructure has to perform well and be reliable for us to be successful. We will need to continue to invest in infrastructure and customer support to account for the continued growth in traffic (and the increased complexity of that traffic) delivered via content delivery networks such as ours. We have spent and expect to continue to spend substantial amounts on the purchase and lease of equipment and data centers and the upgrade of our technology and network infrastructure to handle increased traffic over our network, implement changes to our network architecture and integrate existing solutions and to roll out new solutions and services. For example, during 2020, we increased our network capacity by more than 41% to over 90 terabits per second through software enhancements and hardware additions. This expansion is expensive and complex and could result in inefficiencies, operational failures or defects in our network and related software. If we do not implement such changes or expand successfully, or if we experience inefficiencies and operational failures, the quality of our solutions and services and user experience could decline. Cost increases or the failure to accommodate increased traffic or these evolving business demands without disruption could harm our operating results and financial condition. Also, from time to time, we have needed to correct errors and defects in our software or in other aspects of our network. In the future, there may be additional errors and defects that may harm our ability to deliver our services, including errors and defects originating with third party networks or software on which we rely. These occurrences could damage our reputation and lead to the loss of current and potential customers, which would harm our operating results and financial condition.

Rapid increase in the use of mobile and other devices to access the Internet present significant development and deployment challenges.

The number of people who access the Internet through devices other than PCs, including mobile devices, game consoles and television set-top devices continues to increase dramatically . The capabilities of these devices are advancing exponentially, and the increasing need to provide a high-quality video experience will present us with significant challenges. If we are unable to deliver our service offerings to a substantial number of alternative device users and at a high quality, or if we are slow to develop services and technologies that are more compatible with these devices, we may fail to capture a significant share of an important portion of the market. Such a failure could limit our ability to compete effectively in an industry that is rapidly growing and changing, which, in turn, could cause our business, financial condition and results of operations to suffer.

Our operations are dependent in part upon communications capacity provided by third party telecommunications providers. A material disruption of the communications capacity could harm our results of operations, reputation and customer relations.

We enter into arrangements for private line capacity for our backbone from third party providers. Our contracts for private line capacity generally have terms of three to four years. The communications capacity may become unavailable for a variety of reasons, such as physical interruption, technical difficulties, contractual disputes, or the financial health of our third party providers. Also, industry consolidation among communications providers could result in fewer viable market alternatives, which could have an impact on our costs of providing services. Alternative providers are currently available; however, it could be time consuming and expensive to promptly identify and obtain alternative third party connectivity. Additionally, as we grow, we anticipate requiring greater private line capacity than we currently have in place. If we are unable to obtain such capacity from third party providers on terms commercially acceptable to us or at all, our business and financial results would suffer. Similarly, if we are unable to timely deploy enough network capacity to meet the needs of our customer base or effectively manage the demand for our services, our reputation and relationships with our customers would be harmed, which, in turn, could harm or business, financial condition and results of operations.

We face risks associated with international operations that could harm our business.

We have operations in numerous foreign countries and may continue to expand our sales and support organizations internationally. As part of our business strategy, we intend to expand our international network infrastructure. Expansion could require us to make significant expenditures, including the hiring of local employees or resources, in advance of generating any revenue. As a consequence, we may fail to achieve profitable operations that will compensate our investment in international locations. We are subject to a number of risks associated with international business activities that may increase our costs, lengthen our sales cycle and require significant management attention. These risks include, but are not limited to:

- increased expenses associated with sales and marketing, deploying services and maintaining our infrastructure in foreign countries;
- competition from local service providers, many of which are very well positioned within their local markets;
- challenges caused by distance, language, and cultural differences;
- unexpected changes in regulatory requirements preventing or limiting us from operating our global network or resulting in unanticipated costs and delays;
- interpretations of laws or regulations that would subject us to regulatory supervision or, in the alternative, require us to exit a country, which could have a negative impact on the quality of our services or our results of operations;
- legal systems that may not adequately protect contract and intellectual property rights, policies, and taxation, the physical infrastructure of the country;
- potential political turmoil;
- longer accounts receivable payment cycles and difficulties in collecting accounts receivable;
- corporate and personal liability for violations of local laws and regulations;
- currency exchange rate fluctuations and repatriation of funds;
- potentially adverse tax consequences;
- credit risk and higher levels of payment fraud; and
- foreign exchange controls that might prevent us from repatriating cash earned outside the United States.

There can be no assurance that these international risks will not materially adversely affect our business. Should there be significant productivity losses, or if we become unable to conduct operations in international locations in the future, and our contingency plans are unsuccessful in addressing the related risks, our business could be adversely affected.

Our business depends on continued and unimpeded access to third party controlled end-user access networks.

Our services depend on our ability to access certain end-user access networks in order to complete the delivery of rich media and other online content to end-users. Some operators of these networks may take measures that could degrade, disrupt or increase the cost of our or our customers' access to certain of these end-user access networks. Such measures may include restricting or prohibiting the use of their networks to support or facilitate our services, or charging increased fees to us, our customers or end-users in connection with our services. In 2015, the U.S. Federal Communications Commission (FCC) released network neutrality and open Internet rules that reclassified broadband Internet access services as a telecommunications service subject to some elements of common carrier regulation. Among other things, the FCC order prohibited blocking or discriminating against lawful services and applications and prohibited "paid prioritization," or providing faster speeds or other benefits in return for compensation. In 2017, the FCC overturned these rules. As a result, we or our customers could experience increased cost or slower data on these third-party networks. If we or our customers experience increased cost in delivering content to end users, or otherwise, or if end users perceive a degradation of quality, our business and that of our customers may be significantly harmed. This or other types of interference could result in a loss of existing customers, increased costs and impairment of our ability to attract new customers, thereby harming our revenue and growth.

In addition, the performance of our infrastructure depends in part on the direct connection of our network to a large number of end-user access networks, known as peering, which we achieve through mutually beneficial cooperation with these networks. In some instances, network operators charge us for the peering connections. If, in the future, a significant percentage of these network operators elected to no longer peer with our network or peer with our network on less favorable economic terms, then the performance of our infrastructure could be diminished, our costs could increase and our business could suffer.

We use certain "open-source" software, the use of which could result in our having to distribute our proprietary software, including our source code, to third parties on unfavorable terms, which could materially affect our business.

Certain of our service offerings use software that is subject to open-source licenses. Open-source code is software that is freely accessible, usable and modifiable. Certain open-source code is governed by license agreements, the terms of which could require users of such open-source code to make any derivative works of such open-source code available to others on unfavorable terms or at no cost. Because we use open-source code, we may be required to take remedial action to protect our proprietary software. Such action could include replacing certain source code used in our software, discontinuing certain of our products or features or taking other actions that could divert resources away from our development efforts.

In addition, the terms relating to disclosure of derivative works in many open-source licenses are unclear. We periodically review our compliance with the open-source licenses we use and do not believe we will be required to make our proprietary software freely available. Nevertheless, if a court interprets one or more such open-source licenses in a manner that is unfavorable to us, we could be required to make some components of our software available at no cost, which could materially and adversely affect our business and financial condition.

Our business requires the continued development of effective business support systems to support our customer growth and related services.

The growth of our business depends on our ability to continue to develop effective business support systems. This is a complicated undertaking requiring significant resources and expertise. Business support systems are needed for implementing customer orders for services, delivering these services, and timely and accurate billing for these services. The failure to continue to develop effective business support systems could harm our ability to implement our business plans and meet our financial goals and objectives.

Risks Relating to our Customers and Demand for our Services

We depend on a limited number of customers for a substantial portion of our revenue in any fiscal period, and the loss of, or a significant shortfall in demand from, these customers could significantly harm our results of operations.

A relatively small number of customers typically account for a significant percentage of our revenue. For the year ended December 31, 2020, sales to our top 20 customers accounted for approximately 75% of our total revenue and we had two customers, Amazon and Sony, who represented approximately 36% and 11%, respectively of our total revenue.

In the past, the customers that comprised our top 20 customers have continually changed, and we also have experienced significant fluctuations in our individual customers' usage of, or decreased usage of, our services. As a consequence, we may not be able to adjust our expenses in the short term to address the unanticipated loss of a large customer during any particular period. As such, we may experience significant, unanticipated fluctuations in our operating results that may cause us to not meet our expectations or those of stock market analysts, which could cause our stock price to decline.

Rapidly evolving technologies or new business models could cause demand for our services to decline or could cause these services to become obsolete.

Customers, potential customers or third parties may develop technological or business model innovations that address digital delivery requirements in a manner that is, or is perceived to be, equivalent or superior to our service offerings. This is particularly true as our customers increase their operations and begin expending greater resources on delivering their content using third party solutions. If we fail to offer content delivery, video content management, edge services, and other related services that are competitive to in-sourced solutions, we may lose additional customers or fail to attract customers that may consider pursuing this in-sourced approach, and our business and financial results would suffer.

If competitors introduce new products or services that compete with or surpass the quality or the price or performance of our services, we may be unable to renew our agreements with existing customers or attract new customers at the prices and levels that allow us to generate attractive rates of return on our investment. We may not anticipate such developments and may be unable to adequately compete with these potential solutions. In addition, our customers' business models may change in ways that we do not anticipate, and these changes could reduce or eliminate our customers' needs for our services. If this occurred, we could lose customers or potential customers, and our business and financial results would suffer.

As a result of these or similar potential developments, it is possible that competitive dynamics in our market may require us to reduce our prices faster than we anticipate, which could harm our revenue, gross margin and operating results.

Many of our significant current and potential customers are pursuing emerging or unproven business models, which, if unsuccessful, or ineffective at monetizing delivery of their content, could lead to a substantial decline in demand for our content delivery and other services.

Because the proliferation of Internet connections and the subsequent monetization of content libraries for distribution to Internet users are relatively recent phenomena, many of our customers' business models that center on the delivery of rich media and other content to users remain unproven. Some of our customers will not be successful in selling advertising, subscriptions, or otherwise monetizing the content we deliver on their behalf, and consequently, may not be successful in creating a profitable business model. This will result in some of our customers discontinuing their business operations and discontinuing use of our services and solutions. Further, any deterioration and related uncertainty in the global financial markets and economy, such as that caused by the COVID-19 pandemic, could result in reductions in available capital and liquidity from banks and other providers of credit, fluctuations in equity and currency values worldwide, and concerns that portions of the worldwide economy may be in a prolonged recessionary period. In addition, as the COVID-19 pandemic adversely affects the global financial markets and economy, it may also have the effect of heightening many of the other risks described in this ''Risk Factors'' section. Any of this could materially adversely impact our customers' access to capital or willingness to spend capital on our services or, in some cases, ultimately cause the customer to exit their business. This uncertainty may also impact our customers' levels of cash liquidity, which could affect their ability or willingness to timely pay for services that they will order or have already ordered from us. From time to time we discontinue service to customers for non-payment of services. We expect customers may discontinue operations or not be willing or able to pay for services that they have ordered from us.

If we are unable to attract new customers or to retain our existing customers, our revenue could be lower than expected and our operating results may suffer.

If our existing and prospective customers do not perceive our services to be of sufficiently high value and quality, we may not be able to retain our current customers or attract new customers. We sell our services pursuant to service agreements that generally include some form of financial minimum commitment. Our customers have no obligation to renew their contracts for our services after the expiration of their initial commitment, and these service agreements may not be renewed at the same or higher level of service, if at all. Moreover, under some circumstances, some of our customers have the right to cancel their service agreements prior to the expiration of the terms of their agreements. Aside from minimum financial commitments, customers are not obligated to use our services for any particular type or amount of traffic. These facts, in addition to the changing competitive landscape in our market, means that we cannot accurately predict future customer renewal rates or usage rates. Our customers' renewal rates may decline or fluctuate as a result of a number of factors, including:

- their satisfaction or dissatisfaction with our services;
- the quality and reliability of our content delivery network;
- the prices of our services;
- the prices of services offered by our competitors;
- discontinuation by our customers of their Internet or web-based content distribution business;
- mergers and acquisitions affecting our customer base; and
- reductions in our customers' spending levels.

If our customers do not renew their service agreements with us, or if they renew on less favorable terms, our revenue may decline and our business may suffer. Similarly, our customer agreements often provide for minimum commitments that are often significantly below our customers' historical usage levels. Consequently, even if we have agreements with our customers to use our services, these customers could significantly curtail their usage without incurring any penalties under our agreements. In this event, our revenue would be lower than expected and our operating results could suffer.It also is an important component of our growth strategy to market our services and solutions to particular industries or market segments. As an organization, we may not have significant experience in selling our services into certain of these markets. Our ability to successfully sell our services into these markets to a meaningful extent remains unproven. If we are unsuccessful in such efforts, our business, financial condition and results of operations could suffer.

We generate our revenue primarily from the sale of content delivery services, and the failure of the market for these services to expand as we expect or the reduction in spending on those services by our current or potential customers would seriously harm our business.

While we offer our customers a number of services and solutions, we generate the majority of our revenue from charging our customers for the content delivered on their behalf through our global network. We are subject to an elevated risk of reduced demand for these services. Furthermore, if the market for delivery of rich media content in particular does not continue to grow as we expect or grows more slowly, then we may fail to achieve a return on the significant investment we are making to prepare for this growth. Our success, therefore, depends on the continued and increasing reliance on the Internet for delivery of media content and our ability to cost-effectively deliver these services. Many different factors may have a general tendency to limit or reduce the number of users relying on the Internet for media content, the amount of content consumed by our customers' users, or the number of providers making this content available online, including, among others:

- a general decline in Internet usage;
- third party restrictions on online content, including copyright, digital rights management, and geographic restrictions;
- system impairments or outages, including those caused by hacking or cyberattacks; and
- a significant increase in the quality or fidelity of off-line media content beyond that available online to the point where

users prefer the off-line experience.

The influence of any of these or other factors may cause our current or potential customers to reduce their spending on content delivery services, which would seriously harm our operating results and financial condition.

If our ability to deliver media files in popular proprietary content formats was restricted or became cost-prohibitive, demand for our content delivery services could decline, we could lose customers and our financial results could suffer.

Our business depends on our ability to deliver media content in all major formats. If our legal right or technical ability to store and deliver content in one or more popular proprietary content formats was limited, our ability to serve our customers in these formats would be impaired and the demand for our services would decline by customers using these formats. Owners of propriety content formats may be able to block, restrict, or impose fees or other costs on our use of such formats, which could lead to additional expenses for us and for our customers, or which could prevent our delivery of this type of content altogether. Such interference could result in a loss of customers, increased costs, and impairment of our ability to attract new customers, any of which would harm our revenue, operating results, and growth.

Risks Relating to Human Capital Management

Failure to effectively enhance our sales capabilities could harm our ability to increase our customer base and achieve broader market acceptance of our services.

Increasing our customer base and achieving broader market acceptance of our services will depend to a significant extent on our ability to enhance our sales and marketing operations. We have a concentration of our sales force in Arizona, but we also have a widely deployed field sales force. We have aligned our sales resources to improve our sales productivity and efficiency and to bring our sales personnel closer to our current and potential customers. Adjustments to our sales force have been and will continue to be expensive and could cause some near-term productivity impairments. As a result, we may not be successful in improving the productivity and efficiency of our sales force, which could cause our results of operations to suffer.

We believe that there is significant competition for both inside and direct sales personnel with the sales skills and technical knowledge that we require. Our ability to achieve significant growth in revenue in the future will depend, in large part, on our success in recruiting, training and retaining sufficient numbers of inside and direct sales personnel. New hires require significant training and, in most cases, take a significant period of time before they achieve full productivity. Our recent hires and planned hires may not become as productive as we would like, and we may be unable to hire or retain sufficient numbers of qualified individuals in the future in the markets where we do business. Our business will be seriously harmed if our sales force productivity efforts do not generate a corresponding significant increase in revenue.

If we are unable to retain our key employees and hire qualified personnel, our ability to compete could be harmed.

Our future success depends upon the continued services of our executive officers and other key technology, sales, marketing, and support personnel who have critical industry experience and relationships that they rely on in implementing our business plan. There is considerable competition for talented individuals with the specialized knowledge to deliver our services, and this competition affects our ability to hire and retain key employees. Historically, we have experienced a significant amount of employee turnover, especially with respect to our sales personnel. Sales personnel that are relatively new may need time to become fully productive. Inability to retain or hire key employees could disrupt our operations, delay the development and introduction of our services, and negatively impact our ability to sell our services.

Risks Relating to Intellectual Property, Litigation, and Regulations

Our involvement in litigation may have a material adverse effect on our financial condition and operations.

We have been involved in multiple intellectual property lawsuits in the past. We are from time to time party to other lawsuits. The outcome of all litigation is inherently unpredictable. The expenses of defending these lawsuits, particularly fees paid to our lawyers and expert consultants, have been significant to date. If the cost of prosecuting or defending current or future lawsuits continues to be significant, it may continue to adversely affect our operating results during the pendency of such lawsuits. Lawsuits also require a diversion of management and technical personnel time and attention away from other activities to pursue the defense or prosecution of such matters. In addition, adverse rulings in such lawsuits either alone or cumulatively may have an adverse impact on our revenue, expenses, market share, reputation, liquidity, and financial condition.

We need to defend our intellectual property and processes against patent or copyright infringement claims, which may cause us to incur substantial costs and threaten our ability to do business.

Companies, organizations or individuals, including our competitors and non-practicing entities, may hold or obtain patents or other proprietary rights that would prevent, limit or interfere with our ability to make, use or sell our services or develop new services, which could make it more difficult for us to operate our business. We have been and continue to be the target of intellectual property infringement claims by third parties. Companies holding Internet-related patents or other intellectual property rights are increasingly bringing suits alleging infringement of such rights or otherwise asserting their rights and seeking licenses. Any litigation or claims, whether or not valid, could result in substantial costs and diversion of resources from the defense of such claims. In addition, many of our agreements with customers require us to defend and indemnify those customers for third-party intellectual property infringement claims against them, which could result in significant additional costs and diversion of resources. If we are determined to have infringed upon a third party's intellectual property rights, we may also be required to do one or more of the following:

- cease selling, incorporating or using products or services that incorporate the challenged intellectual property;
- pay substantial damages;
- obtain a license from the holder of the infringed intellectual property right, which license may or may not be available on reasonable terms or at all; or
- redesign products or services.

If we are forced to litigate any claims or to take any of these other actions, our business may be seriously harmed.

Our business may be adversely affected if we are unable to protect our intellectual property rights from unauthorized use or infringement by third parties.

We rely on a combination of patent, copyright, trademark and trade secret laws and restrictions on disclosure to protect our intellectual property rights. We have applied for patent protection in the United States and a number of foreign countries. These legal protections afford only limited protection and laws in foreign jurisdictions may not protect our proprietary rights as fully as in the United States. Monitoring infringement of our intellectual property rights is difficult, and we cannot be certain that the steps we have taken will prevent unauthorized use of our intellectual property rights. Developments and changes in patent law, such as changes in interpretations of the joint infringement standard, could restrict how we enforce certain patents we hold. We also cannot be certain that any pending or future patent applications will be granted, that any future patent will not be challenged, invalidated or circumvented, or that rights granted under any patent that may be issued will provide competitive advantages to us. If we are unable to effectively protect our intellectual property rights, our business may be harmed.

Internet-related and other laws relating to taxation issues, privacy, data security, and consumer protection and liability for content distributed over our network could harm our business.

Laws and regulations that apply to communications and commerce conducted over the Internet are becoming more prevalent, both in the United States and internationally, and may impose additional burdens on companies conducting business online or providing Internet-related services such as ours. Increased regulation could negatively affect our business directly, as well as the businesses of our customers, which could reduce their demand for our services. For example, tax authorities abroad may impose taxes on the Internet-related revenue we generate based on where our internationally deployed servers are located. In addition, domestic and international taxation laws are subject to change. Our services, or the businesses of our customers, may become subject to increased taxation, which could harm our financial results either directly or by forcing our customers to scale back their operations and use of our services in order to maintain their operations. Also, the Communications Act of 1934, as amended by the Telecommunications Act of 1996 (the Act), and the regulations promulgated by the FCC under Title II of the Act, may impose obligations on the Internet and those participants involved in Internet-related businesses. In addition, the laws relating to the liability of private network operators for information carried on, processed by or disseminated through their networks are unsettled, both in the United States and abroad. Network operators have been sued in the past, sometimes successfully, based on the content of material disseminated through their networks. We may become subject to legal claims such as defamation, invasion of privacy and copyright infringement in connection with content stored on or distributed through our network. In addition, our reputation could suffer as a result of our perceived association with the type of content that some of our customers deliver. If we need to take costly measures to reduce our exposure to the risks posed by laws and regulations that apply to communications and commerce conducted over the Internet, or are required to defend ourselves against related claims, our financial results could be negatively affected.

Several other laws also could expose us to liability and impose significant additional costs on us. For example, the Digital Millennium Copyright Act has provisions that limit, but do not eliminate, our liability for the delivery of customer content that infringe copyrights or other rights, so long as we comply with certain statutory requirements. Also, the Children's On-line Privacy Protection Act restricts the ability of online services to collect information from minors and the Protection of Children from Sexual Predators Act of 1998 requires online service providers to report evidence of violations of federal child pornography laws under certain circumstances. There are also emerging regulation and standards regarding the collection and use of personal information and protecting the security of data on networks. Compliance with these laws, regulations, and standards is complex and any failure on our part to comply with these regulations may subject us to additional liabilities.

We are subject to stringent privacy and data protection requirements and any actual or perceived failure by us to comply with such requirements could expose us to liability and have an adverse impact on our business.

We are subject to stringent laws and legal requirements that regulate our collection, processing, storage, use and sharing of certain personal information, including the EU's General Data Protection Regulation (GDPR), Brazil's Lei Geral de Protecao de Dados Pessoais (LGPD), and in the US, the California Consumer Privacy Act (CCPA), among others. GDPR specifically imposes strict rules regulating data transfers of personal data from the EU to the US. These laws and regulations are costly to comply with, could expose us to civil penalties and substantial penalties for non-compliance, as well as private rights of action for data breaches, all of which could increase our potential liability. This could also delay or impede the development or adoption of our products and services, reduce the overall demand for our services, result in negative publicity, increase our operating costs, require significant management time and attention, slow the pace at which we close (or prevent us from closing) sales transactions. Furthermore, these laws have prompted a number of proposals for new US and global privacy legislation, which, if enacted, could add additional complexity and potential legal risk, require additional investment of resources, and impact strategies and require changes in business practices and policies.

We expect that we will continue to face uncertainty as to whether our evolving efforts to comply with our obligations under privacy laws will be sufficient. If we are investigated by data protection regulators, we may face fines and other penalties. Any such investigation or charges by data protection regulators could have a negative effect on our existing business and on our ability to attract and retain new customers.

Privacy concerns could lead to regulatory and other limitations on our business, including our ability to use "cookies" and video player "cookies" that are crucial to our ability to provide services to our customers.

Our ability to compile data for customers depends on the use of "cookies" to identify certain online behavior that allows our customers to measure a website or video's effectiveness. A cookie is a small file of information stored on a user's computer that allows us to recognize that user's browser or video player when the user makes a request for a web page or to play a video. Certain privacy laws regulate cookies and/or require certain disclosures regarding cookies or place restrictions on the sending of unsolicited communications. In addition, Internet users may directly limit or eliminate the placement of cookies on their computers by, among other things, using software that blocks cookies, or by disabling or restricting the cookie functions of their Internet browser software and in their video player software. If our ability to use cookies were substantially restricted due to the foregoing, or for any other reason, we would have to generate and use other technology or methods that allow the gathering of user data in order to provide services to customers. This change in technology or methods could require significant re-engineering time and resources, and may not be complete in time to avoid negative consequences to our business. In addition, alternative technology or methods might not be available on commercially reasonable terms, if at all. If the use of cookies is prohibited and we are not able to efficiently and cost effectively create new technology, our business, financial condition and results of operations would be materially adversely affected.

