FORM S-1 · REGISTRATION STATEMENT

Fastly Inc

IPO priced 2019-05-17 · $16.00 a share · FSLY



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As filed with the Securities and Exchange Commission on April 19, 2019.

REGISTRATION STATEMENT NO. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

FASTLY, INC.

(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

Delaware	**7372**	**27-5411834**
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	(PRIMARY STANDARD INDUSTRIAL CLASSIFICATION CODE NUMBER)	(I.R.S. EMPLOYER IDENTIFICATION NUMBER)

475 BRANNAN STREET, SUITE 300

SAN FRANCISCO, CA 94107

1-844-432-7859

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

ARTUR BERGMAN

CHIEF EXECUTIVE OFFICER

Fastly, Inc.

475 BRANNAN STREET, SUITE 300

SAN FRANCISCO, CA 94107

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(NAME, ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF AGENT FOR SERVICE)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company or an emerging growth company. See 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 7(a)(2)(B) of the Securities Act. ☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE(1)(2)	AMOUNT OF REGISTRATION FEE
Class A Common Stock, $0.00002 par value per share	$100,000,000	$12,120

(1) In accordance with Rule 457(o) under the Securities Act of 1933, as amended, the number of shares being registered and the proposed maximum offering price per share are not included in this table.

(2) Estimated solely for purposes of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended. Includes the offering price of shares that the underwriters have the option to purchase.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion Preliminary Prospectus dated April 19, 2019

PROSPECTUS

SHARES

CLASS A COMMON STOCK

This is Fastly, Inc.'s initial public offering. We are selling shares of our Class A common stock.

We expect the public offering price to be between $ and $ per share. Currently, no public market exists for the shares of our Class A common stock. We have applied to list our Class A common stock on the New York Stock Exchange (NYSE) under the symbol "FSLY."

We have two classes of authorized common stock, Class A common stock and Class B common stock. The rights of the holders of Class A common stock and Class B common stock are identical, except with respect to voting and conversion. Each share of Class A common stock is entitled to one vote per share. Each share of Class B common stock is entitled to 10 votes per share and is convertible into one share of Class A common stock. Outstanding shares of Class B common stock will represent approximately % of the voting power of our outstanding capital stock immediately following this offering, with our directors, executive officers, and principal stockholders representing approximately % of such voting power.

We are an "emerging growth company" as defined under the U.S. federal securities laws and, as such, may elect to comply with certain reduced public company reporting requirements for this and future filings. See "Prospectus Summary—Implications of Being an Emerging Growth Company."

Investing in our Class A common stock involves risks that are described in the "Risk Factors" section beginning on page 14 of this prospectus.

	PER SHARE	TOTAL
Public offering price		$$
Underwriting discount		$$
Proceeds, before expenses, to us		$$

(1) See "Underwriting" beginning on page 154 for additional information regarding underwriting compensation.

The underwriters may also exercise their option to purchase up to an additional shares of Class A common stock from us, at the initial public offering price, less the underwriting discount, for 30 days after the date of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The shares of Class A common stock will be ready for delivery on or about , 2019.

BofA Merrill Lynch			**Citigroup**		**Credit Suisse**	
William Blair	**Raymond James**	**Baird**	**Oppenheimer & Co.**	**Stifel**	**Craig-Hallum Capital Group**	**D.A. Davidson & Co.**

The date of this prospectus is , 2019 We are in the business of enabling developers to dream bigger. Together, we create the trustworthy internet. 53 0K+ Average Revenue Across All Enterprise Customers* (For the year ended December 31, 2018) 130%+ Dollar Based Net Expansion Rate** (For the years ended December 31, 2017 and 2018) 54%+ 2018 Gross Margin 64 NPS Score (As of December 2018) *Enterprise customers are defined as customers with LTM revenue in excess of $100,000 as of 12131/2018. Fastly had 227 Enterprise customers which generated 84% of total revenue as of 12/31/2018. **We calculate Dollar Based Net Expansion Rate by dividing the revenue for a given period from customers who remained customers as of the last day of the given period (the "current period") by the revenue from the same customers for the same period measured one year prior (the "base period"). The revenue included in the current period excludes revenue from (0 customers that churned after the end of the base period and (ii) new customers that entered into a customer agreement after the end of the base period Fueling the future of the web New York Times CC I'm a huge fan of Fastly. On election night, we had