Risks Relating to the COVID-19 Pandemic

The effects of the COVID-19 pandemic have materially affected how we and our customers are operating our businesses, and the duration and extent to which this will impact our future results of operations and overall financial performance remains uncertain.

In 2020, the WHO declared COVID-19 a global pandemic. This pandemic has has adversely affected work forces, organizations, governments, customers, economies, and financial markets globally, and led to an economic downturn and increased market volatility. It also disrupted the normal operations of many businesses, including ours. For example, in response to the outbreak of COVID-19, we activated our pandemic response plan and took several precautionary steps early to safeguard our business and our people, including implementing travel bans and restrictions, temporarily closing offices, and canceling participation in various industry events. The continued persistence of this outbreak, as well as intensified measures undertaken to contain the spread of COVID-19, could decrease consumer spending, adversely affect demand for our technology and services, cause some of our customers and partners to exit their business, cause one or more of our customers to fail to renew, terminate, or renegotiate their contracts, affect the ability of our sales team to travel to potential customers, impact expected spending from new customers, and negatively impact collections of accounts receivable, all of which could adversely affect our business, results of operations, and financial condition. Also, the sales cycle for a new customer of our technology and services could lengthen, resulting in a potentially longer delay between increasing operating expenses and the generation of corresponding revenue, if any. We cannot predict whether and to what degree the disruption caused by the COVID-19 pandemic and reactions thereto will continue, and expect to face difficulty accurately predicting our internal forecasts for the foreseeable future. The outbreak also presents challenges as our workforce is currently working remotely and shifting to assisting new and existing customers who are also generally working remotely. It is not possible for us to predict the duration or magnitude of the adverse results of the outbreak and its effects on our business, results of operations, or financial condition.

Risks Relating to Strategic Transactions

As part of our business strategy, we may acquire businesses or technologies and may have difficulty integrating these operations.

We may seek to acquire businesses or technologies that are complementary to our business in the future. Acquisitions are often complex and involve a number of risks to our business, including, among others:

- the difficulty of integrating the operations, services, solutions and personnel of the acquired companies;
- the potential disruption of our ongoing business;
- the potential distraction of management;
- the possibility that our business culture and the business culture of the acquired companies will not be compatible;
- the difficulty of incorporating or integrating acquired technology and rights;
- expenses related to the acquisition and to the integration of the acquired companies;
- the impairment of relationships with employees and customers as a result of any integration of new personnel;
- employee turnover from the acquired companies or from our current operations as we integrate businesses;
- risks related to the businesses of acquired companies that may continue following the merger; and
- potential unknown liabilities associated with acquired companies.

If we are not successful in completing acquisitions, or integrating completed acquisitions in a timely manner, we may be required to reevaluate our business strategy, and we may incur substantial expenses and devote significant management time and resources without a productive result. Acquisitions will require the use of our available cash or dilutive issuances of securities. Future acquisitions or attempted acquisitions could also harm our ability to achieve profitability.

Risks Related to Investments and Our Outstanding Convertible Notes

If we are required to seek funding, such funding may not be available on acceptable terms or at all.

We believe that our cash, cash equivalents and marketable securities classified as current plus cash from operations will be sufficient to fund our operations and proposed capital expenditures for at least the next 12 months. However, we may need or desire to obtain funding due to a number of factors, including a shortfall in revenue, increased expenses, increased investment in capital equipment, the acquisition of significant businesses or technologies, or adverse judgments or settlements in connection with future, unforeseen litigation. If we do need to obtain funding, it may not be available on commercially reasonable terms or at all. If we are unable to obtain sufficient funding, our business would be harmed. Even if we were able to find outside funding sources, we might be required to issue securities in a transaction that could be highly dilutive to our investors or we may be required to issue securities with greater rights than the securities we have outstanding today. We might also be required to take other actions that could lessen the value of our common stock, including borrowing money on terms that are not favorable to us. If we are unable to generate or raise capital that is sufficient to fund our operations, we may be required to curtail operations, reduce our capabilities or cease operations in certain jurisdictions or completely.

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

In July 2020, we issued $125,000 aggregate principal amount of 3.50% Convertible Senior Notes due 2025 (the Notes) in a private offering. Our ability to make scheduled payments of the principal of, to pay interest on, or to refinance our indebtedness, including the Notes, 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 sufficient to service our debt or 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 or equity financing on terms that may be onerous or highly dilutive. Our ability to refinance 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.

Our indebtedness and liabilities could limit the cash flow available for our operations, expose us to risks that could adversely affect our business, financial condition, and results of operations and impair our ability to satisfy our obligations under the Notes.

We incurred $125,000 principal amount of additional indebtedness as a result of our issuance of the Notes. We may also incur additional indebtedness to meet future financing needs, including under our credit facility with SVB. Our indebtedness could have significant negative consequences for our security holders and our business, results of operations, and financial condition by, among other things:

- increasing our vulnerability to adverse economic and industry conditions;
- limiting our ability to obtain additional financing;
- requiring the dedication of a substantial portion of our cash flow from operations to service our indebtedness, which will reduce the amount of cash available for other purposes;
- limiting our flexibility to plan for, or react to, changes in our business;
- diluting the interests of our stockholders as a result of issuing shares of our stock upon conversion of the Notes; and
- placing us at a possible competitive disadvantage with competitors that are less leveraged than us or have better access to capital.

Our business may not generate sufficient funds, and we may otherwise be unable to maintain sufficient cash reserves, to pay amounts due under our indebtedness, including the Notes, and our cash needs may increase in the future. In addition, the Credit Agreement governing our credit facility contains, and any future indebtedness that we may incur may contain, financial and other restrictive covenants that limit our ability to operate our business, raise capital or make payments under our other indebtedness. If we fail to comply with these covenants or to make payments under our indebtedness when due, then we would be in default under that indebtedness, which could, in turn, result in that and our other indebtedness becoming immediately payable in full.

We may be unable to raise the funds necessary to repurchase the Notes for cash following a fundamental change, or to pay any cash amounts due upon conversion, and our other indebtedness may limit our ability to repurchase the Notes or pay cash upon their conversion.

Holders of the Notes may require us to repurchase their Notes following a fundamental change at a cash repurchase price generally equal to the principal amount of the Notes to be repurchased, plus accrued and unpaid interest, if any. In addition, upon conversion, we will satisfy part or all of our conversion obligation in cash unless we elect to settle conversions solely in shares of our common stock. We may not have enough available cash or be able to obtain financing at the time we are required to repurchase the Notes or pay the cash amounts due upon conversion. In addition, applicable law, regulatory authorities, and the agreements governing our other indebtedness may restrict our ability to repurchase the Notes or pay the cash amounts due upon conversion. Our failure to repurchase the Notes or to pay the cash amounts due upon conversion when required will constitute a default under the indenture governing the Notes. A default under the indenture or the fundamental change itself could also lead to a default under agreements governing our other indebtedness, which may result in that other indebtedness becoming immediately payable in full. We may not have sufficient funds to satisfy all amounts due under the other indebtedness and the Notes.

The accounting method for the Notes could adversely affect our reported financial condition and results.

The accounting method for reflecting the Notes on our balance sheet, accruing interest expense for the Notes and reflecting the underlying shares of our common stock in our reported diluted earnings per share may adversely affect our reported earnings and financial condition. We expect that, under applicable accounting principles, the initial liability carrying amount of the Notes will be the fair value of a similar debt instrument that does not have a conversion feature, valued using our cost of capital for straight, non-convertible debt. We expect to reflect the difference between the net proceeds from the offering of the Notes and the initial carrying amount as a debt discount for accounting purposes, which will be amortized into interest expense over the term of the Notes. As a result of this amortization, the interest expense that we expect to recognize for the Notes for accounting purposes will be greater than the cash interest payments we will pay on the Notes, which will result in lower reported income or higher reported losses. The lower reported income or higher reported losses resulting from this accounting treatment could depress the trading price of our common stock and the Notes.

However, in August 2020, FASB published ASU 2020-06, eliminating the separate accounting for the debt and equity components as described above. ASU 2020-06 will be effective for SEC-reporting entities for fiscal years beginning after December 15, 2021 (or, in the case of smaller reporting companies, December 15, 2023), including interim periods within those fiscal years. When ASU 2020-06 is adopted by the Company, we expect the elimination of the separate accounting described above to reduce the interest expense that we expect to recognize for the Notes for accounting purposes. In addition, ASU 2020-06 eliminates the use of the treasury stock method for convertible instruments that can be settled in whole or in part with equity, and instead require application of the “if-converted” method. Under that method, if it is adopted, diluted earnings per share would generally be calculated assuming that all the Notes were converted solely into shares of common stock at the beginning of the reporting period, unless the result would be anti-dilutive. The application of the if-converted method may reduce our reported diluted earnings per share. Also, if any of the conditions to the convertibility of the Notes is satisfied, then we may be required under applicable accounting standards to reclassify the liability carrying value of the Notes as a current, rather than a long-term, liability. This reclassification could be required even if no Note-holders convert their Notes and could materially reduce our reported working capital.

Transactions relating to our Notes may affect the value of our common stock.

In connection with the pricing of the Notes, we entered into capped call transactions (collectively, the Capped Calls) with one of the initial purchasers of the Notes and other financial institutions (collectively, the Option Counterparties). The Capped Calls cover, subject to customary adjustments, the number of shares of common stock initially underlying the Notes. The Capped Calls are expected generally to reduce the potential dilution of our common stock upon conversion of the Notes or at our election (subject to certain conditions) offset any cash payments we are required to make in excess of the aggregate principal amount of converted Notes, as the case may be, with such reduction or offset subject to a cap.

In addition, the Option Counterparties or their respective affiliates may 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 or other securities of ours in secondary market transactions following the pricing of the Notes and from time to time prior to the maturity of the Notes (and are likely to do so on each exercise date of the Capped Calls, which are expected to occur during the 40 trading day period beginning on the 41st scheduled trading day prior to the maturity date of the Notes, or following any termination of any portion of the Capped Calls in connection with any repurchase, redemption, or conversion of the Notes if we make the relevant election under the Capped Calls). This activity could also cause or avoid an increase or a decrease in the market price of our common stock.

We are subject to counterparty risk with respect to the Capped Calls.

The Option Counterparties are financial institutions, and we will be subject to the risk that any or all of them might default under the Capped Calls. Our exposure to the credit risk of the Option Counterparties will not be secured by any collateral. Past global economic conditions have resulted 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 the Capped Calls with such option counterparty. Our exposure will depend on many factors but, generally, an increase in our exposure will be correlated to an increase in the market price subject to the cap 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 Ownership of Our Common Stock

The trading price of our common stock has been, and is likely to continue to be, volatile.

The trading prices of our common stock and the securities of technology companies generally have been highly volatile. Factors affecting the trading price of our common stock will include:

- variations in our operating results;
- announcements of technological innovations, new services or service enhancements, strategic alliances or significant agreements by us or by our competitors;
- commencement or resolution of, our involvement in and uncertainties arising from litigation;
- recruitment or departure of key personnel;
- changes in the estimates of our operating results or changes in recommendations by securities analysts;
- if we or our stockholders sell substantial amounts of our common stock (including shares issued upon the exercise of options and warrants);
- developments or disputes concerning our intellectual property or other proprietary rights;
- the gain or loss of significant customers;
- market conditions in our industry, the industries of our customers, and the economy as a whole, including the economic impact of the COVID-19 pandemic; and
- adoption or modification of regulations, policies, procedures or programs applicable to our business.

In addition, if the market for technology stocks or the stock market in general experiences loss of investor confidence, the trading price of our common stock could decline for reasons unrelated to our business, operating results or financial condition. The trading price of our common stock might also decline in reaction to events or speculation of events that affect other companies in our industry even if these events do not directly affect us.

If securities or industry analysts do not publish research or reports about our business or if they issue an adverse or misleading opinion or report, our stock, our stock price, and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. If an analyst issues an adverse or misleading opinion, our stock price could decline. If one or more of these analysts cease covering us or fails to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

Future equity issuances or a sale of a substantial number of shares of our common stock may cause the price of our common stock to decline.

Because we may need to raise additional capital in the future to continue to expand our business and our research and development activities, among other things, we may conduct additional equity offerings. If we or our stockholders sell substantial amounts of our common stock (including shares issued upon the exercise of options and warrants) in the public market, the market price of our common stock could fall. A decline in the market price of our common stock could make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate.

Anti-takeover provisions in our charter documents and Delaware law could discourage, delay or prevent a change in control of our company and may affect the trading price of our common stock.

Provisions of our amended and restated certificate of incorporation and bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us, even if doing so would benefit our stockholders. These provisions:

- establish that members of the board of directors may be removed only for cause upon the affirmative vote of stockholders owning a majority of our capital stock;
- authorize the issuance of "blank check" preferred stock that could be issued by our board of directors to increase the number of outstanding shares and thwart a takeover attempt;
- limit who may call special meetings of stockholders;
- prohibit action by written consent, thereby requiring stockholder actions to be taken at a meeting of the stockholders;
- establish advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings;
- provide for a board of directors with staggered terms; and
- provide that the authorized number of directors may be changed only by a resolution of our board of directors.

In addition, Section 203 of the Delaware General Corporation Law, which imposes certain restrictions relating to transactions with major stockholders, may discourage, delay or prevent a third party from acquiring us.

General Risk Factors

We are subject to the effects of fluctuations in foreign exchange rates, which could affect our operating results.

The financial condition and results of operations of our operating foreign subsidiaries are reported in the relevant local currency and are then translated into U.S. dollars at the applicable currency exchange rate for inclusion in our consolidated U.S. dollar financial statements. Also, although a large portion of our customer and vendor agreements are denominated in U.S. dollars, we may be exposed to fluctuations in foreign exchange rates with respect to customer agreements with certain of our international customers. Exchange rates between these currencies and U.S. dollars in recent years have fluctuated significantly and may do so in the future. In addition to currency translation risk, we incur currency transaction risk whenever one of our operating subsidiaries enters into a transaction using a different currency than the relevant local currency. Given the volatility of exchange rates, we may be unable to manage our currency transaction risks effectively. Currency fluctuations could have a material adverse effect on our future international sales and, consequently, on our financial condition and results of operations.

We could incur charges due to impairment of goodwill and long-lived assets.

As of December 31, 2020, we had a goodwill balance of approximately $77,753, which is subject to periodic testing for impairment. Our long-lived assets also are subject to periodic testing for impairment. A significant amount of judgment is involved in the periodic testing. Failure to achieve sufficient levels of cash flow could result in impairment charges for goodwill or fixed asset impairment for long-lived assets, which could have a material adverse effect on our reported results of operations. Our goodwill impairment analysis also includes a comparison of the aggregate estimated fair value of our reporting unit to our total market capitalization. If our stock trades below our book value, a significant and sustained decline in our stock price and market capitalization could result in goodwill impairment charges. During times of financial market volatility, significant judgment will be used to determine the underlying cause of the decline and whether stock price declines are short-term in nature or indicative of an event or change in circumstances. Impairment charges, if any, resulting from the periodic testing are non-cash.

Our results of operations may fluctuate in the future. As a result, we may fail to meet or exceed the expectations of securities analysts or investors, which could cause our stock price to decline.

Our results of operations may fluctuate as a result of a variety of factors, many of which are outside of our control. If our results of operations fall below the expectations of securities analysts or investors, the price of our common stock could decline substantially. In addition to the effects of other risks discussed in this section, fluctuations in our results of operations may be due to a number of factors, including, among others:

- our ability to increase sales to existing customers and attract new customers to our services;
- the addition or loss of large customers, or significant variation in their use of our services;
- costs associated with current or future intellectual property lawsuits and other lawsuits;
- service outages or third party security breaches to our platform or to one or more of our customers' platforms;
- the amount and timing of operating costs and capital expenditures related to the maintenance and expansion of our business, operations and infrastructure and the adequacy of available funds to meet those requirements;
- the timing and success of new product and service introductions by us or our competitors;
- the occurrence of significant events in a particular period that result in an increase in the use of our services, such as a major media event or a customer's online release of a new or updated video game or operating system;
- changes in our pricing policies or those of our competitors;
- the timing of recognizing revenue;
- limitations of the capacity of our global network and related systems;
- the timing of costs related to the development or acquisition of technologies, services or businesses;
- the potential write-down or write-off of intangible or other long-lived assets;
- general economic, industry and market conditions (such as fluctuations experienced in the stock and credit markets during times of deteriorated global economic conditions or during an outbreak of an epidemic or pandemic, such as the recent COVID-19 outbreak) and those conditions specific to Internet usage;
- limitations on usage imposed by our customers in order to limit their online expenses; and
- war, threat of war or terrorism, including cyber terrorism, and inadequate cybersecurity.

We believe that our revenue and results of operations may vary significantly in the future and that period-to-period comparisons of our operating results may not be meaningful. You should not rely on the results of one period as an indication of future performance.

We have a history of losses and we may not achieve or maintain profitability in the future.

We incur significant expenses in developing our technology and maintaining and expanding our network. We also incur significant share-based compensation expense and have incurred (and may in the future incur) significant costs associated with litigation. Accordingly, we may not be able to achieve or maintain profitability for the foreseeable future. We also may not achieve sufficient revenue to achieve or maintain profitability and thus may continue to incur losses in the future for a number of reasons, including, among others:

- slowing demand for our services;
- increasing competition and competitive pricing pressures;
- any inability to provide our services in a cost-effective manner;
- incurring unforeseen expenses, difficulties, complications and delays; and
- other risks described in this report.

If we fail to achieve and maintain profitability, the price of our common stock could decline, and our business, financial condition and results of operations could suffer.

We have incurred, and will continue to incur, significant costs as a result of operating as a public company, and our management is required to devote substantial time to corporate governance.

We have incurred, and will continue to incur, significant public company expenses, including accounting, legal and other professional fees, insurance premiums, investor relations costs, and costs associated with compensating our independent directors. In addition, rules implemented by the SEC and Nasdaq impose additional requirements on public companies, including requiring changes in corporate governance practices. For example, the Nasdaq listing requirements require that we satisfy certain corporate governance requirements. Our management and other personnel need to devote a substantial amount of time to these governance matters. Moreover, these rules and regulations increase our legal and financial compliance costs and make some activities more time-consuming and costly. For example, these rules and regulations make it more difficult and more expensive for us to obtain director and officer liability insurance.

If the accounting estimates we make, and the assumptions on which we rely, in preparing our financial statements prove inaccurate, our actual results may be adversely affected.

Our financial statements have been prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us to make estimates and judgments about, among other things, taxes, revenue recognition, share-based compensation costs, contingent obligations, and doubtful accounts. These estimates and judgments affect the reported amounts of our assets, liabilities, revenue and expenses, the amounts of charges accrued by us, and related disclosure of contingent assets and liabilities. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances and at the time they are made. If our estimates or the assumptions underlying them are not correct, we may need to accrue additional charges or reduce the value of assets that could adversely affect our results of operations, investors may lose confidence in our ability to manage our business and our stock price could decline.

If we fail to maintain proper and effective internal controls or fail to implement our controls and procedures with respect to acquired or merged operations, our ability to produce accurate financial statements could be impaired, which could adversely affect our operating results, our ability to operate our business and investors' views of us.

We must ensure that we have adequate internal financial and accounting controls and procedures in place so that we can produce accurate financial statements on a timely basis. We are required to spend considerable effort on establishing and maintaining our internal controls, which is costly and time-consuming and needs to be re-evaluated frequently.

We have operated as a public company since June 2007, and we will continue to incur significant legal, accounting, and other expenses as we comply with Sarbanes-Oxley, as well as new rules implemented from time to time by the SEC and Nasdaq. These rules impose various requirements on public companies, including requiring changes in corporate governance practices, increased reporting of compensation arrangements, and other requirements. Our management and other personnel will continue to devote a substantial amount of time to these compliance initiatives. Moreover, new rules and regulations will likely increase our legal and financial compliance costs and make some activities more time-consuming and costly.

Section 404 of SOX requires that we include in our annual report our assessment of the effectiveness of our internal control over financial reporting and our audited financial statements as of the end of each fiscal year. Furthermore, our independent registered public accounting firm, Ernst & Young LLP (EY), is required to report on whether it believes we maintained, in all material respects, effective internal control over financial reporting as of the end of the year. Our continued compliance with Section 404 will require that we incur substantial expense and expend significant management time on compliance related issues, including our efforts in implementing controls and procedures related to acquired or merged operations. We currently do not have an internal audit group and use an international accounting firm to assist us with our assessment of the effectiveness of our internal controls over financial reporting. In future years, if we fail to timely complete this assessment, or if EY cannot timely attest, there may be a loss of public confidence in our internal controls, the market price of our stock could decline, and we could be subject to regulatory sanctions or investigations by Nasdaq, the SEC, or other regulatory authorities, which would require additional financial and management resources. In addition, any failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our operating results or cause us to fail to timely meet our regulatory reporting obligations.

Changes in financial accounting standards or practices may cause adverse, unexpected financial reporting fluctuations and affect our reported results of operations.

A change in accounting standards or practices can have a significant effect on our operating results and may affect our reporting of transactions completed before the change is effective. New accounting pronouncements and varying interpretations of existing accounting pronouncements have occurred and may occur in the future. Changes to existing rules or the questioning of current practices may adversely affect our reported financial results or the way we conduct our business.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our global corporate headquarters is located in approximately 37,755 square feet of leased office space in Scottsdale, Arizona. We also lease space for a data center and warehouse in Phoenix, Arizona. We lease offices in several other locations in the United States and Canada, including in or near Lexington, Kentucky; Boston, Massachusetts; New York, New York; Seattle, Washington; and Toronto, Canada. We also lease offices in Europe and Asia in or near London, England; Paris, France; Tel Aviv, Israel; Bangalore, Chennai, Haryana and Mumbai, India; Lviv, Ukraine; Tokyo, Japan; Seoul, Korea; and Singapore. We believe our facilities are sufficient to meet our needs for the foreseeable future and, if needed, additional space will be available at a reasonable cost.

Item 3. Legal Proceedings

For a description of our material pending legal proceedings, please refer to Note 10 “Contingencies - Legal Matters" of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this annual report on Form 10-K, which is incorporated herein by reference.

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

Market Information

Our common stock, par value $0.001 per share, trades on The Nasdaq Global Select Market under the symbol “LLNW”.

Holders

As of February 5, 2021, there were 233 holders of record of our common stock.

Dividends

We have never paid or declared any cash dividends on shares of our common stock or other securities and do not anticipate paying any cash dividends in the foreseeable future. We currently intend to retain all future earnings, if any, for use in the operation of our business.

Unregistered Sales of Equity Securities

In July 2020, we issued $125,000 aggregate principal amount of 3.50% Convertible Senior Notes due 2025 (the Notes) in a private offering pursuant to Rule 144A under the Securities Act. The offer and sale of the Notes to the initial purchasers for the Notes was made in reliance on the exemption from registration provided by Section 4(a)(2) of the Securities Act. We relied on this exemption from registration based in part on representations made by the initial purchasers, including that such initial purchasers would only offer, sell or deliver the Notes to persons whom they reasonably believe to be qualified institutional buyers within the meaning of Rule 144A under the Securities Act.

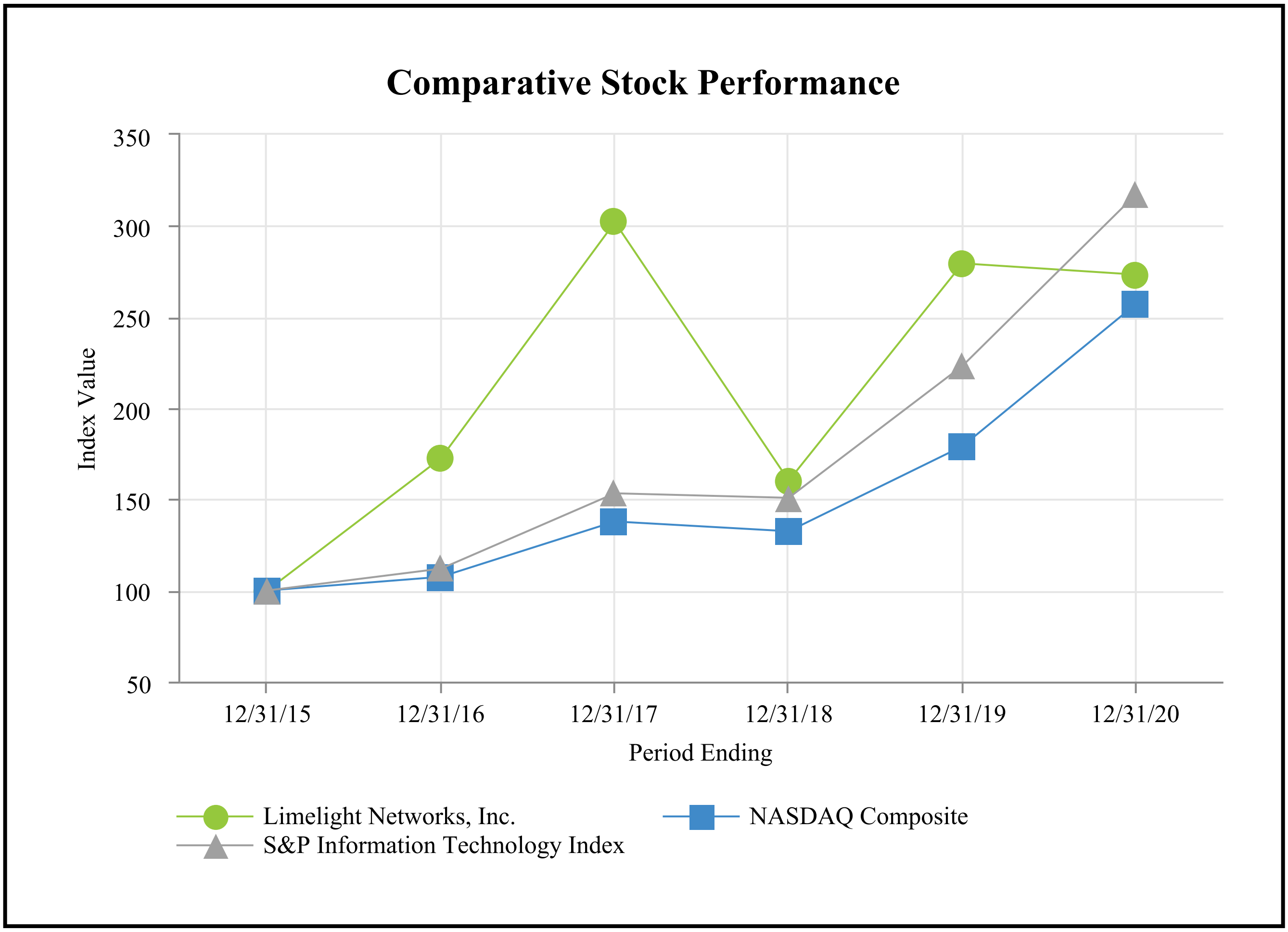
For more information, see Item 8 of Part II, “Financial Statements and Supplementary Data - Note 8 - Debt - Convertible Senior Notes - Due 2025” of this Annual Report on Form 10-K, which is incorporated into this item by reference.

Issuers Purchases of Equity Securities

None

STOCK PERFORMANCE GRAPH

The graph set forth below compares the cumulative total stockholder return on our common stock between December 31, 2015 and December 31, 2020, with the cumulative total return of (i) the Nasdaq Composite Index and (ii) the S&P Information Technology Sector Index, over the same period. This graph assumes the investment of $100 on December 31, 2015 in our common stock, the Nasdaq Composite Index and the S&P Information Technology Sector Index, and assumes the reinvestment of dividends, if any. The comparisons shown in the graph below are based upon historical data. We caution that the stock price performance shown in the graph below is not necessarily indicative of, nor is it intended to forecast, the potential future performance of our common stock.



This graph assumes an investment on December 31, 2015 of $100 in our common stock (based on the closing sale price of our common stock), and in each of such indices (including the reinvestment of all dividends). Measurement points are to the last trading day for each respective period. The performance shown is not necessarily indicative of future performance.

Item 6. Selected Financial Data

The following selected consolidated financial data should be read in conjunction with our Consolidated Financial Statements and related notes and with "Management Discussion and Analysis of Financial Condition and Results of Operations" and other financial data included elsewhere in this Annual Report on Form 10-K. On August 1, 2016, we entered into a settlement and license agreement with Akamai with respect to the '703 and certain other related patents, which settled all asserted and unasserted claims with respect to the licensed patents. The terms of the agreement required us to pay $54,000 over twelve equal quarterly installments, which began on August 1, 2016. We took a charge in the year ended December 31, 2016 for the full, undiscounted amount of $54,000, per our accounting policy. On January 1, 2018, we adopted Topic 606, Revenue from Contracts with Customers (Topic 606) using the modified retrospective method applied to those contracts which were not completed as of January 1, 2018. We recorded a net decrease to opening accumulated deficit of $1,496 as of January 1, 2018 due to the cumulative impact of adopting Topic 606 with the impact primarily related to the costs to obtain a customer contract ($1,129), specifically commissions and upfront incentive payments, and from the recognition of revenue from customers with contracts that contain minimum commitments billed ratably over the contract term ($367). On April 9, 2018, we entered into a definitive settlement and patent license agreement with Akamai in a separate matter where the parties agreed to (i) license certain patents to the other party, (ii) a covenant not to sue for three years for certain patents related to the licensed patents, and (iii) settle all outstanding legal disputes between the parties. The terms of the agreement also required Akamai to pay to Limelight a total of $14,900, over five equal quarterly installments. During the year ended December 31, 2018, we recorded $14,900 of settlement and patent license income related to this agreement. All information is presented in thousands, except per share amounts, customer count and where specifically noted.

	Limelight Networks, Inc.				
	Year Ended December 31,				
	2020	2019	2018	2017	2016
Revenue	$ 230,194	$ 200,634	$ 195,670	$ 184,360	$ 168,234
Cost of revenue:					
Cost of services (1)	125,509	99,897	85,920	78,423	78,857
Depreciation — network	21,579	19,193	16,277	18,138	18,032
Total cost of revenue	147,088	119,090	102,197	96,561	96,889
Gross profit	83,106	81,544	93,473	87,799	71,345
Operating expenses:					
General and administrative (1)	31,284	30,785	32,372	32,053	30,042
Sales and marketing (1)	42,945	43,078	39,553	36,098	32,945
Research and development (1)	21,680	22,534	24,075	25,342	24,335
Depreciation and amortization	1,591	872	2,313	2,376	2,452
Provision for litigation	—	—	—	—	54,000
Total operating expenses	97,500	97,269	98,313	95,869	143,774
Operating loss	(14,394)	(15,725)	(4,840)	(8,070)	(72,429)
Other income (expense):					
Interest expense	(3,939)	(76)	(86)	(80)	(918)
Interest income	69	427	670	494	123
Settlement and patent license income	—	—	14,900	—	—
Other, net	(368)	80	(264)	452	(98)
Total other income (expense)	(4,238)	431	15,220	866	(893)
(Loss) income before income taxes	(18,632)	(15,294)	10,380	(7,204)	(73,322)
Income tax expense	645	750	538	426	603
Net (loss) income	$ (19,277)	$ (16,044)	$ 9,842	$ (7,630)	$ (73,925)
Net (loss) income per share:					
Basic	$ (0.16)	$ (0.14)	$ 0.09	$ (0.07)	$ (0.71)
Diluted	$ (0.16)	$ (0.14)	$ 0.08	$ (0.07)	$ (0.71)
Weighted average shares used in per share calculation:					
Basic	121,196	115,890	112,114	108,814	104,350
Diluted	121,196	115,890	120,010	108,814	104,350

(1) Includes share-based compensation as follows:

	Limelight Networks, Inc.				
	Year Ended December 31,				
	2020	2019	2018	2017	2016
Cost of services	$ 1,998	$ 1,495	$ 1,815	$ 1,450	$ 1,493
General and administrative	7,611	8,098	8,458	6,502	7,070
Sales and marketing	3,519	2,263	2,837	2,470	2,792
Research and development	2,589	1,922	2,720	2,322	2,104
Total	$ 15,717	$ 13,778	$ 15,830	$ 12,744	$ 13,459

	Limelight Networks, Inc.				
	Year Ended December 31,				
	2020	2019	2018	2017	2016
Consolidated Balance Sheet Data:					
Cash and cash equivalents and marketable securities, current	$ 123,723	$ 18,335	$ 50,466	$ 49,316	$ 66,187
Non-current marketable securities	40	40	40	40	40
Working capital	145,256	34,185	58,273	44,607	56,643
Property and equipment, net	46,418	46,136	27,378	28,991	30,352
Total assets	314,178	209,369	198,925	196,448	208,129
Provision for litigation	—	—	9,000	18,000	18,000
Provision for litigation, less current portion	—	—	—	9,000	27,000
Long-term debt, less current portion	100,945	—	—	—	—
Total stockholders' equity	175,192	166,537	165,151	144,145	137,568

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

This Annual Report on Form 10-K contains "forward-looking statements" within the meaning of Section 21E of the Exchange Act, as amended. Forward-looking statements include, among other things, statements as to industry trends, our future expectations, operations, financial condition and prospects, business strategies and other matters that do not relate strictly to historical facts. These statements are often identified by the use of words such as "may," "will," "expect," "believe," "anticipate," "intend," "could," "estimate," or "continue," and similar expressions or variations. These statements are based on the beliefs and assumptions of our management based on information currently available to management. Such forward-looking statements are subject to risks, uncertainties and other factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified below, and those discussed in the section titled "Risk Factors" set forth in Part I, Item 1A and in the "Special Note Regarding Forward-Looking Statements" preceding Part I of this Annual Report on Form 10-K. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. We undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements. Prior period information has been modified to conform to current year presentation. All information is presented in thousands, except per share amounts, customer count and where specifically noted.

Overview

We were founded in 2001 as a provider of content delivery network services to deliver digital content over the Internet. We began development of our infrastructure in 2001 and began generating meaningful revenue in 2002. Today, we are a leading provider of digital content delivery, online video delivery, cloud security, edge computing, and cloud storage services. Our edge services platform includes a globally distributed, high-performance private network, intelligent software, and support services. Our mission is to securely manage and globally deliver digital content, building customer satisfaction through exceptional reliability and performance.

Our delivery services represented approximately 78% of our total revenue for the year ended December 31, 2020. We also generate revenue through the sale of professional services and other infrastructure services, such as transit and rack space services.

We operate in markets that are highly competitive. We have experienced and expect to continue to experience increased competition in price, features, functionality, integration and other factors leading to customer churn and customers operating their own network. Competition and technology advancements have resulted in declining average selling prices in the industry. We believe continued increases in content delivery traffic growth rates, driven by the continued shift to over the top consumption for online video and increased consumption of rich media content and larger file sizes, increased migration of applications and data to the cloud, and continued growth rates of mobile device usage are all important trends that will continue to outpace declining average selling prices in the industry.

In addition to these revenue-related trends, our profitability is impacted by trends in our costs of services and operating expenses. We continuously review our capacity needs and work to optimize our data center footprint. During 2020, we increased our network capacity by approximately 30 terabits per second. We continuously renegotiate our infrastructure contracts in order to scale our operations based on traffic levels and lower bandwidth costs per unit. Our operating expenses are largely driven by payroll and related employee costs. Our headcount increased from 610 at December 31, 2019, to 618 as of December 31, 2020.

The change in everyday behavior caused by the COVID-19 pandemic has impacted people's viewing habits and created new patterns in daily usage worldwide. This has included a greater consumption of content online, such as movies and television shows, news, and video games. We continued to see strong volumes of customer traffic and we believe the pandemic has accelerated the adoption of direct to consumer product offerings. Nevertheless, there is uncertainty about future traffic patterns as the pandemic evolves, workers return to their places of employment, and seasonal weather impacts end customers viewing habits.

Our business is dependent on providing our customers with fast, efficient, and reliable distribution of content delivery and digital asset management services over the Internet every minute of every day. Because of this, we operate a globally distributed network with services that are available 24 hours a day, seven days a week, and 365 days a year. Our network is fully redundant and includes extensive diversity through data center and telecommunication suppliers within and across regions. In response to the outbreak of COVID-19, we took several precautionary steps early to safeguard our business and our people, including implementing travel bans and restrictions, temporarily closing offices, and canceling participation in various industry events. We have been in constant communication with our business-critical partners and are frequently reassured that, like us, they have activated their pandemic response plans to ensure service continuity. We also have had conversations with various ISPs to understand their pain points and how we can manage our traffic to better alleviate congestion.

We have seen a slowing in our collections of outstanding accounts receivable from some of our customers, and we are experiencing logistics challenges in some parts of the world that may cause delays in updating or expanding our network and acquiring new customers. While it is difficult to predict what the world will look like when this pandemic has run its course, we currently do not expect the COVID-19 pandemic to have a material adverse impact on our balance sheet, financial condition, and results of operations, nor do we expect any impairment of goodwill, long-lived assets or right of use assets. There has been no material impact to our financial reporting systems, internal control over financial reporting, and disclosure controls and procedures.

The following table summarizes our revenue, costs and expenses for the years ended December 31, 2020, 2019, and 2018 (in thousands of dollars and as a percentage of total revenue).

	Year Ended December 31,					
	2020		2019		2018	
Revenue	$ 230,194	100.0 %	$ 200,634	100.0 %	$ 195,670	100.0 %
Cost of revenue	147,088	63.9 %	119,090	59.4 %	102,197	52.2 %
Gross profit	83,106	36.1 %	81,544	40.6 %	93,473	47.8 %
Operating expenses	97,500	42.4 %	97,269	48.5 %	98,313	50.2 %
Operating loss	(14,394)	(6.3)%	(15,725)	(7.8)%	(4,840)	(2.5)%
Settlement and patent license income	—	— %	—	— %	14,900	7.6 %
Total other income (expense)	(4,238)	(1.8)%	431	0.2 %	320	0.2 %
(Loss) income before income taxes	(18,632)	(8.1)%	(15,294)	(7.6)%	10,380	5.3 %
Income tax expense	645	0.3 %	750	0.4 %	538	0.3 %
Net (loss) income	$ (19,277)	(8.4)%	$ (16,044)	(8.0)%	$ 9,842	5.0 %

Use of Non-GAAP Financial Measures

To evaluate our business, we consider and use non-generally accepted accounting principles (Non-GAAP) net income (loss), EBITDA and Adjusted EBITDA as supplemental measures of operating performance. These measures include the same adjustments that management takes into account when it reviews and assesses operating performance on a period-to-period basis. We consider Non-GAAP net income (loss) to be an important indicator of overall business performance. We define Non-GAAP net income (loss) to be U.S. GAAP net income (loss), adjusted to exclude the settlement and patent license income, share-based compensation, litigation expenses, and non-cash interest expense. We believe that EBITDA provides a useful metric to investors to compare us with other companies within our industry and across industries. We define EBITDA as U.S. GAAP net income (loss), adjusted to exclude depreciation and amortization, interest expense, interest and other (income) expense and income tax expense. We define Adjusted EBITDA as EBITDA adjusted to exclude the settlement and patent license income, share-based compensation and litigation expenses. We use Adjusted EBITDA as a supplemental measure to review and assess operating performance. Our management uses these Non-GAAP financial measures because, collectively, they provide valuable information on the performance of our on-going operations, excluding non-cash charges, taxes and non-core activities (including interest payments related to financing activities). These measures also enable our management to compare the results of our on-going operations from period to period, and allow management to review the performance of our on-going operations against our peer companies and against other companies in our industry and adjacent industries. We believe these measures also provide similar insights to investors, and enable investors to review our results of operations "through the eyes of management."

Furthermore, our management uses these Non-GAAP financial measures to assist them in making decisions regarding our strategic priorities and areas for future investment and focus.

In our February 11, 2021 earnings press release, as furnished on Form 8-K, we included Non-GAAP net income (loss), EBITDA and Adjusted EBITDA. The terms Non-GAAP net income (loss), EBITDA and Adjusted EBITDA are not defined under U.S. GAAP, and are not measures of operating income, operating performance or liquidity presented in accordance with U.S. GAAP. Our Non-GAAP net income (loss), EBITDA and Adjusted EBITDA have limitations as analytical tools, and when assessing our operating performance, Non-GAAP net income (loss), EBITDA and Adjusted EBITDA should not be considered in isolation, or as a substitute for net income (loss) or other consolidated income statement data prepared in accordance with U.S. GAAP. Some of these limitations include, but are not limited to:

- EBITDA and Adjusted EBITDA do not reflect our cash expenditures or future requirements for capital expenditures or contractual commitments;
- these measures do not reflect changes in, or cash requirements for, our working capital needs;
- Non-GAAP net income (loss) and Adjusted EBITDA do not reflect the cash requirements necessary for litigation costs, including provision for litigation and litigation expenses;
- these measures do not reflect the interest expense, or the cash requirements necessary to service interest or principal payments, on our debt that we may incur;
- these measures do not reflect income taxes or the cash requirements for any tax payments;
- although depreciation and amortization are non-cash charges, the assets being depreciated and amortized will be replaced sometime in the future, and EBITDA and Adjusted EBITDA do not reflect any cash requirements for such replacements;
- while share-based compensation is a component of operating expense, the impact on our financial statements compared to other companies can vary significantly due to such factors as the assumed life of the options and the assumed volatility of our common stock; and
- other companies may calculate Non-GAAP net income (loss), EBITDA and Adjusted EBITDA differently than we do, limiting their usefulness as comparative measures.

We compensate for these limitations by relying primarily on our U.S. GAAP results and using Non-GAAP net income (loss), EBITDA, and Adjusted EBITDA only as supplemental support for management's analysis of business performance. Non-GAAP net income (loss), EBITDA and Adjusted EBITDA are calculated as follows for the periods presented.

Reconciliation of Non-GAAP Financial Measures

In accordance with the requirements of Item 10(e) of Regulation S-K, we are presenting the most directly comparable U.S. GAAP financial measures and reconciling the unaudited Non-GAAP financial metrics to the comparable U.S. GAAP measures.

Reconciliation of U.S. GAAP Net Income (Loss) to Non-GAAP Net Income (Loss)
(Unaudited)

	Year Ended December 31,		
	2020	2019	2018
U.S. GAAP net (loss) income	$ (19,277)	$ (16,044)	$ 9,842
Settlement and patent license income	—	—	(14,900)
Share-based compensation	15,717	13,778	15,830
Litigation expenses	—	—	2,907
Non-cash interest expense	1,938	—	—
Non-GAAP net (loss) income	$ (1,622)	$ (2,266)	$ 13,679

Reconciliation of U.S. GAAP Net Income (Loss) to EBITDA to Adjusted EBITDA

(Unaudited)

	Year Ended December 31,		
	2020	**2019**	**2018**
U.S. GAAP net (loss) income	$ (19,277)	$ (16,044)	$ 9,842
Depreciation and amortization	23,170	20,065	18,590
Interest expense	3,939	76	86
Interest and other (income) expense	299	(507)	(406)
Income tax expense	645	750	538
EBITDA	$ 8,776	$ 4,340	$ 28,650
Settlement and patent license income	—	—	(14,900)
Share-based compensation	15,717	13,778	15,830
Litigation expenses	—	—	2,907
Adjusted EBITDA	$ 24,493	$ 18,118	$ 32,487

Critical Accounting Policies and Estimates

The preparation of consolidated financial statements and related disclosures in conformity with U.S. GAAP requires management to make judgments, assumptions, and estimates that affect the amounts reported in the consolidated financial statements and accompanying notes. Note 2 to the consolidated financial statements describes the significant accounting policies and methods used in the preparation of the consolidated financial statements. The accounting policies described below are significantly affected by critical accounting estimates. Such accounting policies require significant judgments, assumptions, and estimates used in the preparation of the consolidated financial statements, and actual results could differ materially from the amounts reported based on these policies.

Revenue Recognition

Revenues are recognized when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services.

Our customers generally execute contracts with terms of one year or longer, which are referred to as recurring revenue contracts or long-term contracts. These contracts generally allow the customer access to our network and are either entirely usage based or commit the customer to a minimum monthly level of usage with additional charges applicable for actual usage above the monthly minimum commitment. We define usage as customer data sent or received using our content delivery service, or content that is hosted or cached by us at the request or direction of our customers. For contracts that contain minimum monthly commitments, we recognize revenue equal to the greater of the minimum monthly committed amount or actual usage, if actual usage exceeds the monthly committed amount, using the right to invoice practical expedient allowable under Topic 606, Revenue from Contracts with Customers (Topic 606).

For contracts that contain minimum commitments over the contractual term, we estimate an amount of variable consideration by using either the expected value method or the most likely amount method. We include estimates of variable consideration in revenue only when we have a high degree of confidence that revenue will not be reversed in a subsequent reporting period. We believe that the expected value method is the most appropriate estimate of the amount of variable consideration. These customers have entered into contracts with contract terms generally from one to four years. As of December 31, 2020, we have approximately $3,215 of remaining unsatisfied performance obligations. We recognized revenue of approximately $7,896 and $9,600, respectively, during the years ended December 31, 2020 and 2019, related to these types of contracts with our customers. We expect to recognize approximately 91% of the remaining unsatisfied performance obligations in 2021 and approximately 9% in 2022.

We may charge the customer an activation fee when services are first activated. We do not charge activation fees for contract renewals. Activation fees are not distinct within the context of the overall contractual commitment with the customer to perform our content delivery service and are therefore recognized initially as deferred revenue and recognized as revenue ratably over the estimated life of the customer arrangement.

We also derive revenue from services and events sold as discrete, non-recurring events or based solely on usage. For these services, we recognize revenue when control of promised goods or services is transferred to customers at an amount that reflects the consideration to which we expect to be entitled to in exchange for those goods or services.

At the inception of a customer contract for service, we make an assessment as to that customer's ability to pay for the services provided. If we subsequently determine that collection from the customer is not probable, we record an allowance for doubtful accounts and bad debt expense or deferred revenue for that customer's unpaid invoices and cease recognizing revenue for continued services provided until it is probable that revenue will not be reversed in a subsequent reporting period. Our standard payment terms vary by the type and location of our customer.

Arrangements with Multiple Performance Obligations

Certain of our revenue arrangements include multiple promises to our customers. Revenue arrangements with multiple promises are accounted for as separate performance obligations if each promise is distinct. Such arrangements may include a combination of some or all of the following: content delivery services, video content management services, performance services for website and web application acceleration and security, professional services, cloud storage, edge computing services, and sale of equipment.

Judgment may be required in determining whether products or services are considered distinct performance obligations that should be accounted for separately or as one combined performance obligation. Revenue is recognized over the period in which the performance obligations are satisfied, which is generally over the contract term. We have determined that generally most of our products and services do not constitute an individual service offering to our customers, as our promise to the customer is to provide a complete edge services platform, and therefore have concluded that it represents a single performance obligation. We have determined that professional services and hardware sales represent separate performance obligations from that of our edge services platform.

Consideration is allocated to the performance obligations using the relative standalone selling price method. Generally, arrangements with performance obligations are provided over the same contract period, and therefore, revenue is recognized over the same period.

We determine standalone selling price by evaluating the overall pricing objectives and market conditions. Consideration includes our discounting practices, the size and volume of our transactions, the area where services are sold, price lists, historical sales and contract prices.