100,000 requests per second, and Fastly performed flawlessly - we had no problems at all. “ Nick Rockwell CTO Instrument your entire Ticketmaster CC When tickets go on sale, we can see thousands of requests per second. At the same time, our inventory is changing every second. Fastly gives us the ability to reconcile these challenges and respond to customers in real-time by serving highly dynamic content from the edge. “ Gary Wong Software Manager iiibcNcw ~ork !iiimcs - \1.5 - •.• - - - - - ..... - ..... - - .. , ... -- - HowCalifocnia’oBineotUtility Overlooked Wold fire Rioko •FiwoJI’U.,tOJ»)fldtoltiK:tl,..tlroslotbo 1Utoolnoo1015ho,...,.,.,tlnkodtothe ...._.ot_aos• •I><J”Iotors.....,..thatln”’>n)’”= PGt.E.-...!ou.tolo• O<<O<IIdllave -..,....,.ortW.oU-w.t. New Relic Opinion> G.; I Coll “”•..:IB«~ ..... n., ~; ;,;. A ,..n\AliR iP t An•hhyll>ouldlho)’bo? ‘{ CC We work with Fastly because it’s a company whose values are significantly similar to ours - great engineering, great culture, always innovating, and totally focused on delivering high-quality products. “ Nic Benders Chief Architect ---------- tiCketmaster ,.. · or ~””” ‘·-·~···” ~ lllii&l ~~ ::::.,..._ c, ,_,__,_ a., 02 0 -. 11> -- u. .. .. @ ~ - (New: 40,000 bonus mile offer “”-~ · -wO “’’ L~ ~oo..o,.,. ~ r.- .ll<·..t..•,_.. ...., •”’ : ~:E~!~I~~~~;:_y.~ .... _,_..~.- Spotify Spotify partnered with Fastly to design a managed CDN offering that could meet their needs. By combining Fastty• s full-site delivery and managed delivery offerings, Spotify was able to maintain control over how their content catalogue was delivered, while ensuring a quality experience for all their listeners. “ ru’”””””” “””. ‘””””P”” “”P” “’ • +·• .”’.·-.r r •><oo1<••eo:nl:<r•:•h oo”” · : ~- -· ,.,...-.”” · ·- ~”” Learn Git and GitHub wit hout a ny code! U.Cng t”” Hdln Were ;,..ifio>. yoor”ll ~·- ;or”””””1”’}· !;ort b”rcl\,ll.fl ... ~<lffmnto, ..-.:lo~ro:..M “’ll<-ltS! ‘<”””””” ,. ~ ‘”” ..., .,_ --~,.w·-· ~ . ... fA --~>0 U “”~ .oi.>. ...-..-..-...~..-....., ~ . . ....-.. .... ~. ..... Discover interesting projects artd people to populate . , .t “·’ you r personal news feed Alaska Airlines Alaska Airlines used Pastly’s powerful edge programming language to safely test out new features without risking disruption to production traffic. Pastly allowed them to control what percentage of users were directed to a test server to experience a new feature, dialing this up over time until they were confident the feature was ready for release. Gspotffy ..... , ... , o ..... 1 “’I’ l .. .. GitHub GitHub chose Pastly as a CDN provider to take advantage of Pastly’ s advanced functionality and large edge network capacity in order to serve an increasingly large customer base without overloading origin servers.

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We have not, and the underwriters have not, authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses we have prepared. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.

For investors outside the United States: We have not, and the underwriters have not, done anything that would permit this offering, or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of Class A common stock and the distribution of this prospectus outside of the United States.

DEALER PROSPECTUS DELIVERY OBLIGATION

Through and including , 2019 (25 days after the date of this prospectus), all dealers that effect transactions in our Class A common stock, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to unsold allotments or subscriptions.

Prospectus Summary

PROSPECTUS SUMMARY *This summary highlights selected information that is presented in greater detail elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our Class A common stock. You should read this entire prospectus carefully, including the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes included elsewhere in this prospectus, before making an investment decision. Unless the context otherwise requires, the terms "Fastly," "the company," "we," "us," and "our" in this prospectus refer to Fastly, Inc. and its consolidated subsidiaries.*

Overview

Developers are reinventing the way we live, work, and play online. Yet they repeatedly encounter innovation barriers when delivering modern digital experiences. Expectations for digital experiences are at an all-time high; they must be fast, secure, and highly personalized. If they aren't reliable, end-users simply take their business elsewhere. The challenge today is enabling developers to deliver a modern digital experience while simultaneously providing scale, security, and performance. We built our edge cloud platform to solve this problem.