Deferred Revenue

Deferred revenue represents amounts billed to customers for which revenue has not been recognized. Deferred revenue primarily consists of the unearned portion of monthly billed service fees and prepayments made by customers for services to be rendered in future periods.

Convertible Senior Notes

In July 2020, we issued $125,000 aggregate principal amount of 3.50% convertible senior notes. We separate our convertible senior notes (the Notes) into liability and equity components. The carrying amount of the liability component is 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 is determined by deducting the fair value of the liability component from the principal amount of the Notes. The excess of the principal amount of the Notes over the carrying amount of the liability component (debt discount) is amortized to interest expense at an effective interest rate over the contractual term of the Notes. The equity component is recorded in additional paid-in capital and is not remeasured as long as it continues to meet the conditions for equity classification. We allocate the issuance costs to the liability and equity components of the Notes based on the proportion of the proceeds allocated to the debt and equity components. Issuance costs attributable to the liability component are amortized to interest expense using the effective interest method over the contractual terms of the Notes. Issuance costs attributable to the equity component are netted with the equity component in stockholders' equity.

Accounts Receivable and Related Reserves

Trade accounts receivable are recorded at the invoiced amounts and do not bear interest. We record reserves as a reduction of our accounts receivable balance for service credits and for doubtful accounts. Estimates are used in determining both of these reserves. The allowance for doubtful accounts charges are included as a component of general and administrative expenses.

Our allowance for doubtful accounts is based upon a calculation that uses our aging of accounts receivable and applies a reserve percentage to the specific age of the receivable to estimate the allowance for doubtful accounts. The reserve percentages are determined based on our historical write-off experience. These estimates could change significantly if our customers' financial condition changes or if the economy in general deteriorates. In the event such conditions become known, we specifically identify balances for necessary reserves.

Our reserve for future service credits relates to service credits that are expected to be issued to customers during the ordinary course of business. These credits typically relate to customer disputes and billing adjustments and are estimated at the time the revenue is recognized and recorded as a reduction of revenues. Estimates for service credits are based on an analysis of credits issued in previous periods.

Goodwill and Other Intangible Assets

We have recorded goodwill as a result of past business acquisitions. Goodwill is recorded when the purchase price paid for an acquisition exceeds the estimated fair value of the net identified tangible and intangible assets acquired. In each of our acquisitions, the objective of the acquisition was to expand our product offerings and customer base and to achieve synergies related to cross selling opportunities, all of which contributed to the recognition of goodwill.

We test goodwill for impairment on an annual basis or more frequently if events or changes in circumstances indicate that goodwill might be impaired. We concluded that we have one reporting unit and assigned the entire balance of goodwill to this reporting unit. The estimated fair value of the reporting unit is determined using our market capitalization as of our annual impairment assessment date or more frequently if circumstances indicate the goodwill might be impaired. Items that could reasonably be expected to negatively affect key assumptions used in estimating fair value include but are not limited to:

- sustained decline in our stock price due to a decline in our financial performance due to the loss of key customers, loss of key personnel, emergence of new technologies or new competitors and/or unfavorable outcomes of intellectual property disputes;
- decline in overall market or economic conditions leading to a decline in our stock price; and
- decline in observed control premiums paid in business combinations involving comparable companies.

The estimated fair value of the reporting unit is determined using a market approach. Our market capitalization is adjusted for a control premium based on the estimated average and median control premiums of transactions involving companies comparable to us. As of the annual impairment testing date of October 31, 2020, we determined that goodwill was not impaired.

Impairment and Useful Lives of Long-Lived Assets

We review our long-lived assets, such as fixed assets and amortizable intangible assets, for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. Events that would trigger an impairment review include a change in the use of the asset or forecasted negative cash flows related to the asset. When such events occur, we compare the carrying amount of the asset to the undiscounted expected future cash flows related to the asset. If this comparison indicates that impairment is present, the amount of the impairment is calculated as the difference between the carrying amount and the fair value of the asset. If a readily determinable market price does not exist, fair value is estimated using discounted expected cash flows attributable to the asset. The estimates required to apply this accounting policy include forecasted usage of the long-lived assets, the useful lives of these assets, and expected future cash flows. Changes in these estimates could materially impact results from operations.

Results of Continuing Operations

Discussion of our financial condition and results of operations for the year ended December 31, 2020 compared to the year ended December 31, 2019 is presented below.

Discussion of our financial condition and results of operations for the year ended December 31, 2019 compared to the year ended December 31, 2018 can be found in "Part II. Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on January 30, 2020.

Comparison of the Years Ended December 31, 2020 and 2019

Revenue

We derive revenue primarily from the sale of our digital content delivery, video delivery, cloud security, edge cloud and origin storage services. We also generate revenue through the sale of professional services and other infrastructure services, such as transit and rack space services.

The following table reflects our revenue for the year ended December 31, 2020, compared to December 31, 2019:

	Year Ended December 31,			
	2020	2019	Increase (Decrease)	Percent Change
Revenue	$ 230,194	$ 200,634	$ 29,560	14.7 %

Our revenue increased during the year ended December 31, 2020, versus 2019 primarily due to a significant increase in volumes driven by increased demand for our content delivery services. For the year ended December 31, 2020, we experienced a decrease in average selling price versus the comparable 2019 period as a result of continuous pricing compression, which is common in our industry.

Our active customers worldwide decreased to 527 as of December 31, 2020, compared to 599 as of December 31, 2019. We are continuing our selective approach to accepting profitable business by following a clear process for identifying customers that value quality, performance, availability, and service.

During the years ended December 31, 2020 and 2019, sales to our top 20 customers accounted for approximately 75% and 72%, respectively of our total revenue. The customers that comprised our top 20 customers change from time to time, and our large customers may not continue to be as significant going forward as they have been in the past.

During the year ended December 31, 2020, we had two customers, Amazon and Sony who represented approximately 36% and 11%, respectively of our total revenue. During the year ended December 31, 2019, Amazon represented approximately 30% of our total revenue.

Revenue by geography is based on the location of the customer from which the revenue is earned. The following table sets forth revenue by geographic area (in thousands and as a percentage of total revenue):

	Year Ended December 31,			
	2020		2019	
Americas	$ 142,345	62 %	$ 125,075	62 %
EMEA	36,958	16 %	32,008	16 %
Asia Pacific	50,891	22 %	43,551	22 %
Total revenue	$ 230,194	100 %	$ 200,634	100 %

Cost of Revenue

Cost of revenue consists primarily of fees paid to network providers for bandwidth and backbone, costs incurred for non-settlement free peering and connection to Internet service providers, and fees paid to data center operators for housing of our network equipment in third party network data centers, also known as co-location costs. Cost of revenue also includes leased warehouse space and utilities, depreciation of network equipment used to deliver our content delivery services, payroll and related costs, and share-based compensation for our network operations and professional services personnel. Other costs include professional fees and outside services, travel and travel-related expenses and royalty expenses.

Cost of revenue was composed of the following (in thousands and as a percentage of total revenue):

	Year Ended December 31,			
	2020		2019	
Bandwidth and co-location fees	$ 88,473	38.4 %	$ 67,747	33.8 %
Depreciation - network	21,579	9.4 %	19,193	9.6 %
Payroll and related employee costs	18,467	8.0 %	16,468	8.2 %
Share-based compensation	1,998	0.9 %	1,495	0.7 %
Other costs	16,571	7.2 %	14,187	7.1 %
Total cost of revenue	$ 147,088	63.9 %	$ 119,090	59.4 %

Our cost of revenue increased in both aggregate dollars and as a percentage of total revenue for the year ended December 31, 2020, versus the comparable 2019 period. The changes in cost of revenue were primarily a result of the following:

- Bandwidth expenses increased in aggregate dollars due to higher transit fees and increased peering costs, resulting from increased traffic on our network and our continued expansion in existing, as well as new geographies.
- Our co-location costs increased in aggregate dollars primarily due to our expansion in existing, as well as new geographies.
- Depreciation expense increased due to increased capital expenditures over the last two years.
- Payroll and related employee costs increased as a result of additional network operations and professional services personnel.
- Other costs increased primarily due to an increase in international re-seller costs, which was partially off-set by decreased travel and entertainment and contract royalties.

General and Administrative

General and administrative expense was composed of the following (in thousands and as a percentage of total revenue):

	Year Ended December 31,			
	2020		2019	
Payroll and related employee costs	$ 12,348	5.4 %	$ 10,657	5.3 %
Professional fees and outside services	4,305	1.9 %	4,419	2.2 %
Share-based compensation	7,611	3.3 %	8,098	4.0 %
Other costs	7,020	3.0 %	7,611	3.8 %
Total general and administrative	$ 31,284	13.6 %	$ 30,785	15.3 %

Our general and administrative expense increased in aggregate dollars and decreased as a percentage of total revenue for the year ended December 31, 2020, versus the comparable 2019 period.

The increase in aggregate dollars for the year ended December 31, 2020, versus the comparable 2019 period was primarily driven by increased payroll and related employee costs due to increased general and administrative personnel. These increases were partially off-set by decreased share-based compensation, decreased professional fees and services (consulting). Other costs also decreased, which was primarily lower bad debt expense and lower travel and entertainment expenses.

We expect our general and administrative expenses for 2021 to remain consistent as a percentage of revenue.

Sales and Marketing

Sales and marketing expense was composed of the following (in thousands and as a percentage of total revenue):

	Year Ended December 31,			
	2020		2019	
Payroll and related employee costs	$ 31,355	13.6 %	$ 31,165	15.5 %
Share-based compensation	3,519	1.5 %	2,263	1.1 %
Marketing programs	2,228	1.0 %	2,120	1.1 %
Other costs	5,843	2.5 %	7,530	3.8 %
Total sales and marketing	$ 42,945	18.7 %	$ 43,078	21.5 %

Our sales and marketing expense decreased in aggregate dollars and decreased as a percentage of total revenue for the year ended December 31, 2020, versus the comparable 2019 period.

The decrease in aggregate dollars for the year ended December 31, 2020 was primarily related to lower other costs (travel and entertainment, recruiting fees and facilities). These decreases were offset by increased share-based compensation primarily due to variable compensation that was paid in restricted stock units and increased payroll and related employee costs.

We expect our sales and marketing expenses for 2021 to increase as a percentage of revenue as compared to 2020 due to increased marketing related initiatives and personnel costs to drive revenue growth.

Research and Development

Research and development expense was composed of the following (in thousands and as a percentage of total revenue):

	Year Ended December 31,			
	2020		2019	
Payroll and related employee costs	$ 14,334	6.2 %	$ 15,791	7.9 %
Share-based compensation	2,589	1.1 %	1,922	1.0 %
Other costs	4,757	2.1 %	4,821	2.4 %
Total research and development	$ 21,680	9.4 %	$ 22,534	11.2 %

Our research and development expense decreased in both aggregate dollars and as a percentage of total revenue for the year ended December 31, 2020 versus the comparable 2019 period.

The decrease in aggregate dollars was primarily driven by decreased payroll and related employee costs (lower salaries) and decreased other costs (decreased travel and entertainment, facilities and other employee costs, off-set by increased professional fees). These decreases were partially offset by increased share-based compensation.

We expect our research and development expenses for 2021 to remain consistent with 2020.

Depreciation and Amortization (Operating Expenses)

Depreciation and amortization expense was $1,591, or 0.7% of revenue, for the year ended December 31, 2020, versus $872, or 0.4% of revenue for the comparable 2019 period. Depreciation expense consists of depreciation on equipment and furnishings used by general administrative, sales and marketing, and research and development personnel. Amortization expense consists of amortization of acquired intangible assets.

Interest Expense

Interest expense was $3,939 for the year ended December 31, 2020, versus $76 for the comparable 2019 period. Interest expense includes expense associated with the issuance of our senior convertible notes in July 2020 and fees associated with the Loan and Security Agreement (as amended, the Credit Agreement) with Silicon Valley Bank (SVB) originally entered into in November 2015. See Note 8 of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K for additional information related to our debt.

Interest Income

Interest income was $69 for the year ended December 31, 2020 versus $427 for the comparable 2019 period. Interest income includes interest earned on invested cash balances and marketable securities.

Other Income (Expense)

Other expense was $368 for the year ended December 31, 2020, versus other income of $80 for the comparable 2019 period. For the years ended December 31, 2020 and 2019, respectively, other income/expense consisted primarily of foreign currency transaction gains and losses and the gain/loss on sale of fixed assets.

Income Tax Expense

Income tax expense for the year ended December 31, 2020, was $645 versus $750 for the comparable 2019 period. Income tax expense on net income (loss) before taxes was different than the statutory income tax rate primarily due to our providing for a valuation allowance on deferred tax assets in certain jurisdictions, and recording of state and foreign tax expense for the year. The effective income tax rate is based primarily upon income or loss for the year, the composition of the income or loss in different countries, and adjustments, if any, for the potential tax consequences, benefits or resolutions for tax audits.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was enacted in response to the COVID-19 pandemic. The CARES Act, among other things, permits NOL carryovers and carrybacks to offset 100% of taxable income for taxable years beginning before 2021. In addition, the CARES Act allows NOLs incurred in 2018, 2019, and 2020 to be carried back to each of the five preceding taxable years to generate a refund of previously paid income taxes. We are currently evaluating the impact of the CARES Act, but at present do not expect that the NOL carryback provision of the CARES Act would result in a cash benefit to us.

Liquidity and Capital Resources

As of December 31, 2020, our cash, cash equivalents and marketable securities classified as current totaled $123,723. Included in this amount is approximately $8,014 of cash and cash equivalents held outside the United States. Changes in cash, cash equivalents and marketable securities are dependent upon changes in, among other things, working capital items such as deferred revenues, accounts payable, accounts receivable, accrued provision for litigation and various accrued expenses, as well as purchases of property and equipment and changes in our capital and financial structure due to debt repurchases and issuances, stock option exercises, sales of equity investments and similar events.

Cash from operations could also be affected by various risks and uncertainties, including, but not limited to, the effects of the COVID-19 pandemic and other risks detailed in Part I, Item 1A titled "Risk Factors". However, we believe that our existing cash, cash equivalents and marketable securities, and available borrowing capacity will be sufficient to meet our anticipated cash needs for at least the next 12 months. If the assumptions underlying our business plan regarding future revenue and expenses change or if unexpected opportunities or needs arise, we may seek to raise additional cash by selling equity or debt securities.

The major components of changes in cash flows for the years ended December 31, 2020, and 2019 are discussed in the following paragraphs.

Operating Activities

Net cash provided by operating activities was $21,328 for the year ended December 31, 2020, versus net cash provided by operating activities of $1,746 for 2019, an increase of $19,582. Changes in operating assets and liabilities of $(1,750) during the year ended December 31, 2020, versus $(18,074) in 2019 were primarily due to:

- accounts receivable decreased $2,000 during the year ended December 31, 2020 as a result of timing of collections as compared to a $10,228 increase in the comparable 2019 period;
- prepaid expenses and other current assets increased $5,717 during the year ended December 31, 2020, due to an increase in prepaid bandwidth and backbone costs, VAT receivable, and other prepaid expenses off-set by the amortization of prepaid bandwidth and backbone expenses, compared to a $1,101 increase in the comparable 2019 period;
- accounts payable and other current liabilities decreased $1,069 during the year ended December 31, 2020, versus an increase of $1,292 for the comparable 2019 period due to timing of vendor payments and variable compensation; and

- net payments for provision for litigation decreased by $3,040 as a result our final payments from a settled litigation matter during the three months ended June 30, 2019.

Cash provided by operating activities may not be sufficient to cover new purchases of property and equipment during 2021 and beyond. The timing and amount of future working capital changes and our ability to manage our days sales outstanding will also affect the future amount of cash used in or provided by operating activities.

Investing Activities

Net cash used in investing activities was $102,665 for the year ended December 31, 2020, versus $9,568 for 2019. Net cash used in investing activities was primarily related to the purchase of marketable securities, and capital expenditures primarily for servers and network equipment associated with the build-out and expansion of our global computing platform, partially offset by cash received from the sale and maturities of marketable securities.

We expect to have ongoing capital expenditure requirements as we continue to invest in and expand our content delivery network. During 2020, we made capital expenditures of $25,085, which represented approximately 11% of our total revenue. We currently expect capital expenditures in 2021 to approximate ten percent of revenue, as we continue to increase the capacity of our global network and re-fresh our systems.

Financing Activities

Net cash provided by financing activities was $109,518 for the year ended December 31, 2020, versus net cash provided by financing activities of $799 for 2019. Net cash provided by financing activities in the year ended December 31, 2020, primarily relates to cash received from the issuance of our Notes of $121,600, and the exercise of stock options and our employee stock purchase plan of $10,068, offset by $16,413 premium paid related to our capped call transactions, $859 payment of debt issuance costs, and the payments of employee tax withholdings related to the net settlement of vested restricted stock units of $4,878.

Convertible Senior Notes and Capped Call Transactions

In July 2020, we issued $125,000 aggregate principal amount of 3.50% Convertible Senior Notes due 2025 (the Notes), with an initial conversion rate of 117.2367 shares of our common stock (equal to an initial conversion rate of $8.53 per share), subject to adjustment in some events. The Notes will be senior, unsecured obligations of ours and will be equal in right of payment with our senior, unsecured indebtedness; senior in right of payment to our indebtedness that is expressly subordinated to the Notes; effectively subordinated to our senior, secured indebtedness, including future borrowings, if any, under our $20,000 credit facility with SVB, to the extent of the value of the collateral securing that indebtedness; and structurally subordinated to all indebtedness and other liabilities, including trade payables, and (to the extent we are not a holder thereof) preferred equity, if any, of our subsidiaries. The Notes are governed by an indenture (the Indenture) between us, as the issuer, and U.S. Bank, National Association, as trustee. The Indenture does not contain any financial covenants.

The Notes mature on August 1, 2025, unless earlier converted, redeemed or repurchased in accordance with their term prior to the maturity date. Interest is payable semiannually in arrears on February 1 and August 1 of each year, beginning on February 1, 2021. We may not redeem the Notes prior to August 4, 2023.

On or after August 4, 2023, and on or before the 40th scheduled trading day immediately before the maturity date, we may redeem for cash all or any portion of the Notes if the last reported sale price of our common stock has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive), including the trading day immediately preceding the date on which we provide notice of redemption, during any 30 consecutive trading day period ending on, and including, the trading day immediately preceding the date on which we provide notice of redemption. The redemption price will equal 100% of the principal amount of the Notes being redeemed, plus accrued and unpaid interest to, but excluding, the redemption date. No sinking fund is provided for the Notes.

During the year ended December 31, 2020, the conditions allowing holders of the Notes to convert were not met and therefore the Notes are not yet convertible.

In connection with the offering of the Notes, we also entered into privately negotiated capped call transactions (collectively, the Capped Calls). The Capped Calls have an initial strike price of approximately $8.53 per share, subject to certain adjustments, which corresponds to the initial conversion price of the Notes. The Capped Calls have an initial cap price of $13.38 per share, subject to certain adjustments. The capped call transactions cover, subject to anti-dilution adjustments, approximately 14.7 million shares of our common stock and are expected to offset the potential economic dilution to our common stock up to the initial cap price.

Line of Credit

In July 2020, we entered into a Sixth Amendment (Sixth Amendment) and in December 2020 we entered into the Seventh Amendment (Seventh Amendment) to the Loan and Security Agreement (the Credit Agreement) with Silicon Valley Bank (SVB) originally entered into in November 2015. Under the Sixth and Seventh Amendments, the maximum principal commitment amount remained at $20,000. The Sixth Amendment modified language within the Credit Agreement, which permitted us to issue our Notes. The Seventh Amendment modified the reporting requirements on a quarterly basis, given our current liquidity position. As long as our Adjusted Quick Ratio remains above 1.5 to 1, we no longer are required to submit quarterly borrowing base reports as previously required. Our borrowing capacity is the lesser of the commitment amount or 80% of eligible accounts receivable. All outstanding borrowings owed under the Credit Agreement become due and payable no later than the extended final maturity date of November 2, 2022.

As of December 31, 2020, borrowings under the Credit Agreement bear interest at the current prime rate minus 0.25%. In the event of default, obligations shall bear interest at a rate per annum which is 3% above the then applicable rate. As of December 31, 2020, and December 31, 2019, we had no outstanding borrowings, and we had availability under the Credit Agreement of $20,000.

Financial Covenants and Borrowing Limitations

The Credit Agreement requires, and any future credit facilities will likely require, us to comply with specified financial requirements that may limit the amount we can borrow. A breach of any of these covenants could result in a default. Our ability to satisfy those covenants depends principally upon our ability to meet or exceed certain financial performance results. Any debt agreements we enter into in the future may further limit our ability to enter into certain types of transactions.

We are required to maintain an Adjusted Quick Ratio of at least 1.0 to 1.0. We are also subject to certain customary limitations on our ability to, among other things, incur debt, grant liens, make acquisitions and other investments, make certain restricted payments such as dividends, dispose of assets or undergo a change in control. As of December 31, 2020, we were in compliance with our covenant under the Credit Agreement.

For a more detailed discussion regarding our Credit Agreement and Sixth Amendment, please refer to Note 8 "Debt - Line of Credit" of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

We may be prevented from taking advantage of business opportunities that arise because of the limitations imposed on us by restrictive covenants within the Credit Agreement. These restrictions may also limit our ability to plan for or react to market conditions, meet capital needs or otherwise restrict our activities or business plans and adversely affect our ability to finance our operations, enter into acquisitions, execute our business strategy, effectively compete with companies that are not similarly restricted or engage in other business activities that would be in our interest. In the future, we may also incur debt obligations that might subject us to additional and different restrictive covenants that could affect our financial and operational flexibility. We cannot assure you that we will be granted waivers or amendments to the indenture governing the Credit Agreement, or such other debt obligations if for any reason we are unable to comply with our obligations thereunder or that we will be able to refinance our debt on acceptable terms, or at all, should we seek to do so. Any such limitations on borrowing under the Credit Agreement, including payments related to litigation, could have a material adverse impact on our liquidity and our ability to continue as a going concern could be impaired.

Share repurchases

On March 14, 2017, our board of directors authorized a $25,000 share repurchase program. Any shares repurchased under this program will be canceled and returned to authorized but unissued status. During the years ended December 31, 2020 and 2019, respectively, we did not repurchase any shares under the repurchase programs. During the year ended December 31, 2018, we purchased and canceled 1,000 shares for $3,800, including commissions and fees. As of December 31, 2020, there remained $21,200 under this share repurchase program.

Contractual Obligations, Contingent Liabilities, and Commercial Commitments

In the normal course of business, we make certain long-term commitments for ROU assets, (primarily office facilities) and purchase commitments for bandwidth, and computer rack space. These commitments expire on various dates ranging from 2021 to 2030. We expect that the growth of our business will require us to continue to add to and increase our right-of-use (ROU) assets and long-term commitments in 2021 and beyond. As a result of our growth strategies, we believe that our liquidity and capital resources requirements will grow.

The following table presents our contractual obligations and commercial commitments, as of December 31, 2020 over the next five years and thereafter (in thousands):

	Payments Due by Period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Purchase Commitments					
Bandwidth commitments	$ 44,851	$ 29,596	$ 14,540	$ 715	$ —
Rack space commitments	16,747	10,472	5,958	317	—
Total purchase commitments	61,598	40,068	20,498	1,032	—
Right-of-use assets and other operating leases	16,923	3,220	3,993	2,881	6,829
Total commitments	$ 78,521	$ 43,288	$ 24,491	$ 3,913	$ 6,829

Off Balance Sheet Arrangements

As of December 31, 2020, we are not involved in any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K.

New Accounting Pronouncements

See Item 8 of Part II, “Financial Statements and Supplementary Data - Note 2 - Summary of Significant Accounting Policies - Recent Accounting Standards.”

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Interest Rate Risk

Our exposure to market risk for changes in interest rates relates primarily to our debt and investment portfolio. In our investment portfolio, we do not use derivative financial instruments. Our investments are primarily with our commercial and investment banks and, by policy, we limit the amount of risk by investing primarily in money market funds, United States Treasury obligations, high quality corporate and municipal obligations, and certificates of deposit. Interest expense on our line of credit is at the current prime rate minus 0.25%. In the event of default, obligations shall bear interest at a rate per annum which is 3% above the then applicable rate. An increase in interest rates of 100 basis points would add $10 of interest expense per year, to our financial position or results of operations, for each $1,000 drawn on the line of credit. As of December 31, 2020, there were no outstanding borrowings against the line of credit.

Foreign Currency Risk

We operate in the Americas, EMEA and Asia-Pacific. As a result of our international business activities, our financial results could be affected by factors such as changes in foreign currency exchange rates or economic conditions in foreign markets, and there is no assurance that exchange rate fluctuations will not harm our business in the future. We have foreign currency exchange rate exposure on our results of operations as it relates to revenues and expenses denominated in foreign currencies. A portion of our cost of revenues and operating expenses are denominated in foreign currencies as are our revenues associated with certain international customers. To the extent that the U.S. dollar weakens, similar foreign currency denominated transactions in the future will result in higher revenues and higher cost of revenues and operating expenses, with expenses having the greater impact on our financial results. Similarly, our revenues and expenses will decrease if the U.S. dollar strengthens against these foreign currencies. Although we will continue to monitor our exposure to currency fluctuations, and, where appropriate, may use financial hedging techniques in the future to minimize the effect of these fluctuations, we are not currently engaged in any financial hedging transactions. Assuming a 10% weakening of the U.S. dollar relative to our foreign currency denominated revenues and expenses, our net loss for the year ended December 31, 2020, would have been higher by approximately $3,903. There are inherent limitations in the sensitivity analysis presented, primarily due to the assumption that foreign exchange rate movements across multiple jurisdictions are similar and would be linear and instantaneous. As a result, the analysis is unable to reflect the potential effects of more complex markets or other changes that could arise, which may positively or negatively affect our results of operations.

Inflation Risk

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

Credit Risk

During any given fiscal period, a relatively small number of customers typically account for a significant percentage of our revenue. For example, in 2020, 2019, and 2018, sales to our top 20 customers accounted for approximately 75%, 72% and 71%, respectively, of our total revenue. During 2020, we had two customers, Amazon and Sony who represented approximately 36% and 11%, respectively, of our total revenue. During 2019 and 2018, Amazon represented approximately 30%, and 30%, respectively, of our total revenue. In 2021, we anticipate that our top 20 customer concentration levels will remain consistent with 2020. In the past, the customers that comprised our top 20 customers have continually changed, and our large customers may not continue to be as significant going forward as they have been in the past.

Item 8. Financial Statements and Supplementary Data

LIMELIGHT NETWORKS, INC.
Index to Consolidated Financial Statements and Schedule

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Limelight Networks, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Limelight Networks, Inc. (the Company) as of December 31, 2020 and 2019, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2020, and the related notes and the financial statement schedule listed in the Index at Item 15(a) (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the consolidated financial position of the Company at December 31, 2020 and 2019, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

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, 2020, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 12, 2021 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's 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 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 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 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 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 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 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.

Accounting for Issuance of Convertible Debt

Description of the Matter	In July 2020, the Company issued $125.0 million of principal in convertible debt as described in Note 8 to the consolidated financial statements. The accounting for the transaction was complex, as it required management to assess as to whether features, other than the conversion feature, required bifurcation and separate valuation. Additionally, the transaction required management to perform a valuation of the conversion feature within the debt instrument, involving estimation of the fair value of the debt instrument absent of any conversion feature, as well as the assessment of the appropriate classification of the conversion feature in the consolidated financial statements. Auditing management's evaluation of the transaction was challenging due to the complexity in assessing the features of the convertible notes for separate accounting, as well as evaluating management's valuation of the debt instrument absent of the conversion feature. The fair value was sensitive to changes in certain key inputs, including a synthetic credit rating and yield and changes to those inputs could have had a material effect on the initial recognition of the liability and equity components of the convertible debt and subsequent accretion of the liability component for the year ended December 31, 2020.

How We Addressed the Matter in Our Audit	We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's initial convertible debt accounting process, including the valuation and recognition of the liability and equity components of the convertible debt. To test the initial accounting for the convertible debt, our audit procedures included, among others, inspection of the debt agreement and testing management's application of the relevant accounting guidance, which included the classification of the conversion feature. We also involved our valuation specialists to assist in the evaluation of the Company's determination of the fair value of the debt absent any conversion feature, which included testing the appropriateness of the methodology and underlying assumptions used, and evaluating the sensitivity of management's key estimates. We also performed sensitivity analyses to evaluate the reasonableness of management's calculations. We tested the completeness and accuracy of the underlying data supporting the significant assumptions and estimates.

Accounting for Revenue Recognition

Description of the Matter	As described in Note 2 to the consolidated financial statements, the Company generates revenues from the sales of its suite of content and video delivery services. The Company's revenue recognition process for its content and delivery services involved several applications and data sources needed for the initiation, processing, and recording of transactions from the Company's various revenue sources, as well as the calculation of revenue in accordance with the Company's accounting policy. Auditing the Company's accounting for revenue from contracts with customers was challenging and complex primarily due to the multiple applications and data sources associated with the revenue recognition process.
How We Addressed the Matter in Our Audit	We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's revenue recognition process, including its IT general controls and application controls over the IT applications supporting the revenue recognition process. To test the Company's accounting for revenue from contracts with customers, we performed substantive audit procedures that included, among others, testing on a sample basis the completeness and accuracy of the underlying data within the Company's revenue systems, performing data analytics to test recorded revenue, tracing a sample of sales transactions to supporting documentation, and testing a sample of cash to billings reconciliations.

/s/ Ernst & Young LLP
We have served as the Company's auditor since 2006.
Phoenix, Arizona
February 12, 2021

Limelight Networks, Inc.

Consolidated Balance Sheets
(In thousands, except per share data)

	December 31, 2020	December 31, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 46,795	$ 18,335
Marketable securities	76,928	—
Accounts receivable, net	31,675	34,476
Income taxes receivable	68	82
Prepaid expenses and other current assets	15,588	9,920
Total current assets	171,054	62,813
Property and equipment, net	46,418	46,136
Operating lease right of use assets	10,150	12,842
Marketable securities, less current portion	40	40
Deferred income taxes	1,530	1,319
Goodwill	77,753	77,102
Other assets	7,233	9,117
Total assets	$ 314,178	$ 209,369
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 4,587	$ 12,020
Deferred revenue	933	976
Operating lease liability obligations	2,465	2,056
Income taxes payable	253	178
Other current liabilities	17,560	13,398
Total current liabilities	25,798	28,628
Convertible senior notes, net	100,945	—
Operating lease liability obligations, less current portion	11,265	13,488
Deferred income taxes	279	239
Deferred revenue, less current portion	220	161
Other long-term liabilities	479	316
Total liabilities	138,986	42,832
Commitments and contingencies		
Stockholders' equity:		
Convertible preferred stock, $0.001 par value; 7,500 shares authorized; 0 shares issued and outstanding	—	—
Common stock, $0.001 par value; 300,000 shares authorized; 123,653 and 118,368 shares issued and outstanding at December 31, 2020 and 2019, respectively	124	118
Additional paid-in capital	556,512	530,285
Accumulated other comprehensive loss	(7,511)	(9,210)
Accumulated deficit	(373,933)	(354,656)
Total stockholders' equity	175,192	166,537
Total liabilities and stockholders' equity	$ 314,178	$ 209,369

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

Limelight Networks, Inc.

Consolidated Statements of Operations
(In thousands, except per share data)

	Years Ended December 31,		
	2020	2019	2018
Revenue	$ 230,194	$ 200,634	$ 195,670
Cost of revenue:			
Cost of services (1)	125,509	99,897	85,920
Depreciation — network	21,579	19,193	16,277
Total cost of revenue	147,088	119,090	102,197
Gross profit	83,106	81,544	93,473
Operating expenses:			
General and administrative	31,284	30,785	32,372
Sales and marketing	42,945	43,078	39,553
Research and development	21,680	22,534	24,075
Depreciation and amortization	1,591	872	2,313
Total operating expenses	97,500	97,269	98,313
Operating loss	(14,394)	(15,725)	(4,840)
Other income (expense):			
Interest expense	(3,939)	(76)	(86)
Interest income	69	427	670
Settlement and patent license income	—	—	14,900
Other, net	(368)	80	(264)
Total other income (expense)	(4,238)	431	15,220
(Loss) income before income taxes	(18,632)	(15,294)	10,380
Income tax expense	645	750	538
Net (loss) income	$ (19,277)	$ (16,044)	$ 9,842
Net (loss) income per share:			
Basic	$ (0.16)	$ (0.14)	$ 0.09
Diluted	$ (0.16)	$ (0.14)	$ 0.08
Weighted average shares used in per share calculation:			
Basic	121,196	115,890	112,114
Diluted	121,196	115,890	120,010

(1) Cost of services excludes amortization related to intangibles, including existing technologies, customer relationships, and trade names and trademarks, which are included in depreciation and amortization

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

LIMELIGHT NETWORKS, INC.

Consolidated Statements of Comprehensive Income (Loss)
(In thousands)

	Years Ended December 31,		
	2020	2019	2018
Net (loss) income	$ (19,277)	$ (16,044)	$ 9,842
Other comprehensive gain (loss), net of tax:			
Unrealized (loss) gain on investments	(51)	41	28
Foreign exchange translation gain (loss)	1,750	782	(1,733)
Other comprehensive gain (loss), net of tax	1,699	823	(1,705)
Comprehensive (loss) income	$ (17,578)	$ (15,221)	$ 8,137

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

Limelight Networks, Inc.

Consolidated Statements of Stockholders' Equity
(In thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total
	Shares	Amount				
Balance at December 31, 2017	110,824	$ 111	$502,312	$ (8,328)	$ (349,950)	$144,145
Cumulative effect of accounting change	—	—	—	—	1,496	1,496
Net income	—	—	—	—	9,842	9,842
Change in unrealized loss on available-for-sale investments, net of taxes	—	—	—	28	—	28
Foreign currency translation adjustment, net of taxes	—	—	—	(1,733)	—	(1,733)
Exercise of common stock options	1,479	1	4,021	—	—	4,022
Vesting of restricted stock units	3,501	3	(3)	—	—	—
Restricted stock units surrendered in lieu of withholding taxes	(1,154)	(1)	(4,792)	—	—	(4,793)
Issuance of common stock under employee stock purchase plan	596	1	2,150	—	—	2,151
Purchases of common stock	(1,000)	(1)	(3,799)	—	—	(3,800)
Share-based compensation	—	—	13,793	—	—	13,793
Balance at December 31, 2018	114,246	$ 114	513,682	(10,033)	(338,612)	165,151
Net loss	—	—	—	—	(16,044)	(16,044)
Change in unrealized loss on available-for-sale investments, net of taxes	—	—	—	41	—	41
Foreign currency translation adjustment, net of taxes	—	—	—	782	—	782
Exercise of common stock options	1,054	1	2,467	—	—	2,468
Vesting of restricted stock units	3,416	3	(3)	—	—	—
Restricted stock units surrendered in lieu of withholding taxes	(1,142)	(1)	(3,606)	—	—	(3,607)
Issuance of common stock under employee stock purchase plan	794	1	1,937	—	—	1,938
Share-based compensation	—	—	15,808	—	—	15,808
Balance at December 31, 2019	118,368	$ 118	530,285	(9,210)	(354,656)	166,537
Net loss	—	—	—	—	(19,277)	(19,277)
Change in unrealized loss on available-for-sale investments, net of taxes	—	—	—	(51)	—	(51)
Foreign currency translation adjustment, net of taxes	—	—	—	1,750	—	1,750
Exercise of common stock options	2,870	3	8,121	—	—	8,124
Vesting of restricted stock units	2,817	3	4	—	—	7
Restricted stock units surrendered in lieu of withholding taxes	(957)	(1)	(4,877)	—	—	(4,878)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total
	Shares	Amount				
Issuance of common stock under employee stock purchase plan	555	1	1,936	—	—	1,937
Share-based compensation	—	—	15,723	—	—	15,723
Equity component of convertible senior notes, net	—	—	21,733	—	—	21,733
Purchase of capped calls related to issuance of convertible senior notes	—	—	(16,413)	—	—	(16,413)
Balance at December 31, 2020	123,653	$ 124	$556,512	$ (7,511)	$ (373,933)	$175,192

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

Limelight Networks, Inc.

Consolidated Statements of Cash Flows
(In thousands)

	Years Ended December 31,		
	2020	2019	2018
Operating activities			
Net (loss) income	$ (19,277)	$ (16,044)	$ 9,842
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	23,170	20,065	18,590
Share-based compensation	15,717	13,778	15,830
Settlement and patent license income	—	—	(14,900)
Foreign currency remeasurement loss (gain)	214	(25)	(162)
Deferred income taxes	(94)	270	17
Loss (gain) on sale of property and equipment	6	(56)	(137)
Accounts receivable charges	801	1,793	902
Amortization of premium on marketable securities	606	30	115
Realized loss on marketable securities	(3)	9	—
Noncash interest expense	1,938	—	—
Changes in operating assets and liabilities:			
Accounts receivable	2,000	(10,228)	5,438
Prepaid expenses and other current assets	(5,717)	(1,101)	(2,466)
Income taxes receivable	19	40	(31)
Other assets	2,762	(4,188)	(558)
Accounts payable and other current liabilities	(1,069)	1,292	(4,333)
Deferred revenue	17	(789)	1,089
Income taxes payable	71	61	(333)
Payments related to litigation, net	—	(3,040)	(9,060)
Other long term liabilities	167	(121)	(121)
Net cash provided by operating activities	21,328	1,746	19,722
Investing activities			
Purchases of marketable securities	(88,754)	(10,279)	(20,631)
Sale and maturities of marketable securities	11,172	35,364	23,865
Purchases of property and equipment	(25,085)	(34,704)	(16,113)
Proceeds from sale of property and equipment	2	51	135
Net cash used in investing activities	(102,665)	(9,568)	(12,744)
Financing activities			
Proceeds from issuance of debt, net	121,600	—	—
Purchase of capped calls	(16,413)	—	—
Payment of debt issuance costs	(859)	—	—
Payment of employee tax withholdings related to restricted stock vesting	(4,878)	(3,607)	(4,793)
Cash paid for the purchase of common stock	—	—	(3,800)
Proceeds from employee stock plans	10,068	4,406	6,173
Net cash provided by (used in) financing activities	109,518	799	(2,420)
Effect of exchange rate changes on cash and cash equivalents	279	(25)	(87)
Net increase (decrease) in cash and cash equivalents	28,460	(7,048)	4,471
Cash and cash equivalents, beginning of year	18,335	25,383	20,912
Cash and cash equivalents, end of year	$ 46,795	$ 18,335	$ 25,383
Supplement disclosure of cash flow information			
Cash paid during the year for interest	$ 108	$ 76	$ 87
Cash paid during the year for income taxes, net of refunds	$ 626	$ 396	$ 892

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

Notes to Consolidated Financial Statements
December 31, 2020
(In thousands, except per share amounts and where specifically noted)

1. Nature of Business

Limelight Networks, Inc., a provider of digital content delivery, online video delivery, cloud security, edge computing and cloud storage services, empowers customers to provide exceptional digital experiences. Limelight's edge services platform includes a globally distributed, high performance private network, intelligent software, and expert support services that enable current and future workflows.

We were incorporated in Delaware in 2003, and have operated in the Phoenix metropolitan area since 2001 and elsewhere throughout the United States since 2003. We began international operations in 2004.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP). The consolidated financial statements include accounts of Limelight and our wholly owned subsidiaries. All significant intercompany balances and transactions have been eliminated. In addition, certain other reclassifications have been made to prior period amounts to conform to the current period presentation.

Use of Estimates

The preparation of the consolidated financial statements and related disclosures in conformity with U.S. GAAP requires management to make judgments, assumptions, and estimates that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results and outcomes may differ from those estimates. The results of operations presented in this Annual Report on Form 10-K are not necessarily indicative of the results that may be expected for the year ending December 31, 2021, or for any future periods.

Foreign Currency Translation

The functional currency of our international subsidiaries is the local currency. We translate assets and liabilities of foreign subsidiaries, whose functional currency is their local currency, at exchange rates in effect at the balance sheet date. We translate revenue and expenses at the monthly average exchange rates. We include accumulated net translation adjustments in stockholders' equity as a component of accumulated other comprehensive income (loss).

Due to changes in exchange rates between reporting periods and changes in certain account balances, the foreign currency translation adjustment will change from period to period. During the years ended December 31, 2020, 2019, and 2018, we recorded foreign currency translation gains (losses) of $1,750, $782, and $(1,733), respectively, in our statements of comprehensive income (loss).

Our entities occasionally transact in currencies other than their functional currencies. Assets denominated in foreign currencies other than that of the functional currency of the entity are remeasured at period-end exchange rates. Foreign currency-based revenue and expense transactions are measured at transaction date exchange rates. During the years ended December 31, 2020, 2019, and 2018, we recorded a foreign currency re-measurement gain (loss) of approximately $(368), $24, and $(405), respectively, in other income (expense) in the consolidated statements of operations.

Recent Accounting Standards

Adopted Accounting Standards

In June 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-13, which requires measurement and recognition of expected credit losses for financial assets held. The standard is to be applied through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. We adopted this guidance effective January 1, 2020. The adoption of this guidance did not have a material impact on our consolidated financial statements and related disclosures and there was no cumulative-effect adjustment required.

In January 2017, the FASB issued ASU 2017-04, which simplifies the accounting for goodwill impairment. The updated guidance eliminates Step 2 of the impairment test, which requires entities to calculate the implied fair value of goodwill to measure a goodwill impairment charge. Instead, entities will record an impairment charge based on the excess of a reporting unit's carrying amount over its fair value, determined in Step 1. We adopted this guidance effective January 1, 2020, using a prospective approach. The adoption of this guidance did not have a material impact on our consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-13, which removes, modifies and adds to the disclosure requirements on fair value measurements in Topic 820. The amendments on changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and the narrative description of measurement uncertainty should be applied prospectively for only the most recent interim or annual period presented in the initial fiscal year of adoption. All other amendments should be applied retrospectively to all periods presented upon their effective date. An entity is permitted to early adopt any removed or modified disclosures upon issuance of this updated guidance and delay adoption of the additional disclosures until their effective date. We adopted this guidance effective January 1, 2020. The adoption of this guidance did not have a material impact on our consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-15, to help entities evaluate the accounting for fees paid by a customer in a cloud computing arrangement (hosting arrangement) by providing guidance for determining when the arrangement includes a software license. The amendments align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal use software license). The accounting for the service element of a hosting arrangement that is a service contract is not affected by the amendments. We adopted this guidance effective January 1, 2020. The adoption of this guidance did not have a material impact on our consolidated financial statements and related disclosures.

Recently Issued Accounting Standards

In December 2019, the FASB issued ASU 2019-12 to simplifying the accounting for income taxes. ASU 2019-12 is intended to simplify various aspects related to accounting for income taxes, eliminates certain exceptions to the general principles in the Accounting Standards Codification (ASC) Topic 740 related to intra-period tax allocation, simplifies when companies recognize deferred taxes in an interim period, and clarifies certain aspects of the current guidance to promote consistent application. This guidance is effective for public business entities for fiscal years beginning after December 15, 2020, and for interim periods within those fiscal years, with early adoption permitted. ASU 2019-12 requires a retrospective, modified retrospective or prospective transition approach for individual aspects of the ASU. This guidance is applicable to us for our fiscal year beginning January 1, 2021. We are currently evaluating the potential impact of this guidance on our consolidated financial statements.

In August 2020, the FASB issued ASU 2020-06, which simplifies the accounting for convertible instruments. ASU 2020-06 eliminates certain models that require separate accounting for embedded conversion features, in certain cases. Additionally, among other changes, the guidance eliminates certain of the conditions for equity classification for contracts in an entity's own equity. ASU 2020-06 also requires entities to use the if-converted method for all convertible instruments in the diluted earnings per share calculation and include the effect of share settlement for instruments that may be settled in cash or shares, except for certain liability-classified share-based payment awards. ASU 2020-06 is effective for our fiscal year beginning after December 15, 2021, including interim periods within this fiscal year. Early adoption is permitted, but no earlier than our fiscal year beginning after December 15, 2020, including interim periods within those fiscal years. This guidance can be applied using either a modified or full retrospective approach. We expect to early adopt this guidance on January 1, 2021 on a modified retrospective basis. We expect our total remaining interest expense over the contractual terms of our convertible debt to be approximately $20,000 less than under the existing accounting standards. Adoption is expected to result in an approximate $21,700 decrease in additional paid in capital from the derecognition of the bifurcated equity component, $20,000 increase in debt from the derecognition of the discount associated with the bifurcated equity component and $1,700 decrease to the opening balance of accumulated deficit, representing the cumulative interest expense recognized related to the amortization of the bifurcated conversion option. We expect to write-off the related deferred tax liabilities with a corresponding adjustment to the valuation allowance, resulting in no net tax impact to the cumulative adjustment to retained earnings.

Significant Accounting Policies

Revenue Recognition

Revenues are recognized when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services.

Our customers generally execute contracts with terms of one year or longer, which are referred to as recurring revenue contracts or long-term contracts. These contracts generally allow the customer access to our network and are either entirely usage based or commit the customer to a minimum monthly level of usage with additional charges applicable for actual usage above the monthly minimum commitment. We define usage as customer data sent or received using our content delivery service, or content that is hosted or cached by us at the request or direction of our customers. For contracts that contain minimum monthly commitments, we recognize revenue equal to the greater of the minimum monthly committed amount or actual usage, if actual usage exceeds the monthly committed amount, using the right to invoice practical expedient allowable under Topic 606.

For contracts that contain minimum commitments over a term greater than one month, we estimate an amount of variable consideration by using the expected value method. We include estimates of variable consideration in revenue only when we have a high degree of confidence that revenue will not be reversed in a subsequent reporting period. We believe that the expected value method is the most appropriate estimate of the amount of variable consideration. These customers have entered into contracts with contract terms generally from one to four years. As of December 31, 2020, we have approximately $3,215 of remaining unsatisfied performance obligations. We recognized revenue of approximately $7,896, $9,600 and $8,300, respectively, during the years ended December 31, 2020, 2019, and 2018, related to these types of contracts with our customers. We expect to recognize approximately 91% of the remaining unsatisfied performance obligations in 2021 and approximately 9% in 2022.

We may charge the customer an activation fee when services are first activated. We do not charge activation fees for contract renewals. Activation fees are not distinct within the context of the overall contractual commitment with the customer to perform our content delivery service and are therefore recorded initially as deferred revenue and recognized as revenue ratably over the estimated life of the customer arrangement.

We also derive revenue from services and events sold as discrete, non-recurring events or based solely on usage. For these services, we recognize revenue when control of promised goods or services is transferred to customers at an amount that reflects the consideration to which we expect to be entitled to in exchange for those goods or services.

At the inception of a customer contract for service, we make an assessment as to that customer’s ability to pay for the services provided. If we subsequently determine that collection from the customer is not probable, we record an allowance for credit losses or deferred revenue for that customer’s unpaid invoices and cease recognizing revenue for continued services provided until it is probable that revenue will not be reversed in a subsequent reporting period. Our standard payment terms vary by the type and location of our customer but do not contain a financing component.