The edge cloud is a new category of Infrastructure as a Service (IaaS) that enables developers to build, secure, and deliver digital experiences at the edge of the internet. This service represents the convergence of the Content Delivery Network (CDN) with functionality that has been traditionally delivered by hardware-centric appliances such as Application Delivery Controllers (ADC), Web Application Firewalls (WAF), Bot Detection, and Distributed Denial of Service (DDoS) solutions. It also includes the emergence of a new, but growing edge computing market which aims to move compute power and logic as close to the end-user as possible. The edge cloud uses the emerging cloud computing, serverless paradigm in which the cloud provider runs the server and dynamically manages the allocation of machine resources. When milliseconds matter, processing at the edge is an ideal way to handle highly dynamic and time-sensitive data. The edge cloud complements data center, central cloud, and hybrid solutions.

Our mission is to fuel the next modern digital experience by providing developers with a programmable and reliable edge cloud platform that they adopt as their own.

Organizations must keep up with complex and ever-evolving end-user requirements. We help them surpass their end-users' expectations by powering fast, secure, and scalable digital experiences. We built a powerful edge cloud platform, designed from the ground up to be programmable and support agile software development. We believe our platform gives our customers a significant competitive advantage, whether they were born into the digital age or are just embarking on their digital transformation journey. Our platform consists of three key components: a programmable edge, a software-defined modern network, and a philosophy of customer empowerment. Our programmable edge provides developers with real-time visibility and control where they can write and deploy code to push application logic to the edge. It supports modern application delivery processes, freeing developers to innovate without constraints. Our software-defined modern network is built for the software-defined future. It is powerful, efficient, and flexible, designed to enable us to rapidly scale to meet the needs of the most demanding customers and never be a barrier to their growth. Our 45 terabit edge network is located in 60 uniquely designed points-of-presence (POPs) across the world as of March 31, 2019. Finally, being developers ourselves, we empower customers to build great things while supporting their efforts through frictionless tools and a deeply technical support team that facilitates ongoing collaboration.

We serve both established enterprises and technology-savvy organizations. Our customers represent a diverse set of organizations across many industries with one thing in common: they are competing by using the power of software to build differentiation at the edge. With our edge cloud platform, our customers are disrupting existing industries and creating new ones. For example, several of our customers have reinvented digital publishing by connecting readers through subscription models to indispensable content, helping people understand the world through deeply reported independent journalism. Our customers' software applications use our edge cloud platform to ensure concert goers can buy tickets to the live events they love, travelers can book flights seamlessly and embark on their next great adventure, and sports fans can stream events in real time, across all devices. The range of applications that developers build with our edge cloud platform continues to surpass our expectations.

So where do we go from here? Our vision is to create a trustworthy internet, where good thrives. We want all developers to have the ability to deliver the next transformative digital experience on a global scale. And because big ideas often start small, we love it when developers experiment and iterate on our edge cloud platform, coming up with exciting new ways to solve today's complex problems.

Our usage-based revenue grows as our customers' websites and applications deliver, process, and protect more traffic, as they adopt more features of our edge platform and as they more broadly adopt our platform across their organizations. A meaningful indicator of the increased activity from our existing customers is our Dollar-Based Net Expansion Rate (DBNER), which was 147.3% and 132.0% for the years ended December 31, 2017 and 2018, respectively. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Business Metrics—Dollar-Based Net Expansion Rate."

We have achieved significant growth in recent periods. For the years ended December 31, 2017 and 2018, our revenue was $104.9 million and $144.6 million, respectively. We incurred a net loss of $32.5 million and $30.9 million for the years ended December 31, 2017 and 2018, respectively.

Industry Background

Online Behaviors and Expectations Have Changed

Hyper-connected end-users are increasingly impatient. We live in a digital age defined by constant connectivity and instant gratification. These connected end-users have more choice, more access to information, and less patience. Slower load times lead to fewer page views and lower customer satisfaction. According to a Google study, as page load times increase from one to five seconds, the probability of bounce increases 90%.

End-users expect instant, personalized, and dynamic experiences online. We believe personalized content results in increased sales and an increased likelihood of repeat purchases. The increasing popularity of the mobile application, gaming, and live-streaming markets has fueled explosive growth in dynamic content and the transformative nature of emerging technologies like the internet of things (IoT) and augmented and virtual reality (AR/VR) is readily apparent. These technologies will require companies to rapidly process vast amounts of data closer to the end-user or device for instant, accurate responses.

End-users easily part with personal data but expect privacy in return. Lured by the promise of the next truly delightful online experience, many end-users willingly part with personal data. However, they expect enterprises to put the right measures in place to guarantee the privacy of their data.