Arrangements with Multiple Performance Obligations

Certain of our revenue arrangements include multiple promises to our customers. Revenue arrangements with multiple promises are accounted for as separate performance obligations if each promise is distinct. Such arrangements may include a combination of some or all of the following: content delivery services, video content management services, performance services for website and web application acceleration and security, professional services, cloud storage, edge computing services, and sale of equipment.

Judgment may be required in determining whether products or services are considered distinct performance obligations that should be accounted for separately or as one combined performance obligation. Revenue is recognized over the period in which the performance obligations are satisfied, which is generally over the contract term. We have determined that generally most of our products and services do not constitute an individual service offering to our customers, as our promise to the customer is to provide a complete edge services platform, and therefore have concluded that it represents a single performance obligation. We have determined that professional services and hardware sales represent separate performance obligations from that of our edge services platform.

Consideration is allocated to the performance obligations using the relative standalone selling price method. Generally, arrangements with multiple performance obligations are provided over the same contract period, and therefore, revenue is recognized over the same period.

We determine standalone selling price by evaluating the overall pricing objectives and market conditions. Consideration included our discounting practices, the size and volume of our transactions, the area where services are sold, price lists, historical sales and contract prices.

Deferred Revenue

Deferred revenue represents amounts billed to customers for which revenue has not been recognized. Deferred revenue primarily consists of the unearned portion of monthly billed service fees, implementation fees, and prepayments made by customers for services to be rendered in future periods.

Convertible Senior Notes

In July 2020, we issued $125,000 aggregate principal amount of 3.50% convertible senior notes. We separate our convertible senior notes (the Notes) into liability and equity components. The carrying amount of the liability component is 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 is determined by deducting the fair value of the liability component from the principal amount of the Notes. The excess of the principal amount of the Notes over the carrying amount of the liability component (debt discount) is amortized to interest expense at an effective interest rate over the contractual term of the Notes. The equity component is recorded in additional paid-in capital and is not remeasured as long as it continues to meet the conditions for equity classification. We allocate the issuance costs to the liability and equity components of the Notes based on the proportion of the proceeds allocated to the debt and equity components. Issuance costs attributable to the liability component are amortized to interest expense using the effective interest method over the contractual terms of the Notes. Issuance costs attributable to the equity component are netted with the equity component in stockholders' equity.

Cash and Cash Equivalents

We hold our cash and cash equivalents in checking, money market, and highly-liquid investments. We consider all highly liquid investments with maturities of three months or less when purchased to be cash equivalents. Cash and cash equivalents are deposited in or managed by major financial institutions and at times exceed Federal Deposit Insurance Corporation insurance limits.

Investments in Marketable Securities

We hold investments in marketable securities, consisting of municipal bonds, investment grade corporate debt securities, and certificates of deposit. Management determines the appropriate classification of its marketable securities at the time of purchase and reevaluates such classification as of each balance sheet date. We have classified our investments, which are all debt securities, in marketable securities as available-for-sale and as current, as our marketable securities are available to fund current operations. Our available-for-sale investments are carried at estimated fair value with any unrealized gains and losses, net of taxes, included in accumulated other comprehensive income (loss) in stockholders' equity. Available-for-sale debt securities with an amortized cost basis in excess of estimated fair value are assessed to determine what amount of that difference, if any, is caused by expected credit losses. Expected credit losses on available-for-sale debt securities are recognized in other income (expense), net on our condensed consolidated statements of operations, and any remaining unrealized losses, net of taxes, are included in accumulated other comprehensive income (loss) in stockholders' equity. Credit losses on our marketable securities portfolio for the year ended December 31, 2020 were not material. We determine realized gains or losses on sale of marketable securities on a specific identification method and record such gains or losses as interest and other income (expense), net.

Accounts Receivable

Trade accounts receivable are recorded at the invoiced amounts and do not bear interest. We record reserves against our accounts receivable balance for service credits and for doubtful accounts. Estimates are used in determining both of these reserves. The allowance for credit losses are included as a component of general and administrative expenses.

All trade receivables are reported on the Consolidated Balance Sheets at their amortized cost adjusted for any write-offs and net of allowances for credit losses. We maintain an allowance for credit losses, which represents an estimate of expected losses of our receivables considering current market conditions and estimates for supportable forecasts when appropriate. The estimate is a result of our ongoing assessments and evaluations of collectability, historical loss experience, and future expectations in estimating credit losses for our trade receivables. For trade receivables, we apply a reserve percentage to the specific age of the receivable to estimate the allowance for doubtful accounts. The reserve percentages are determined based on our historical write-off experience. Determination of the proper amount of allowance requires management to exercise judgment about the timing, frequency and severity of potential credit losses that could materially affect the provision for credit losses and, as a result, net earnings. The allowance takes into consideration numerous quantitative and qualitative factors that include receivable type, historical loss experience, delinquency trends, collection experience, current economic conditions, estimates for supportable forecasts, when appropriate, and credit risk characteristics.

Our reserve for service credits relates to credits that are expected to be issued to customers during the ordinary course of business. These credits typically relate to customer disputes and billing adjustments and are estimated at the time the revenue is recognized and recorded as a reduction of revenues. Estimates for service credits are based on an analysis of credits issued in previous periods.

We evaluate the credit risk of the customer when extending credit based on a combination of various financial and qualitative factors that may affect our customers' ability to pay. These factors may include the customer's financial condition, past payment experience, and credit bureau information.

Property and Equipment

Property and equipment are carried at cost less accumulated depreciation or amortization. Depreciation and amortization are computed using the straight-line method over the assets' estimated useful lives of the applicable asset.

Network equipment	3 years
Computer equipment and software	3 years
Furniture and fixtures	3-5 years
Other equipment	3-5 years

Leasehold improvements are amortized over the shorter of the asset's estimated useful life or the respective lease term. Repairs and maintenance are charged to expense as incurred.

Goodwill and Other Intangible Assets

Goodwill represents costs in excess of fair values assigned to the underlying net assets of the acquired company. Goodwill is not amortized but instead is tested for impairment annually or more frequently if events or changes in circumstances indicate goodwill might be impaired. We have concluded that we have one reporting unit and assigned the entire balance of goodwill to this reporting unit. The estimated fair value of the reporting unit is determined using a market approach. Our market capitalization is adjusted for a control premium based on the estimated average and median control premiums of transactions involving companies comparable to us. As of our annual impairment testing date of October 31, 2020, management determined that goodwill was not impaired.

Contingencies

We record contingent liabilities resulting from asserted and unasserted claims when it is probable that a loss has been incurred and the amount of the loss is reasonably estimable. We disclose contingent liabilities when there is a reasonable possibility that the ultimate loss will exceed the recorded liability. Additionally, estimating the loss, or range of loss, associated with a contingency requires analysis of multiple factors, and changes in law or other developments may ultimately cause our judgments to change. Therefore, actual losses in any future period are inherently uncertain and may be materially different from our estimate.

Long-Lived Assets

We review our long-lived assets for impairment annually, or whenever events or circumstances indicate that the carrying amount of an asset may not be fully recoverable. We recognize an impairment loss if the sum of the expected long-term undiscounted cash flows that the long-lived asset group is expected to generate is less than the carrying amount of the long-lived asset being evaluated. We treat any write-downs as permanent reductions in the carrying amounts of the assets. We concluded that the carrying amounts of our long-lived assets at December 31, 2020, and 2019, are fully realizable and have not recorded any impairment losses.

Leases

We determine if an arrangement is a lease at inception. Operating leases are included in ROU assets, and lease liability obligations are included in our consolidated balance sheets. ROU assets represent our right to use an underlying asset for the lease term and lease liability obligations represent our obligation to make lease payments arising from the lease. ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. We have lease agreements with lease and non-lease components and account for such components as a single lease component. As most of our leases do not provide an implicit rate, we estimated our incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. We use the implicit rate when readily determinable. The ROU asset also includes any lease payments made and excludes lease incentives and lease direct costs. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Lease expense is recognized on a straight-line basis over the lease term. Upon review of our co-location and bandwidth arrangements, we have determined that such arrangements did not meet the leasing criteria, and therefore, were not included in our ROU asset and lease liability obligations on our balance sheet. We have determined that our real estate leases with terms in excess of one year and which do not include an option to purchase the underlying asset, do meet the leasing criteria. Please refer to Note 16 "Operating Leases - Right of Use Assets and Purchase Commitments" for additional information.

Cost of Revenue

Cost of revenues consists primarily of fees paid to network providers for bandwidth and backbone, costs incurred for non-settlement free peering and connection to Internet service provider networks and fees paid to data center operators for housing network equipment in third party network data centers, also known as co-location costs. Cost of revenues also includes leased warehouse space and utilities, depreciation of network equipment used to deliver our content delivery services, payroll and related costs, and share-based compensation for our network operations and professional services personnel.

We enter into contracts for bandwidth with third party network providers with terms typically ranging from several months to three years. These contracts generally commit us to pay minimum monthly fees plus additional fees for bandwidth usage above contracted minimums. A portion of the global computing platform traffic delivery is completed through direct connection to ISP networks, called peering.

Research and Development

Research and development costs consist primarily of payroll and related personnel costs for the design, development, deployment, testing, operation, and enhancement of our services, and network. Costs incurred in the development of our services are expensed as incurred.

Advertising Costs

Costs associated with advertising are expensed as incurred. Advertising expenses, which are comprised of Internet, trade show, and publications advertising, were approximately $2,228, $2,120, and $2,169 for the years ended December 31, 2020, 2019, and 2018, respectively.

Income Taxes

We account for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

We record net deferred tax assets to the extent we believe these assets will more likely than not be realized. In making such determination, we consider all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies, and recent financial performance on a jurisdiction by jurisdiction basis. In the event we were to determine that we would be able to realize our deferred income tax assets in the future in excess of their net recorded amount, we would make an adjustment to the valuation allowance, which would reduce the provision for income taxes.

We recognize uncertain income tax positions in our financial statements when it is more-likely-than-not the position will be sustained upon examination.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was enacted in response to the COVID-19 pandemic. The CARES Act, among other things, permits NOL carryovers and carrybacks to offset 100% of taxable income for taxable years beginning before 2021. In addition, the CARES Act allows NOLs incurred in 2018, 2019, and 2020 to be carried back to each of the five preceding taxable years to generate a refund of previously paid income taxes. We have evaluated the impact of the CARES Act, and do not expect that the NOL carryback provision of the CARES Act to result in a cash benefit to us.

Fair Value of Financial Instruments

The carrying amounts of cash and cash equivalents approximate fair value due to the nature and short maturity of those instruments. The respective fair values of marketable securities are determined based on quoted market prices or other readily available market information, which approximate fair values. The carrying amounts of accounts receivable, accounts payable, and accrued liabilities reported in the consolidated balance sheets approximate their respective fair values due to the immediate or short-term maturity of these financial instruments.

Share-Based Compensation

We account for our share-based compensation awards using the fair-value method. The grant date fair value was determined using the Black-Scholes-Merton pricing model. The Black-Scholes-Merton valuation calculation requires us to make key assumptions such as future stock price volatility, expected terms, risk-free rates, and dividend yield. Our expected volatility is derived from our volatility rate as a publicly traded company. The expected term is based on our historical experience. The risk-free interest factor is based on the United States Treasury yield curve in effect at the time of the grant for zero coupon United States Treasury notes with maturities of approximately equal to each grant's expected term. We have never paid cash dividends and do not currently intend to pay cash dividends, and therefore, we have assumed a 0% dividend yield.

We apply the straight-line attribution method to recognize compensation costs associated with awards that are not subject to graded vesting.

3. Investments in Marketable Securities

The following is a summary of marketable securities (designated as available-for-sale) at December 31, 2020.

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Certificate of deposit	551	—	—	551
Corporate notes and bonds	45,426	—	41	45,385
Municipal securities	31,039	1	8	31,032
Total marketable securities	$ 77,016	$ 1	$ 49	$ 76,968

The amortized cost and estimated fair value of the marketable securities at December 31, 2020, by maturity, are shown below:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Available-for-sale securities				
Due in one year or less	$ 76,976	$ 1	$ 49	$ 76,928
Due after one year and through five years	40	—	—	40
	$ 77,016	$ 1	$ 49	$ 76,968

The following is a summary of marketable securities (designated as available-for-sale) at December 31, 2019:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Certificate of deposit	$ 40	$ —	$ —	$ 40

The amortized cost and estimated fair value of the marketable securities at December 31, 2019, by maturity, are shown below:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Available-for-sale securities				
Due after one year and through five years	$ 40	$ —	$ —	$ 40

4. Accounts Receivable

Accounts receivable include:

	December 31, 2020	December 31, 2019
Accounts receivable	$ 32,857	$ 35,619
Less: credit allowance	(170)	(170)
Less: allowance for doubtful accounts	(1,012)	(973)
Total accounts receivable, net	$ 31,675	$ 34,476

The following is a roll-forward of the allowance for doubtful accounts related to trade accounts receivable for the years ended December 31, 2020 and 2019.

	December 31, 2020	December 31, 2019
Beginning of period	$ 973	$ 749
Provision for credit losses	801	1,793
Write-offs	(762)	(1,569)
End of period	$ 1,012	$ 973

5. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets include:

	December 31, 2020	December 31, 2019
Prepaid bandwidth and backbone	$ 3,519	$ 1,717
VAT receivable	4,392	3,068
Prepaid expenses and insurance	2,906	1,685
Vendor deposits and other	4,771	3,450
Total prepaid expenses and other current assets	$ 15,588	$ 9,920

6. Goodwill

The changes in the carrying amount of goodwill for the years ended December 31, 2020, and 2019, were as follows:

Balance, December 31, 2018	$ 76,407
Foreign currency translation adjustment	695
Balance, December 31, 2019	77,102
Foreign currency translation adjustment	651
Balance, December 31, 2020	$ 77,753

7. Property and Equipment

Property and equipment include:

	December 31, 2020	December 31, 2019
Network equipment	$ 136,788	$ 126,975
Computer equipment and software	7,358	7,603
Furniture and fixtures	1,703	1,906
Leasehold improvements	7,470	7,888
Other equipment	21	54
	153,340	144,426
Less: accumulated depreciation	(106,922)	(98,290)
Total property and equipment, net	$ 46,418	$ 46,136

Cost of revenue depreciation expense related to property and equipment was approximately $21,579, $19,193, and $16,277, respectively, for the years ended December 31, 2020, 2019, and 2018, respectively.

Operating expense depreciation and amortization expense related to property and equipment was approximately $1,591, $872, and $2,313, respectively, for the years ended December 31, 2020, 2019, and 2018, respectively.

8. Debt

Convertible Senior Notes - Due 2025

On July 27, 2020, we issued $125,000 aggregate principal amount of 3.50% Convertible Senior Notes due 2025 (the Notes), including the initial purchasers' exercise in full of their option to purchase an additional $15,000 principal amount of the Notes, in a private placement to qualified institutional buyers in an offering exempt from registration under the Securities Act of 1933, as amended. The net proceeds from the issuance of the Notes was $120,741 after deducting transaction costs.

The Notes are governed by an indenture (the Indenture) between us, as the issuer, and U.S. Bank, National Association, as trustee. The Notes are senior, unsecured obligations of ours and will be equal in right of payment with our senior, unsecured indebtedness; senior in right of payment to our indebtedness that is expressly subordinated to the notes; effectively subordinated to our senior, secured indebtedness, including future borrowings, if any, under our $20,000 credit facility with SVB, to the extent of the value of the collateral securing that indebtedness; and structurally subordinated to all indebtedness and other liabilities, including trade payables, and (to the extent we are not a holder thereof) preferred equity, if any, of our subsidiaries. The Indenture includes customary covenants and sets forth certain events of default after which the Notes may be declared immediately due and payable and sets forth certain types of bankruptcy or insolvency events of default involving us after which the Notes become automatically due and payable.

The Notes mature on August 1, 2025 unless earlier converted, redeemed or repurchased in accordance with their term prior to the maturity date. Interest is payable semiannually in arrears on February 1 and August 1 of each year, beginning on February 1, 2021. The holders of the Notes may convert all or any portion of their Notes at their option only in the following circumstances:

(1) during any calendar quarter commencing after the calendar quarter ending on December 31, 2020 (and only during such calendar quarter), if the last reported sale price per share of our common stock exceeds 130% of the conversion price of $8.53 for each of at least 20 trading days, whether or not consecutive, during the 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter;

(2) during the five consecutive business days immediately after any ten consecutive trading day period (such ten consecutive trading day period, the "measurement period") in which the trading price per $1 principal amount of Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price per share of our common stock on such trading day and the conversion rate on such trading day;

(3) upon the occurrence of certain corporate events or distributions of our common stock;

(4) if we call such Notes for redemption; and

(5) at any time from, and including, May 1, 2025, until the close of business on the second scheduled trading day immediately before the maturity date.

On or after May 1, 2025, until the close of business on the second scheduled trading day immediately preceding the maturity date, holders may convert all or any portion of their Notes, in minimum principal amount denominations of $1 or any integral multiple of $1 in excess thereof, at the option of the holder regardless of the foregoing circumstances. Upon conversion, we may satisfy our conversion obligation by paying or delivering, as applicable, cash, shares of common stock or a combination of cash and shares of common stock, at our election, in the manner and subject to the terms and conditions provided in the Indenture. The Notes have an initial conversion rate of 117.2367 shares of our common stock per $1 principal amount of Notes, which is equal to an initial conversion price of approximately $8.53 per share of our common stock. The initial conversion price of the notes represents a premium of approximately 27.5% over the last reported sale price of our common stock on The Nasdaq Global Select Market of $6.69 per share on July 22, 2020. The conversion rate is subject to adjustment under certain circumstances in accordance with the terms of the Indenture. In addition, following certain corporate events that occur prior to the maturity date or if we deliver a notice of redemption, we will increase the conversion rate in certain circumstances for a holder who elects to convert its Notes in connection with such a corporate event or convert its Notes called (or deemed called) for redemption in connection with such notice of redemption, provided that the conversion rate will not exceed 149.4768 share of our common stock per $1 principal amount of Notes, subject to adjustment.

We may not redeem the Notes prior to August 4, 2023. We may redeem for cash all, or any portion in an authorized denomination, of the Notes, at our option, on or after August 4, 2023, and on or prior to the 41st scheduled trading day immediately preceding the maturity date, if the last reported sale price of our common stock has been at least 130% of the conversion price then in effect for at least 20 trading days, whether or not consecutive, including the trading day immediately preceding the date on which we provide notice of redemption, during any 30 consecutive trading day period ending on, and including, the trading day preceding the date on which we provide notice of redemption at a redemption price equal to 100% of the principal amount of the Notes to be redeemed, plus any accrued and unpaid interest to, but excluding, the redemption date. No sinking fund is provided for the Notes, which means that we are not required to redeem or retire the Notes periodically.

If we undergo a fundamental change (as defined in the Indenture), holders may require us to repurchase for cash all or any portion of their Notes at a fundamental change repurchase price equal to 100% of the principal amount of the Notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

During the year ended December 31, 2020, the conditions allowing holders of the Notes to convert were not met and therefore the Notes are not yet convertible. The liability component of the Notes is classified as long-term debt on our condensed consolidated balance sheet as of December 31, 2020.

We separately accounted for the liability and equity components of the Notes. We determined the initial carrying amount of the $102,500 liability component before consideration of debt discount and transaction fees by calculating the present value of the cash flows using an effective interest rate of 8.6%. The interest rate was determined based on non-convertible debt offerings of similar sizes and terms by companies with similar credit ratings (Level 2 inputs). The carrying amount of the equity component, representing the conversion option, was $22,500 and was calculated by deducting the initial carrying value of the liability component from the principal amount of the Notes as a whole. This difference represents a debt discount that is amortized to interest expense over the 5-year contractual term of the Notes using the effective interest rate method. The equity component is not remeasured as long as it continues to meet the conditions for equity classification.

We allocated transaction costs related to the issuance of the Notes to the liability and equity components using the same proportions as the initial carrying value of the Notes. Transaction costs initially attributable to the liability component were $3,400 and are being amortized to interest expense using the effective interest method over the term of the Notes. Transaction costs attributable to the equity component were $859 and are accounted for consistently with the equity component of the debt.

The net carrying amount of the liability and equity components of the Notes was as follows:

	December 31, 2020
Liability component:	
Principal	$ 125,000
Debt discount (equity component)	(20,823)
Unamortized transaction costs	(3,232)
Net carrying amount	$ 100,945
Equity component, net of transaction costs	$ 21,733

Interest expense recognized related to the Notes was as follows:

	Year Ended December 31, 2020
Contractual interest expense	$ 1,894
Amortization of debt discount	1,677
Amortization of transaction costs	260
Total	$ 3,831

As of December 31, 2020, the estimated fair value of the Notes was $114,233. We estimated the fair value based on the quoted market prices in an inactive market on the last trading day of the reporting period, which are considered Level 2 inputs.

Capped Call Transactions

In connection with the offering of the Notes, we entered into privately negotiated capped call transactions with certain counterparties (collectively, the Capped Calls). The Capped Calls have an initial strike price of approximately $8.53 per share, subject to certain adjustments, which corresponds to the initial conversion price of the Notes. The Capped Calls have an initial cap price of $13.38 per share, subject to certain adjustments. The Capped Calls are generally intended to reduce or offset the potential economic dilution of approximately 14.7 million shares to our common stock upon any conversion of the Notes with such reduction or offset, as the case may be, subject to a cap based on the cap price. As the Capped Calls are considered indexed to our own stock and are equity classified, they are recorded in stockholders' equity and are not accounted for as derivatives. The cost of $16,400 incurred in connection with the Capped Calls was recorded as a reduction to additional paid-in capital.

Convertible Senior Notes and Capped Calls – Impact on Earnings per Share

The 14.7 million shares underlying the conversion option of the Notes will not have an impact on our diluted earnings per share until the average market price of our common stock exceeds the conversion price of $8.53 per share, as we intend and expect to have the ability to settle the principal amount of the Notes in cash upon conversion. Under current accounting guidance we do not have sufficient substance to overcome the presumption of stock settlement at this time and would be required to calculate earnings per share under the "if converted" method. However, we are in a loss position and therefore, the effects of the Notes are anti-dilutive. Once we achieve net income, we will re-evaluate our intent and ability to settle the Notes in cash and will apply the appropriate earnings per share calculation method at that time.

Line of Credit

In July 2020, we entered into a Sixth Amendment (Sixth Amendment) and in December 2020 we entered into the Seventh Amendment (Seventh Amendment) to the Loan and Security Agreement (the Credit Agreement) with Silicon Valley Bank (SVB) originally entered into in November 2015. Under the Sixth and Seventh Amendments, the maximum principal commitment amount remained at $20,000. The Sixth Amendment modified language within the Credit Agreement, which permitted us to issue our Notes. The Seventh Amendment modified the reporting requirements on a quarterly basis, given our current liquidity position. As long as our Adjusted Quick Ratio remains above 1.5 to 1, we no longer are required to submit quarterly borrowing base reports as previously required. Our borrowing capacity is the lesser of the commitment amount or 80% of eligible accounts receivable. All outstanding borrowings owed under the Credit Agreement become due and payable no later than the extended final maturity date of November 2, 2022.

As of December 31, 2020, and 2019, we had no outstanding borrowings, and we had availability under the Credit Agreement of approximately $20,000.

As of December 31, 2020, borrowings under the Credit Agreement bear interest at the current prime rate minus 0.25%. In the event of default, obligations shall bear interest at a rate per annum that is 3% above the then applicable rate.

Amendment fees and other commitment fees are included in interest expense. During the years ended December 31, 2020, 2019 and 2018, respectively, interest expense was $0, $0 and $0, respectively, and fees expense and related amortization was $108, $76 and $86, respectively.

Any borrowings are secured by essentially all of our domestic personal property, with a negative pledge on intellectual property. SVB's security interest in our foreign subsidiaries is limited to 65% of voting stock of each such foreign subsidiary.