Enterprises Need To Reinvent Themselves To Compete

To stay relevant, organizations must embrace digital transformation. Enterprises are under growing pressure to deliver the next transformative online experience or risk losing customers to the competition. This requires them to embrace digital transformation.

Digital transformation is driving the growth of hybrid and multi-cloud deployments. A growing number of enterprises are tapping into the agility, flexibility, and scalability of the cloud to help support their digital transformation efforts. While some may opt for hybrid cloud deployments, multi-cloud is becoming increasingly popular as a means of avoiding vendor lock-in and ensuring redundancy for mission critical websites and applications.

Enterprises are looking for cloud partners who can scale on-demand. In this digital age, enterprises are expected to deliver exceptional online experiences that can handle sudden and unpredicted spikes in traffic. Organizations are looking for partners with broad global coverage who can scale on demand.

Savvy enterprises see edge computing as the next evolution of the cloud. Industry leaders looking for ways to deliver the next truly delightful application experience for their end-users are turning to edge computing for answers. Gartner defines edge computing as “solutions that facilitate data processing at or near the source of data generation.” Gartner estimates that, by 2022, 75% of enterprise-generated data will be created and processed outside a traditional data center or cloud, at the network edge.

Developers Are Empowered and Powerful

Developers are the new decision-makers. As enterprises embrace digital transformation, the future will be built in software, in the cloud, by developers. Developers are being empowered to make their own technology choices around which cloud platforms, services, programming languages, and frameworks are needed to create new and improved applications.

Software differentiation is being built not bought. Enterprises rely on developers to build custom software to gain a competitive advantage. Cloud platforms have made it easier than ever for developers to build their own custom applications quickly and cost effectively.

Developers are adopting modern software delivery practices. Operational efficiency needs are driving the adoption of more agile application delivery practices. Modern software delivery practices are also extending to security with the growing popularity of DevSecOps.

Developers Are Expecting More from Cloud Providers

Today’s developers seek the freedom to innovate and experiment on their own terms. As they select cloud partners to support their software delivery needs, they are demanding the same level of flexibility. Developers want providers they can grow with and who charge based on product consumption.

These Emerging Trends Pose Significant Challenges for Existing Solutions

Existing solutions for enterprises and developers, such as enterprise data centers, central cloud, small business-focused, or legacy CDNs, suffer from a number of technical limitations that make them particularly ill-equipped to address these new end-user, developer, and enterprise requirements.

Limitations of Legacy Vendors

Legacy CDNs, enterprise data centers, and central cloud architectures suffer from a number of technical limitations that make them particularly ill-equipped to address changing end-user, developer, and enterprise requirements. Legacy CDNs tend to be largely black box solutions, unable to provide real-time visibility and control, and operate on an outdated architecture, adding cost and limiting developers’ flexibility to expand on functionality. When enterprises choose to maintain their own data centers, they incur a high total cost of ownership associated with management of their own physical hardware in colocation facilities, leading to challenges in agility and handling attacks at scale. While central cloud vendors have benefitted from the growing popularity of IaaS offerings, running modern applications in the central cloud poses challenges related to latency, ability to pre-scale, and cost efficiency. As a result, developers have not been truly empowered to pursue digital transformations, despite many attempts for improvement within the industry.

Our Solution: The Developer’s Edge

We have built a powerful edge cloud platform, designed from the ground up to be programmable and support agile software development. We process, serve, and secure our customers’ applications as close to their end-users as possible, at the edge of the internet for enhanced performance and protection.

Programmable Edge. Our programmable edge sits in an extremely privileged position, between our customers’ applications and their end-users, placing our services closer to those users. It is designed to create a space for developers to innovate at their own pace, by providing:

- **Full programmability.** Our powerful platform allows developers to write and deploy their custom code to push application logic to the edge. We believe that logic like A/B testing, URL redirects, paywall authentication, and location/language customization can all be executed faster and more efficiently at the edge.
- **Reusable modules.** Our platform includes reusable modules based on commonly deployed custom code examples. We package and add these reusable modules to our platform, which do not require developer experience to implement.
- **Real-time visibility and control.** Our edge cloud platform is built with instant visibility and control as a core tenet. We stream log data from our network edge in real time so developers can instantly see the impact of new code in production, troubleshoot issues as they occur, and rapidly identify suspicious traffic. We also empower developers to make and roll back their own configuration or code changes on the fly.
- **Agile development.** Developers can build our platform into their technology stack to power continuous integration/continuous development (CI/CD) efforts. They can use our edge cloud platform to help push new code to production multiple times per day as they test new features, fix bugs, or enhance existing offerings.
- **Safety at the edge.** We built a serverless development platform at the edge, designed to allow us to run code in a safe and secure manner, while maintaining the performance and scalability needed for modern applications.

Software-Defined Modern Network. Our edge cloud platform is designed to take advantage of the modern internet. Our philosophy has been to differentiate through software by building a powerful software-centric network composed of unique and proprietary components. Our approach consists of the following key elements:

- **Software-centric approach at global scale.** We develop our software to run on custom-designed servers built upon commodity components and network hardware. With this approach we can control every aspect of the network, from request to response. We have created our own proprietary software-defined networking stack with built-in routing and load balancing, resulting in better network efficiency and greater flexibility to scale as we add more services.
- **POP design.** We built Fastly for the internet of today—meaning fewer POPs, each with massive scale and located at the key interconnection points of the internet. We run smaller clusters of more powerful servers that provide superior performance for customers who expect updates to be pushed out to their global end-users nearly instantaneously. Legacy CDNs do not offer this benefit, as it is extremely difficult to update hundreds of thousands of servers around the world.
- **Server efficiency.** We have a highly efficient global server footprint because we combine advanced server and network hardware with our world class software at each of our POPs.
- **One network.** We have built a single powerful, compliant network to support our customers' security and delivery needs.

Customer Empowerment Philosophy. We believe in empowering our customers to build great things, while collaborating with them to promote their success. We have a unique understanding of what it takes to deliver a frictionless customer experience.

- **Freedom to try.** Our free trial allows developers to sign up and start experimenting with our edge cloud platform in a frictionless, self-service manner.
- **Flexible support model.** Developers are free to program on our edge cloud platform, taking advantage of our rich documentation and expertise of our developer community.
- **Partner friendly.** Just as we expose the ability to program at the edge to our customer base, we enable our partners to build applications on our edge cloud platform.

Strengths of Our Platform

Our edge cloud platform has the following strengths:

- **Programmability.** Our edge cloud platform is fully programmable. Developers can tap into our user interface to address simple use cases. More complex use cases can be addressed using our powerful edge programming language and Application Programming Interfaces (APIs) to write custom code at the edge.
- **Real-time visibility and control.** Our edge cloud platform is built with real-time visibility and control as a core tenet. We allow developers to make instant configuration changes and see the impact of those changes nearly immediately.
- **Consistent and superior performance.** We accelerate web and mobile applications, allowing enterprises to provide delightful end-user experiences. Our modern platform design enables us to cache dynamic content for long periods of time and retrieve it quickly so web pages load faster.
- **Support for agile development processes.** The speed, flexibility, and control offered by our edge cloud platform delivers empowers developers to embrace agile development practices. They can build our edge cloud platform into their technology stack to power CI/CD and DevSecOps efforts.
- **Easy to scale.** Our software-centric approach and software-defined modern network design are designed to enable enterprises to scale on demand.
- **One network.** Using a single, compliant network, our edge cloud platform is able to support our enterprise customers' security and delivery needs in a highly efficient manner.
- **Scalable security.** Our network is designed to provide the massive scale needed to defend against DDoS attacks without sacrificing performance.

- **Large and growing developer community.** We provide support to some of the most important open source tools used by developers. Powering the tools that developers use provides us with significant exposure to the developer ecosystem.

- **Good neighborhood.** We choose to do business with customers who we believe uphold similar values to our own. We do not knowingly do business with websites that promote violence or hate.

- **Partner integrations.** We offer full-featured APIs for seamless integration into any technology stack.

Market Opportunity

We believe that our market opportunity is large and growing and is predominately untapped. We offer a viable solution for many use cases which have not historically been addressed by legacy technologies. On top of our edge computing capabilities, we offer content delivery, streaming, cloud security, and application delivery control.

When incorporating these additional offerings, we estimate a total market opportunity of approximately $18.0 billion in 2019, based on expected growth from 2017, to $35.8 billion in 2022, growing with an expected CAGR of 25.6%.

Growth Strategy

Key elements of our growth strategy include the following:

- **Invest in our technology platform.** We intend to continue to invest in our large-scale, enterprise-grade edge cloud platform which is both developer-friendly and fully programmable.

- **Expansion into additional vertical markets.** We will build upon our success in digital publishing, media and entertainment, technology, online retail, travel and hospitality, and financial services, while expanding into new markets over time.