We are required to maintain an Adjusted Quick Ratio of at least 1.0 to 1.0. We are also subject to certain customary limitations on our ability to, among other things, incur debt, grant liens, make acquisitions and other investments, make certain restricted payments such as dividends, dispose of assets or undergo a change in control. As of December 31, 2020, we were in compliance with all covenants under the Credit Agreement.

9. Other Current Liabilities

Other current liabilities include:

	December 31,	
	2020	2019
Accrued compensation and benefits	$ 5,964	$ 4,918
Accrued cost of revenue	5,036	4,176
Accrued interest payable	1,894	—
Other accrued expenses	4,666	4,304
Total other current liabilities	$ 17,560	$ 13,398

10. Contingencies

Legal Matters

Akamai '703 Litigation

In 2016, we entered into a settlement and license agreement with Akamai Technologies, Inc. (Akamai) with respect to U.S. Patent No. 6,108,703 (the '703 patent) and certain other related patents, which settled all asserted and unasserted claims with respect to the licensed patents. The terms of the agreement required us to pay $54,000 over twelve equal quarterly installments, which began on August 1, 2016. We took a charge in the quarter ended June 30, 2016 for the full, undiscounted amount of $54,000. As of December 31, 2018, there remained $9,000 due to Akamai. During the three months ended June 30, 2019, we made our final payment of $4,500 to Akamai under the terms of the settlement and license agreement.

Other Akamai Litigation

On April 9, 2018, we entered into a definitive settlement and patent license agreement with Akamai in a separate matter where the parties agreed to (i) license certain patents to the other party, (ii) a covenant not to sue for three years for certain patents related to the licensed patents, and (iii) settle all outstanding legal disputes between the parties. The terms of the agreement also require Akamai to pay to Limelight a total of $14,900, over five equal quarterly installments. As of December 31, 2018, there remained $5,960 due from Akamai. During the three months ended June 30, 2019, we received our final payment of $2,980 from Akamai.

Other Matters

We are subject to various other legal proceedings and claims, either asserted or unasserted, arising in the ordinary course of business. While the outcome of these claims cannot be predicted with certainty, management does not believe the outcome of any of these matters will have a material adverse effect on our business, financial position, results of operations, or cash flows, and accordingly, no legal contingencies are accrued as of December 31, 2020. Litigation relating to the content delivery services industry is not uncommon, and we are, and from time to time have been, subject to such litigation. No assurances can be given with respect to the extent or outcome of any such litigation in the future.

Taxes

We are subject to indirect taxation in various states and foreign jurisdictions. Laws and regulations that apply to communications and commerce conducted over the Internet are becoming more prevalent, both in the United States and internationally, and may impose additional burdens on us conducting business online or providing Internet-related services. Increased regulation could negatively affect our business directly, as well as the businesses of our customers, which could reduce their demand for our services. For example, tax authorities in various states and abroad may impose taxes on the Internet-related revenue we generate based on regulations currently being applied to similar but not directly comparable industries.

There are many transactions and calculations where the ultimate tax determination is uncertain. In addition, domestic and international taxation laws are subject to change. In the future, we may come under audit, which could result in changes to our tax estimates. We believe we maintain adequate tax reserves, that are not material in amount, to offset potential liabilities that may arise upon audit. Although we believe our tax estimates and associated reserves are reasonable, the final determination of tax audits and any related litigation could be materially different than the amounts established for tax contingencies. To the extent these estimates ultimately prove to be inaccurate, the associated reserves would be adjusted, resulting in the recording of a benefit or expense in the period in which a change in estimate or a final determination is made.

11. Net (Loss) Income per Share

We calculate basic and diluted net (loss) income per weighted average share. We use the weighted-average number of shares of common stock outstanding during the period for the computation of basic earnings per share. Diluted earnings per share include the dilutive effect of all potentially dilutive common stock, including awards granted under our equity incentive compensation plans in the weighted-average number of shares of common stock outstanding.

The following table sets forth the components used in the computation of basic and diluted net income (loss) per share for the periods indicated:

	Years Ended December 31,		
	2020	2019	2018
Net (loss) income	$ (19,277)	$ (16,044)	$ 9,842
Basic weighted average outstanding shares of common stock	121,196	115,890	112,114
Basic weighted average outstanding shares of common stock	121,196	115,890	112,114
Dilutive effect of stock options, restricted stock units, and other equity incentive plans	—	—	7,896
Diluted weighted average outstanding shares of common stock	121,196	115,890	120,010
Basic net (loss) income per share	$ (0.16)	$ (0.14)	$ 0.09
Diluted net (loss) income per share	$ (0.16)	$ (0.14)	$ 0.08

For the years ended December 31, 2020, 2019 and 2018, the following potentially dilutive common stock, including awards granted under our equity incentive compensation plans were excluded from the computation of diluted net income (loss) per share because including them would have been anti-dilutive.

	Years Ended December 31,		
	2020	2019	2018
Employee stock purchase plan	96	86	—
Stock options	5,973	2,736	3,288
Restricted stock units	1,891	1,303	451
Convertible senior notes	14,654	—	—
	22,614	4,125	3,739

12. Stockholders' Equity

Common Stock

On March 14, 2017, our board of directors authorized a $25,000 share repurchase program. Any shares repurchased under this program will be canceled and returned to authorized but unissued status. We did not purchase any shares during the years ended December 31, 2020 and 2019, respectively. During the year ended December 31, 2018, we purchased and canceled 1,000 shares for $3,800, including commissions and expenses. All repurchased shares were canceled and returned to authorized but unissued status. As of December 31, 2020, there remained $21,200 under this share repurchase program.

Amended and Restated Equity Incentive Plan

We established the 2007 Equity Incentive Plan, or the 2007 Plan, which allows for the grant of equity, including stock options and restricted stock unit awards. In June 2016, our stockholders approved the Amended and Restated Equity Incentive Plan, or the Restated 2007 Plan, which amended and restated the 2007 Plan. Approval of the Restated 2007 Plan replaced the terms and conditions of the 2007 Plan with the terms and conditions of the Restated 2007 Plan and extended the term of the plan to April 2026. There was no increase in the aggregate amount of shares available for issuance. The total number of shares available to be issued under the Restated 2007 Plan as of December 31, 2020 was approximately 9,437.

Employee Stock Purchase Plan

In June 2013, our stockholders approved our 2013 Employee Stock Purchase Plan (ESPP), authorizing the issuance of 4,000 shares. In May 2019, our stockholders approved the adoption of Amendment 1 to the ESPP. Amendment 1 increased the number of shares authorized to 9,000 shares (an increase of 5,000 shares) and amended the maximum number of shares of common stock that an eligible employee may be permitted to purchase during each offering period to be 5 shares. The ESPP allows participants to purchase our common stock at a 15% discount of the lower of the beginning or end of the offering period using the closing price on that day. During the years ended December 31, 2020, 2019, and 2018, we issued 555, 794, and 596 shares, respectively, under the ESPP. Total cash proceeds from the purchase of shares under the ESPP were approximately $1,936, $1,938, and $2,157, respectively for the years ended December 31, 2020, 2019, and 2018. As of December 31, 2020, shares reserved for issuance to employees under this plan totaled 3,685 and we held employee contributions of approximately $324 (included in other current liabilities) for future purchases under the ESPP.

Preferred Stock

Our board of directors have authorized the issuance of up to 7,500 shares of preferred stock at December 31, 2020. The preferred stock may be issued in one or more series pursuant to a resolution or resolutions providing for such issuance duly adopted by the board of directors. As of December 31, 2020, the Board had not adopted any resolutions for the issuance of preferred stock.

13. Accumulated Other Comprehensive Loss

Changes in the components of accumulated other comprehensive loss, net of tax, for the year ended December 31, 2020, was as follows:

	Foreign Currency	Unrealized Gains (Losses) on Available for Sale Securities	Total
Balance, December 31, 2019	$ (9,210)	$ —	$ (9,210)
Other comprehensive gain before reclassifications	1,750	(51)	1,699
Amounts reclassified from accumulated other comprehensive loss	—	—	—
Net current period other comprehensive gain	1,750	(51)	1,699
Balance, December 31, 2020	$ (7,460)	$ (51)	$ (7,511)

14. Share-Based Compensation

Incentive Compensation Plans

We maintain Incentive Compensation Plans (the Plans) to attract, motivate, retain, and reward high quality executives and other employees, officers, directors, and consultants by enabling such persons to acquire or increase a proprietary interest in the Company. The Plans are intended to be qualified plans under the Internal Revenue Code.

The Plans allow us to award stock option grants and restricted stock units (RSUs) to employees, directors and consultants of the Company. During 2020, we granted awards to employees and directors. The exercise price of incentive stock options granted under the Plan may not be granted at less than 100% of the fair market value of our common stock on the date of the grant.

Data pertaining to stock option activity under the Plans are as follows:

	Number of Options Outstanding	Weighted Average Exercise Price
	(In thousands)	
Balance at December 31, 2017	16,963	$ 2.99
Granted	2,126	3.50
Exercised	(1,479)	2.72
Cancelled/Forfeitures	(667)	5.23
Balance at December 31, 2018	16,943	2.99
Granted	2,556	4.03
Exercised	(1,054)	2.34
Cancelled/Forfeitures	(811)	4.55
Balance at December 31, 2019	17,634	3.12
Granted	1,509	4.18
Exercised	(2,870)	2.83
Cancelled/Forfeitures	(678)	3.98
Balance at December 31, 2020	15,595	3.23

The following table summarizes the information about stock options outstanding and exercisable at December 31, 2020:

	Options Outstanding			Options Exercisable	
Exercise Price	Number of Options Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number of Options Exercisable	Weighted Average Exercise Price
	(In thousands)			(In thousands)	
$ 0.00 — $ 1.50	—	—	$ —	—	$ —
$ 1.51 — $ 3.00	8,452	3.8	2.29	8,301	2.28
$ 3.01 — $ 4.50	3,691	7.7	3.62	1,867	3.52
$ 4.51 — $ 6.00	3,266	7.3	4.98	1,959	5.18
$ 6.01 — $ 7.50	11	2.8	6.34	8	6.40
$ 7.51 — $ 15.00	175	0.1	8.07	175	8.07
	15,595			12,310	

The weighted-average grant-date fair value of options granted during the years ended December 31, 2020, 2019, and 2018 on a per-share basis was approximately $2.26, $2.09, and $1.82, respectively. The total intrinsic value of the options exercised during the years ended December 31, 2020, 2019, and 2018 was approximately $9,963, $1,865, and $3,171, respectively. The aggregate intrinsic value of options outstanding at December 31, 2020 is approximately $15,751. The weighted average remaining contractual term of options currently exercisable at December 31, 2020 was 4.4 years.

The fair value of options awarded were estimated on the grant date using the following weighted average assumptions:

	Years Ended December 31,		
	2020	2019	2018
Expected volatility	59.70 %	52.47 %	51.05 %
Expected term, years	5.99	6.17	6.19
Risk-free interest	0.62 %	2.06 %	2.91 %
Expected dividends	— %	— %	— %

Unrecognized share-based compensation related to stock options totaled $6,503 at December 31, 2020. We expect to amortize unvested stock compensation related to stock options over a weighted average period of approximately 2.3 years at December 31, 2020.

The following table summarizes the RSUs outstanding (in thousands):

	Years Ended December 31,		
	2020	2019	2018
RSUs with service-based vesting conditions	3,340	4,503	4,248

Each RSU represents the right to receive one share of our common stock upon vesting. The fair value of these RSUs was calculated based upon our closing stock price on the date of grant.

Data pertaining to RSUs activity under the Plans is as follows:

	Number of Units	Weighted Average Fair Value
	(In thousands)	
Balance at December 31, 2017	5,809	$ 2.68
Granted	2,475	3.88
Vested	(3,501)	2.49
Forfeitures	(535)	3.39
Balance at December 31, 2018	4,248	3.45
Granted	4,089	3.20
Vested	(3,416)	3.17
Forfeitures	(418)	3.19
Balance at December 31, 2019	4,503	3.45
Granted	2,225	4.86
Vested	(2,817)	3.80
Forfeitures	(571)	3.51
Balance at December 31, 2020	3,340	4.09

The weighted-average grant-date fair value of RSUs granted during the years ended December 31, 2020, 2019, and 2018 was approximately $4.86, $3.20, and $3.88, respectively. The total intrinsic value of the units vested during the years ended December 31, 2020, 2019, and 2018 was approximately $14,371, $10,747, and $14,659, respectively. The aggregate intrinsic value of RSUs outstanding at December 31, 2020 is $13,325.

At December 31, 2020 there was approximately $11,146 of total unrecognized compensation costs related to RSUs. That cost is expected to be recognized over a weighted-average period of approximately 2.11 years as of December 31, 2020.

Total unrecognized aggregate share-based compensation expense totaled approximately $17,649 at December 31, 2020, which is expected to be recognized over a weighted average period of approximately 2.17 years.

The following table summarizes the components of share-based compensation expense included in our consolidated statement of operations:

	Years Ended December 31,		
	2020	2019	2018
Share-based compensation expense by type:			
Stock options	$ 4,289	$ 4,208	$ 4,238
Restricted stock units	10,494	8,951	10,753
ESPP	934	619	839
Total share-based compensation expense	$ 15,717	$ 13,778	$ 15,830
Share-based compensation expense included in the consolidated statements of operations:			
Cost of services	$ 1,998	$ 1,495	$ 1,815
General and administrative expense	7,611	8,098	8,458
Sales and marketing expense	3,519	2,263	2,837
Research and development expense	2,589	1,922	2,720
Total share-based compensation expense	$ 15,717	$ 13,778	$ 15,830

For the year ended December 31, 2020, we have recorded approximately $1,091 of share-based compensation expense related to restricted stock units issued as part of our 2019 annual corporate bonus plan.

On February 1, 2019, the compensation committee of our board of directors approved a stock for salary program wherein eligible participants elected to receive payment of his or her base salary in shares of our common stock beginning on February 1, 2019. The shares of common stock were issued under our Restated 2007 Equity Plan. Eligible program participants include our Chief Executive Officer and his direct reports.

The stock for salary program permitted eligible participants to receive 0, 25, 50, 75, or 100% of his or her 2019 salary (including any increases that may occur during the year) in shares of our common stock. On the last trading day of each calendar month, each participant will receive the number of shares of our common stock determined by dividing (i) 1/12th of his or her enrolled salary by (ii) the trailing 30-day closing average of our common stock, rounded up to the nearest whole share. Once an election is made, it runs for the full year 2019 and is irrevocable and the program will automatically terminate on the earlier to occur of January 1, 2020, or the date upon which our common stocks trades on the Nasdaq at $4.00 per share or greater. Participation levels may not be changed after the close of the enrollment period. Once issued, there is no vesting period for the shares. During 2019, our Chief Executive Officer and two of his direct reports elected to participate in the program. Each of the three participants elected to receive 50% of their respective salary in stock. As a result of their participation in the program, we issued 138 shares of common stock and recorded $396 of stock based compensation expense. The stock for salary program terminated on October 17, 2019 as a result of our stock price hitting $4.00 per share on the Nasdaq.

In 2018, 50% of the annual corporate bonus was awarded to eligible employees in the form of our common stock. This resulted in $2,037 of stock based compensation expense in 2018.

15. Related Party Transactions

In July 2006, an aggregate of 39,869,960 shares of Series B Preferred Stock was issued at a purchase price of $3.26 per share to certain accredited investors in a private placement transaction. As a result of this transaction, entities affiliated with Goldman, Sachs & Co., one of the lead underwriters of our initial public offering (IPO), became holders of more than 10% of our common stock. On June 14, 2007, upon the closing of our IPO, all outstanding shares of our Series B Preferred Stock automatically converted into shares of common stock on a 1-for-1 share basis. Between November 2017 and March 2018, investment partnerships affiliated with Goldman, Sachs & Co. sold 30,272,493 shares that they had acquired upon the conversion of their Series B Preferred Stock at the time of the Company's IPO in June 2007.

We had no other material related party transactions during the years ended December 31, 2020, 2019, and 2018.

16. Operating Leases - Right of Use Assets and Purchase Commitments

Right of Use Assets

We have various operating leases for office space that expire through 2030. Below is a summary of our right of use assets and liabilities as of December 31, 2020.

Right-of-use assets	$ 10,150

Lease liability obligations, current	$ 2,465
Lease liability obligations, less current portion	11,265
Total lease liability obligations	$ 13,730

Weighted-average remaining lease term	8.14 years

Weighted-average discount rate	5.05 %

During the year ended December 31, 2020, we recognized approximately $3,166 in operating lease costs. Operating lease costs of $476 are included in cost of revenue and $2,690 are included in operating expenses in our consolidated statement of operations. During the year ended December 31, 2020, cash paid for operating leases was approximately $2,175.

During the year ended December 31, 2019, we recognized approximately $3,540 in operating lease costs. Operating lease costs of $519 are included in cost of revenue and $3,021 are included in operating expenses in our consolidated statement of operations. During the year ended December 31, 2019, cash paid for operating leases was approximately $1,976.

During the year ended December 31, 2018, we recognized approximately $3,070 in operating lease costs. Operating lease costs of $442 are included in cost of revenue and $2,628 are included in operating expenses in our consolidated statement of operations. During the year ended December 31, 2018, cash paid for operating leases was approximately $2,423.

Approximate future minimum lease payments for our right of use assets over the remaining lease periods as of December 31, 2020, are as follows:

2021	$ 3,093
2022	2,237
2023	1,745
2024	1,441
2025	1,440
Thereafter	6,829
Total minimum payments	16,785
Less: amount representing interest	3,055
Total	$ 13,730

Purchase Commitments

We have long-term commitments for bandwidth usage and co-location with various networks and Internet service providers. The following summarizes our minimum non-cancellable commitments for future periods as of December 31, 2020:

2021	$ 40,068
2022	16,380
2023	4,119
2024	1,032
2025	—
Thereafter	—
Total minimum payments	$ 61,599

Operating expense relating to these bandwidth and co-location agreements was approximately $87,535, $66,801, and $56,523, respectively, for the years ended December 31, 2020, 2019, and 2018.

17. Concentrations

During the year ended December 31, 2020, we had two customers, Amazon and Sony who represented approximately 36% and 11%, respectively of our total revenue. During the years ended December 31, 2019, and 2018, Amazon represented approximately 30%, and 30%, respectively, of our total revenue.

Revenue from customers located within the United States, our country of domicile, was approximately $139,217, $121,160, and $113,102, respectively, for the years ended December 31, 2020, 2019, and 2018.

During the years ended December 31, 2020, 2019, and 2018, respectively, we had three countries: Japan, the United Kingdom, and the United States, which accounted for 10% or more of our total revenue.

18. Income Taxes

Our income (loss) before income taxes consists of the following:

	Years Ended December 31,		
	2020	2019	2018
Income (loss) before income taxes:			
United States	$ (20,882)	$ (17,230)	$ 8,648
Foreign	2,250	1,936	1,732
	$ (18,632)	$ (15,294)	$ 10,380

The components of the provision for income taxes are as follows:

	Years Ended December 31,		
	2020	2019	2018
Current:			
Federal	$ —	$ —	$ —
State	85	60	32
Foreign	654	420	489
Total current	739	480	521
Deferred:			
Federal	8	8	8
State	2	(1)	3
Foreign	(104)	263	6
Total deferred	(94)	270	17
Total provision	$ 645	$ 750	$ 538

A reconciliation of the U.S. federal statutory rate to our effective income tax rate is shown in the table below:

	Years Ended December 31,					
	2020		2019		2018	
	Amount	Percent	Amount	Percent	Amount	Percent
U.S. federal statutory tax rate	$ (3,913)	21.0 %	$ (3,212)	21.0 %	$ 2,180	21.0 %
Valuation allowance	5,388	(28.9)%	2,435	(15.9)%	(1,845)	(17.8)%
Foreign income taxes	88	(0.5)%	216	(1.4)%	150	1.5 %
State income taxes	59	(0.3)%	51	(0.3)%	51	0.5 %
Non-deductible expenses	58	(0.3)%	190	(1.2)%	85	0.8 %
Uncertain tax positions	(11)	0.1 %	(2)	— %	—	— %
Non-deductible officer compensation	418	(2.3)%	573	(3.8)%	688	6.6 %
Share-based compensation	(1,478)	7.9 %	420	(2.8)%	(745)	(7.2)%
Federal rate change impact	—	— %	—	— %	—	— %
Other	36	(0.2)%	79	(0.5)%	(26)	(0.2)%
Provision for income taxes	$ 645	(3.5)%	$ 750	(4.9)%	$ 538	5.2 %

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purpose. Significant components of our deferred tax assets and liabilities are as follows:

	December 31,	
	2020	2019
Deferred tax assets:		
Share-based compensation	$ 5,360	$ 6,100
Net operating loss and tax credit carry-forwards	57,153	51,395
Interest expense	390	—
Deferred revenue	247	157
Accounts receivable reserves	248	238
Fixed assets	2,217	1,858
Compensation	443	528
Lease liability	3,112	2,983
Other	146	88
Total deferred tax assets	69,316	63,347
Deferred tax liabilities:		
Convertible debt conversion feature	(5,112)	—
Right-of-use asset	(2,259)	(2,340)
Prepaid expenses	(365)	(314)
Other	(26)	(34)
Total deferred tax liabilities	(7,762)	(2,688)
Valuation allowance	(60,303)	(59,579)
Net deferred tax assets	$ 1,251	$ 1,080

The federal and state net operating loss (NOL) carryforwards relate to prior years' NOLs, which may be used to reduce tax liabilities in future years. At December 31, 2020, we had $229,900 federal and $154,500 state NOL carryforwards. Our federal NOL will begin to expire in 2027 and the state NOL carryforwards will begin to expire in 2021. Pursuant to Sections 382 and 383 of the Internal Revenue Code, the utilization of NOLs and other tax attributes may be subject to substantial limitations if certain ownership changes occur during a three-year testing period (as defined by the Internal Revenue Code). We did not have any state tax credit carryforwards as of December 31, 2020.

We reduce the carrying amounts of deferred tax assets by a valuation allowance if, based on the evidence available, it is more-likely-than-not that such assets will not be realized. In making the assessment under the more-likely-than-not standard, appropriate consideration must be given to all positive and negative evidence related to the realization of the deferred tax assets. This assessment considers, among other matters, the nature, frequency and severity of current and cumulative losses, forecasts of future profitability, the duration of statutory carry-forward periods by jurisdiction, unitary versus stand-alone state tax filings, our experience with loss carryforwards not expiring unutilized, and all tax planning alternatives that may be available.

A valuation allowance has been recorded against our deferred tax assets, with the exception of deferred tax assets at certain foreign subsidiaries as management cannot conclude that it is more-likely-than-not that these assets will be realized. As of December 31, 2020, no valuation allowance was provided on $1,600 of deferred tax assets associated with certain NOLs because we would use them to offset our liabilities relating to our uncertain tax benefits.

Estimated liabilities for unrecognized tax benefits are included in “other liabilities” on the consolidated balance sheet. These contingent liabilities relate to various tax matters that result from uncertainties in the application of complex income tax regulations in the numerous jurisdictions in which we operate. As of December 31, 2020, unrecognized tax benefits were $1,795, of which approximately $198, if recognized, would favorably impact the effective tax rate and the remaining balance would be substantially offset by valuation allowances.

A summary of the activities associated with our reserve for unrecognized tax benefits, interest and penalties follow:

	Unrecognized Tax Benefits
Balance at January 1, 2019	$ 1,800
Additions for tax positions related to current year	—
Additions for tax positions related to prior years	—
Settlements	—
Adjustment related to foreign currency translation	3
Reductions related to the lapse of applicable statute of limitations	(1)
Reduction for tax positions of prior years	—
Balance at December 31, 2019	1,802
Additions for tax positions related to current year	—
Additions for tax positions related to prior years	—
Settlements	—
Adjustment related to foreign currency translation	(2)
Reductions related to the lapse of applicable statute of limitations	(5)
Reduction for tax positions of prior years	—
Balance at December 31, 2020	$ 1,795

We recognize interest and penalties related to unrecognized tax benefits in our tax provision. As of December 31, 2020, we had an interest and penalties accrual related to unrecognized tax benefits of $0, which decreased during 2020 by $6. We anticipate our unrecognized tax benefits may increase or decrease within twelve months of the reporting date, as audits or reviews are initiated or settled and as a result of settled potential tax liabilities in certain foreign jurisdictions. It is not currently reasonably possible to estimate the range of change.

We file income tax returns in jurisdictions with varying statues of limitations. Tax years 2017 through 2019 remain subject to examination by federal tax authorities. Tax years 2016 through 2019 generally remain subject to examination by state tax authorities. As of December 31, 2020, we are not under any federal or state income tax examinations.

On December 22, 2017, the Tax Cuts and Jobs Act (the Tax Act) significantly revised the U.S. corporate income tax law, by among other things, reducing the corporate income tax rate to 21% for tax years beginning in 2018, implementing a modified territorial system that includes a one-time transition tax on deemed repatriated earnings of foreign subsidiaries and creating new taxes on certain foreign sourced earnings.

The Tax Act contains several base broadening provisions that became effective on January 1, 2018 that did not have a material impact on future earnings due to our NOL and valuation allowance position. Also effective for 2018 was a new Global Intangible Low-Taxed Income inclusion (GILTI). The GILTI did not have a material impact on our 2020, 2019, and 2018 earnings due to our NOL and valuation allowance position.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was enacted in response to the COVID-19 pandemic. The CARES Act, among other things, permits NOL carryovers and carrybacks to offset 100% of taxable income for taxable years beginning before 2021. In addition, the CARES Act allows NOLs incurred in 2018, 2019, and 2020 to be carried back to each of the five preceding taxable years to generate a refund of previously paid income taxes. We have evaluated the impact of the CARES Act, and do not expect that the NOL carryback provision of the CARES Act will result in a cash benefit to us.

19. 401(k) Plan

We manage the Limelight Networks 401(k) Plan covering effectively all of our employees. The plan is a 401(k) profit sharing plan in which participating employees are fully vested in any contributions they make.

We will match employee deferrals as follows: a dollar-for-dollar match on eligible employee's deferral that does not exceed 3% of compensation for the year and a 50% match on the next 2% of the employee deferrals. Our employees may elect to reduce their current compensation up to the statutory limit. We made matching contributions of approximately $1,535, $1,501, and $1,423 during the years ended December 31, 2020, 2019, and 2018, respectively.

20. Segment Reporting and Geographic Information

Our chief operating decision maker (who is our Chief Executive Officer) reviews our financial information presented on a consolidated basis for purposes of allocating resources and evaluating our financial performance. We operate in one industry segment — content delivery and related services and we operate in three geographic areas — Americas, Europe, Middle East and Africa (EMEA) and Asia Pacific.

Revenue by geography is based on the location of the customer from which the revenue is earned. The following table sets forth revenue by geographic area:

	Years Ended December 31,					
	2020		2019		2018	
Americas	$ 142,345	62 %	$ 125,075	62 %	$ 118,462	61 %
EMEA	36,958	16 %	32,008	16 %	38,015	19 %
Asia Pacific	50,891	22 %	43,551	22 %	39,193	20 %
Total revenue	$ 230,194	100 %	$ 200,634	100 %	$ 195,670	100 %

The following table sets forth the individual countries and their respective revenue for those countries whose revenue exceeded 10% of our total revenue:

	Years Ended December 31,		
	2020	2019	2018
Country / Region			
United States / Americas	$ 139,217	$ 121,160	$ 113,102
United Kingdom / EMEA	$ 29,623	$ 24,004	$ 26,672
Japan / Asia Pacific	$ 32,369	$ 25,339	$ 20,452

The following table sets forth long-lived assets by geographic area:

	Years Ended December 31,		
	2020	2019	2018
Long-lived Assets			
Americas	$ 32,626	$ 33,450	$ 18,349
International	13,792	12,686	9,029
Total long-lived assets	$ 46,418	$ 46,136	$ 27,378

21. Fair Value Measurements

We evaluate our financial instruments within the three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value. These tiers include:

Level 1 - defined as observable inputs such as quoted prices in active markets;

Level 2 - defined as other than quoted prices in active markets that are either directly or indirectly observable; and

Level 3 - defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

As of December 31, 2020 and 2019, we held certain assets that were required to be measured at fair value on a recurring basis.

The following is a summary of fair value measurements at December 31, 2020:

		Fair Value Measurements at Reporting Date Using		
Description	**Total**	**Quoted Prices In Active Markets for Identical Assets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**
Assets:				
Money market funds (2)	$ 12,370	$ 12,370	$ —	$ —
Certificate of deposit (1)	551	—	551	—
Corporate notes and bonds (1)	45,385	—	45,385	—
Municipal securities (1)	31,032	—	31,032	—
Total assets measured at fair value	$ 89,338	$ 12,370	$ 76,968	$ —

(1) Classified in marketable securities

(2) Classified in cash and cash equivalents

The following is a summary of fair value measurements at December 31, 2019:

		Fair Value Measurements at Reporting Date Using		
Description	**Total**	**Quoted Prices In Active Markets for Identical Assets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**
Assets:				
Certificate of deposit (1)	$ 40	$ —	$ 40	$ —

(1) Classified in marketable securities

The carrying amount of cash equivalents approximates fair value because their maturity is less than three months. The carrying amount of short-term and long-term marketable securities approximates fair value as the securities are marked to market as of each balance sheet date with any unrealized gains and losses reported in stockholders' equity. The carrying amount of accounts receivable, accounts payable and accrued liabilities approximates fair value due to the short-term maturity of the amounts.

22. Quarterly Financial Results (unaudited)

The following tables sets forth certain unaudited quarterly results of operations for the years ended December 31, 2020 and 2019. Amounts may not foot due to rounding.

In the opinion of management, this information has been prepared on the same basis as the audited consolidated financial statements and all necessary adjustments, consisting only of normal recurring adjustments, have been included in the amounts below for a fair statement of the quarterly information when read in conjunction with the audited consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K:

	For the Three Months Ended			
	March 31, 2020	June 30, 2020	Sept. 30, 2020	Dec. 31, 2020
Revenue	$ 57,012	$ 58,546	$ 59,243	$ 55,394
Gross profit	$ 20,749	$ 23,797	$ 21,736	$ 16,823
Net income (loss)	$ (5,257)	$ (1,727)	$ (3,985)	$ (8,309)
Basic net income (loss) per share	$ (0.04)	$ (0.01)	$ (0.03)	$ (0.07)
Diluted net income (loss) per share	$ (0.04)	$ (0.01)	$ (0.03)	$ (0.07)
Basic weighted average common shares outstanding	118,964	120,230	122,363	123,225
Diluted weighted average common shares outstanding	118,964	120,230	122,363	123,225

	For the Three Months Ended			
	March 31, 2019	June 30, 2019	Sept. 30, 2019	Dec. 31, 2019
Revenue	$ 43,280	$ 45,904	$ 51,321	$ 60,129
Gross profit	$ 16,022	$ 18,507	$ 20,758	$ 26,255
Net income (loss)	$ (8,559)	$ (7,192)	$ (2,751)	$ 2,458
Basic net income (loss) per share	$ (0.07)	$ (0.06)	$ (0.02)	$ 0.02
Diluted net income (loss) per share	(0.07)	(0.06)	(0.02)	0.02
Basic weighted average common shares outstanding	114,410	115,275	116,270	117,603
Diluted weighted average common shares outstanding	114,410	115,275	116,270	123,801

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

We carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act, as of December 31, 2020. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of December 31, 2020.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended December 31, 2020 that 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 is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP. Our internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our 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.

Under the supervision of our Chief Executive Officer and Chief Financial Officer, our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2020. In making this assessment, management used the criteria set forth in the *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2013 framework). Based on this assessment, our management has concluded that our internal control over financial reporting was effective as of December 31, 2020.

Our financial statements included in this Annual Report on Form 10-K have been audited by Ernst & Young LLP, independent registered public accounting firm, as indicated in the report included elsewhere herein. Ernst & Young LLP has also provided an attestation report on the Company's internal control over financial reporting.

Limitations on Effectiveness of Controls and Procedures

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

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Limelight Networks, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Limelight Networks, Inc.'s internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Limelight Networks, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, 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, 2020 and 2019, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2020, and the related notes and the financial statement schedule listed in the Index at Item 15(a) and our report dated February 12, 2021 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 Management's Annual 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 the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit 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, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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/ Ernst & Young LLP
Phoenix, Arizona
February 12, 2021

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item relating to our directors and nominees is included under the captions "Proposal One: Election of Directors," "— Information About the Directors and Nominees," and "Board of Directors Meetings and Committees — Nominating and Governance Committee" in our Proxy Statement related to the 2021 Annual Meeting of Shareholders and is incorporated herein by reference.

The information required by this item regarding our Audit Committee is included under the caption "Board of Directors Meetings and Committees" in our Proxy Statement related to the 2021 Annual Meeting of Shareholders and is incorporated herein by reference.

The information required by this item relating to our executive officers is included under the caption "Information about our Executive Officers" in Part I of this Annual Report on Form 10-K.

The information required by this item regarding compliance with Section 16(a) of the Securities Act is included under the caption "Executive Compensation and Other Matters — Section 16(a) Beneficial Ownership Reporting Compliance" in our Proxy Statement related to the 2021 Annual Meeting of Shareholders and is incorporated herein by reference.

We have adopted a code of ethics and business conduct that applies to our Chief Executive Officer, Chief Financial Officer and all other principal executive and senior financial officers and all employees, officers and directors. This code of ethics and business conduct is posted on our website. The Internet address for our website is www.limelight.com, and the code of ethics may be found from our main webpage by clicking first on "About Limelight" and then on "Investors Home", next on "Corporate Governance", and finally on "Code of Ethics" under Governance Documents.

We intend to satisfy any disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of this code of ethics by posting such information on our website, on the webpage found by clicking through to "Code of Ethics" as specified above.

Item 11. Executive Compensation

The information appearing under the headings "Executive Compensation and Other Matters," "— Director Compensation," "Board of Directors Meetings and Committees — Compensation Committee Interlocks and Insider Participation," and "— Compensation Committee Report" in our Proxy Statement related to the 2021 Annual Meeting of Shareholders is incorporated herein by reference.

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

The information required by this item relating to security ownership of certain beneficial owners and management is included under the heading "Security Ownership of Certain Beneficial Owners and Management" in our Proxy Statement related to the 2021 Annual Meeting of Shareholders, and is incorporated herein by reference.

Equity Compensation Plan Information

The following table provides information regarding our current equity compensation plans as of December 31, 2020 (shares in thousands):

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	15,595	$ 3.23	9,437
Equity compensation plans not approved by security holders	—	—	—
Total	15,595	$ 3.23	9,437

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

The information required by this item relating to review, approval or ratification of transactions with related persons is included under the heading "Certain Relationships and Related Transactions," and the information required by this item relating to director independence is included under the headings "Proposal One: Election of Directors" and "Board of Directors Meetings and Committees — Board Independence," in each case in our Proxy Statement related to the 2021 Annual Meeting of Shareholders, and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

The information required by this item is included under the headings "Audit Committee Report—Principal Accountant Fees and Services" and "— Audit Committee Pre-Approval Policy," in each case in our Proxy Statement related to the 2021 Annual Meeting of Shareholders, and is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(a) Documents included in this Annual Report on Form 10-K.

(i) *Financial Statements.* See Item 8 — Financial Statements and Supplementary Data included in this Annual Report on Form 10-K.

(ii) *Financial Schedules.* The schedule listed below is filed as part of this Annual Report on Form 10-K:

	Page
Schedule II — Valuation and Qualifying Accounts	88

All other schedules are omitted as the information required is inapplicable or the information is presented in the consolidated financial statements and the related notes.

(b) *Exhibits.* The exhibits required by Item 601 of Regulation S-K are listed in the Exhibit Index immediately preceding the exhibits and are incorporated herein.

Item 16. Form 10-K Summary.

None

INDEX TO EXHIBITS

Exhibit Number	Exhibit Title
3.1(1)	Amended and Restated Certificate of Incorporation of the Registrant.
3.2(2)	Second Amended and Restated Bylaws of the Registrant.
4.1(3)	Specimen Common Stock Certificate of the Registrant.
4.2(4)	Description of Securities Registered Under Section 12 of the Exchange Act.
4.3(5)	Indenture between Limelight Networks, Inc. and U.S. Bank National Association dated July 27, 2020.
4.4(6)	Form of 3.50% Convertible Senior Notes due August 1, 2025 (included in Exhibit 4.3).
10.1(3)	Form of Indemnification Agreement for directors and officers.
10.2(3)	Amended and Restated 2003 Incentive Compensation Plan and form of agreement thereunder.
10.3(3)	2007 Equity Incentive Plan and form of agreement thereunder.
10.3.01(7)	Amended and Restated 2007 Equity Incentive Plan of Limelight Networks.
10.4(8)	Form of At-Will Employment, Confidential Information, Invention Assignment, and Arbitration Agreement for officers and employees.
10.5(9)	Master Executive Bonus and Management Bonus Plan.
10.6(10)	Form of 2007 Equity Incentive Plan Restricted Stock Unit Agreement.
10.7(11)	Form of 2007 Equity Incentive Plan Restricted Stock Unit Agreement for Non-U.S. Employees.
10.10(12)	Employment Agreement between the Registrant and Robert A. Lento dated January 22, 2013.
10.10.01(13)	First Amendment to Employment agreement between the Registrant and Robert A. Lento dated as of February 23, 2016.
10.10.01*	Transition Agreement, Amendment to Employment Agreement, and Release between the Registrant and Robert Lento dated January 19, 2021.
10.11(14)	Employment Agreement between the Registrant and Daniel Boncel dated July 1, 2020.
10.12(15)	Limelight Networks, Inc. 2013 Employee Stock Purchase Plan.
10.12.01(16)	Amendment 1 to the Limelight Networks, Inc. 2013 Employee Stock Purchase Plan.
10.13(17)	Employment Agreement between the Registrant and Sajid Malhotra dated March 24, 2014.
10.13.01(18)	Amendment to Employment Agreement between the Registrant and Sajid Malhotra dated June 18, 2015.
10.13.02(19)	Second Amendment to Employment agreement between the Registrant and Sajid Malhotra dated as of February 23, 2016.
10.13.03*	Transition Agreement, Amendment to Employment Agreement, and Release between the Registrant and Sajid Malhotra dated as of November 11, 2020.
10.14(20)	Employment Agreement between the Registrant and Michael DiSanto effective April 1, 2015.
10.14.01(21)	Second Amendment to Employment agreement between the Registrant and Michael D. DiSanto dated as of February 23, 2016.
10.15(22)	Loan and Security Agreement between Limelight Networks, Inc. and Silicon Valley Bank dated November 2, 2015.
10.15.01(23)	Second Loan Modification Agreement to the Loan and Security Agreement between Limelight Networks, Inc. and Silicon Valley Bank dated October 25, 2016.
10.15.02(24)	Third Loan Modification Agreement to the Loan and Security Agreement between Limelight Networks, Inc. and Silicon Valley Bank dated October 17, 2017.

10.15.03(25)	Fourth Loan Modification Agreement to the Loan and Security Agreement between Limelight Networks, Inc. and Silicon Valley Bank dated February 27, 2018.
10.15.04(26)	Fifth Loan Modification Agreement to the Loan and Security Agreement between Limelight Networks, Inc. and Silicon Valley Bank dated April 22, 2020.
10.15.05(27)	Sixth Loan Modification Agreement to the Loan and Security Agreement between Limelight Networks, Inc. and Silicon Valley Bank dated July 22, 2020.
10.15.06*	Seventh Loan Modification Agreement to the Loan and Security Agreement between Limelight Networks, Inc. and Silicon Valley Bank dated December 23, 2020.
10.16(28)	Employment Agreement between the Registrant and Kurt Silverman dated August 20, 2013.
10.16.01(29)	First Amendment to Employment agreement between the Registrant and Kurt Silverman dated as of February 23, 2016.
10.16.02(30)	Transition Agreement and Release between the Registrant and Kurt Silverman dated as of September 3, 2020.
10.17*	Employment Agreement between the Registrant and Christine Cross dated May 11, 2020.
10.18(31)	Patent Sublicense Agreement dated August 1, 2016.
10.19(32)	Employment Agreement between the Registrant and Tom Marth dated November 21, 2018.
10.20(33)	Form of Capped Call Transaction Confirmation.
10.21*	Employment Agreement between the Registrant and Robert Lyons dated January 19, 2021.
21.1*	List of subsidiaries of the Registrant.
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.
24.1	Power of Attorney (See signature page).
31.1	Certification of Principal Executive Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Principal Financial Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Principal Financial Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. 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.
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 with applicable taxonomy extensions

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(1) Incorporated by reference to Exhibit 3.1 of the Registrant’s Current Report on Form 8-K filed on June 14, 2011.
(2) Incorporated by reference to Exhibit 3.2 of the Registrant's Form 8-K filed on February 19, 2013.
(3) Incorporated by reference to the same number exhibit of the Registrant’s Form S-1 Registration Statement (Registration No. 333-141516), declared effective by the Securities and Exchange Commission on June 7, 2007.
(4) Filed herewith.
(5) Incorporated by reference to Exhibit 4.1 of the Registrant’s Form 8-K filed on July 27, 2020.
(6) Incorporated by reference to Exhibit 4.2 of the Registrant’s Form 8-K filed on July 27, 2020.

(7) Incorporated by reference to Exhibit 10.3.01 of the Registrant’s Quarterly Report on Form 10-Q filed on October 27, 2016.
(8) Incorporated by reference to Exhibit 10.12 of the Registrant’s Form S-1 Registration Statement (Registration No. 333-141516), declared effective by the Securities and Exchange Commission on June 7, 2007.
(9) Incorporated by reference to Exhibit 99.1 of the Registrant’s Current Report on Form 8-K filed on May 19, 2009.
(10) Incorporated by reference to Exhibit (a)(1)(I) of the Registrant’s Schedule TO filed on May 15, 2008.
(11) Incorporated by reference to Exhibit (a)(1)(J) of the Registrant’s Schedule TO filed on May 15, 2008.
(12) Incorporated by reference to Exhibit 10.21 of the Registrant’s Annual Report on Form 10-K filed on March 1, 2013.
(13) Incorporated by reference to Exhibit 10.1 of the Registrant’s Quarterly Report on Form 10-Q filed on April 28, 2016.
(14) Incorporated by reference to Exhibit 10.3 of the Registrant’s Quarterly Report on Form 10-Q filed on July 20, 2020.
(15) Incorporated by reference to Exhibit 10.23 of the Registrant's Quarterly Report on Form 10-Q filed on August 8, 2013.
(16) Incorporated by reference to Exhibit 10.1 of the Registrant's Form S-8 Registration Statement filed on May 3, 2019.
(17) Incorporated by reference to Exhibit 10.17 of the Registrant’s Annual Report on Form 10-K filed on February 17, 2015.
(18) Incorporated by reference to Exhibit 10.2 of the Registrant's Form 8-K filed on June 19, 2015.
(19) Incorporated by reference to Exhibit 10.2 of the Registrant’s Quarterly Report on Form 10-Q filed on April 28, 2016.
(20) Incorporated by reference to Exhibit 10.2 of the Registrant’s Quarterly Report on Form 10-Q filed on May 1, 2015.
(21) Incorporated by reference to Exhibit 10.5 of the Registrant’s Quarterly Report on Form 10-Q filed on April 28, 2016.
(22) Incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on November 3, 2015.
(23) Incorporated by reference to Exhibit 10.19.01 of the Registrant’s Quarterly Report on Form 10-Q filed on October 27, 2016.
(24) Incorporated by reference to Exhibit 10.16 of the Registrant’s Annual Report on Form 10-K filed on February 8, 2018.
(25) Incorporated by reference to Exhibit 10.01 of the Registrant’s Quarterly Report on Form 10-Q filed on April 20, 2018.
(26) Incorporated by reference to Exhibit 10.15.04 of the Registrant’s Quarterly Report on Form 10-Q filed on April 24, 2020.
(27) Incorporated by reference to Exhibit 10.1 of the Registrant’s Form 8-K filed on July 23, 2020.
(28) Incorporated by reference to Exhibit 10.17 of the Registrant’s Annual Report on Form 10-K filed on February 17, 2017.
(29) Incorporated by reference to Exhibit 10.4 of the Registrant’s Quarterly Report on Form 10-Q filed on April 28, 2016.
(30) Incorporated by reference to Exhibit 10.3 of the Registrant’s Quarterly Report on Form 10-Q filed on October 23, 2020.
(31) Incorporated by reference to Exhibit 10.1 of the Registrant’s Form 8-K filed on August 1, 2016.
(32) Incorporated by reference to Exhibit 10.16 of the Registrant’s Annual Report on Form 10-K filed on January 31, 2019.
(33) Incorporated by reference to Exhibit 10.1 of the Registrant’s Form 8-K filed on July 27, 2020.

* This exhibit shall not be deemed “filed” for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that Section, nor shall it be deemed incorporated by reference in any filings under the Securities Act or the Exchange, whether made before or after the date hereof and irrespective of any general incorporation language in any filings.

† Confidential treatment has been requested or granted for portions of this exhibit by the Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

LIMELIGHT NETWORKS, INC.

Date: February 12, 2021

By: /S/ DANIEL R. BONCEL

Daniel R. Boncel
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Robert A. Lyons and Daniel R. Boncel and each of them, each with the power of substitution, their attorney-in-fact, to sign any amendments to this Annual Report on Form 10-K (including post-effective amendments), and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or their substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Robert A. Lyons **Robert A. Lyons**	President, Chief Executive Officer and Director (Principal Executive Officer)	February 12, 2021
/s/ Daniel R. Boncel **Daniel R. Boncel**	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	February 12, 2021
/s/ Walter D. Amaral **Walter D. Amaral**	Non-Executive Chairman of the Board and Director	February 12, 2021
/s/ Doug Bewsher **Doug Bewsher**	Director	February 12, 2021
/s/ Marc DeBevoise **Marc DeBevoise**	Director	February 12, 2021
/s/ Jeffrey T. Fisher **Jeffrey T. Fisher**	Director	February 12, 2021
/s/ Scott A. Genereux **Scott Genereux**	Director	February 12, 2021
/s/ Patricia Parra Hadden **Patricia Parra Hadden**	Director	February 12, 2021
/s/ David C. Peterschmidt **David C. Peterschmidt**	Director	February 12, 2021

LIMELIGHT NETWORKS, INC.

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

(In thousands)

Description	Balance at Beginning of Period	Additions: Charged to Costs and Expenses	Additions: Charged Against Revenue	Deductions: Write-Offs Net of Recoveries	Balance at End of Period
Year ended December 31, 2018:					
Allowances deducted from asset accounts:					
Reserves for accounts receivable	$ 1,138	902	10	1,051	$ 999
Deferred tax asset valuation allowance	$ 58,718	(1,569)	—	—	$ 57,149
Year ended December 31, 2019:					
Allowances deducted from asset accounts:					
Reserves for accounts receivable	$ 999	1,793	(80)	1,569	$ 1,143
Deferred tax asset valuation allowance	$ 57,149	2,430	—	—	$ 59,579
Year ended December 31, 2020:					
Allowances deducted from asset accounts:					
Reserves for accounts receivable	$ 1,143	801	—	762	$ 1,182
Deferred tax asset valuation allowance	$ 59,579	724	—	—	$ 60,303

Limelight NETWORKS