- **Further enable channel partners.** Our edge cloud platform is the backend of choice for many of the largest PaaS vendors serving the developer community. These PaaS vendors aggregate millions of unique web properties under one brand, using us as their edge cloud. We believe that more and more web applications will be built on convenient and powerful out-of-the-box solutions offered by large PaaS vendors. As these partners expand their customer base, we will grow alongside them.

- **Grow our developer community and continue our open source commitment.** Developers are familiar with the open source caching software that we use, which makes adopting our platform easier. Developers are also familiar with the PaaS vendors we empower and the large number of open source tools we deliver and secure. This familiarity helps us in the sales process, and we will continue to invest in this ecosystem. We will continue to work on open source projects, which will empower developers to build applications in multiple languages and run them faster and more securely at our edge.

- **Invest in marketing.** As we look towards our next stage of growth, we plan on significantly increasing our brand and digital marketing efforts, running campaigns that target both developers and business-level decision makers across different verticals.

- **Expand existing customer relationships.** We plan to continually increase wallet-share over time for existing customers as we build out new products and features, and as customers continue to fully recognize the value of our platform.

- **Further enable channel partners.** Many of our solution partners are Platform as a Service (PaaS) providers who built us into their platform to offer faster, more secure, and scalable hosting services. As these partners expand their customer base, we will grow alongside them.

- **Grow our technology ecosystem.** We act as the unifying layer for several cloud services. As our customers consume more cloud and Software as a Service (SaaS) offerings, we can create additional value and grow with our partners.

- **Continue our open source commitment.** Developers are familiar with the open source caching software that we use, which makes adopting our platform easier. We will continue to work on open source projects, which will empower developers to build applications in multiple languages, and run them faster and more securely at our edge.

- **Extend our global footprint.** As our customer base grows, we plan to aggressively scale our network accordingly. We are expanding our global corporate footprint to support international customers.

Our Culture and Employees

Technology has the potential to make a radically positive impact on the world, and we aspire to improve human lives through our work. We were founded on strong ethical principles, and we have intentionally grown values-first, scaling our workforce, services, customer portfolio, and investment partners purposefully. We choose to work with customers that we believe have integrity, are trustworthy, and do not promote violence or hate.

We are dedicated to building a diverse workforce and leadership team that reflects our values and the unique needs of our global customer base. We strive to be a company full of kind, honest, passionate, and high-integrity people.

Risk Factors

Our business is subject to numerous risks and uncertainties, including those highlighted in the section titled “Risk Factors” immediately following this prospectus summary. These risks include, among others, the following:

- If we are unable to attract new customers, our business will be harmed.

- Our business depends on customers increasing their use of our platform, and any loss of customers or decline in their use of our platform could harm our business.
- If our platform fails to perform properly due to defects, interruptions, delays in performance, or similar problems, and if we fail to develop enhancements to resolve any defect, interruption, delay, or other problems, we could lose customers, become subject to service performance or warranty claims, or incur significant costs.
- If we fail to forecast our revenue accurately, or we fail to manage our expenditures, our operating results could be adversely effected.
- Our limited operating history and our history of operating losses makes it difficult to evaluate our current business and prospects and may increase the risks associated with your investment.
- If we fail to adapt and respond effectively to rapidly changing technology, evolving industry standards, changing regulations, and changing customer needs, requirements, or preferences, our products may become less competitive.
- Failure to effectively develop and expand our marketing and sales capabilities could harm our ability to increase our customer base and achieve broader market acceptance of our platform.
- The markets in which we participate are competitive, and if we do not compete effectively, our business will be harmed.
- If we fail to maintain and enhance our brand, our ability to expand our customer base will be impaired and our business, results of operations, and financial condition may suffer.
- We receive a substantial portion of our revenues from a limited number of customers, and the loss of, or a significant reduction in usage by, one or more of our major customers would result in lower revenues.
- We may not be able to scale our business quickly enough to meet our customers' growing needs. If we are not able to grow efficiently, our business could be harmed.

If we are unable to adequately address these and other risks we face, our business may be harmed.

Corporate Information

We were initially incorporated under the laws of the State of Delaware in March 2011 under the name SkyCache, Inc. We changed our name to Fastly, Inc. in May 2012.

Our principal executive offices are located at 475 Brannan Street, Suite 300, San Francisco, California 94107. Our telephone number is 1-844-432-7859. Our website address is www.fastly.com. The information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus, and you should not consider any information contained on, or that can be accessed through, our website as part of this prospectus or in deciding whether to purchase our Class A common stock.

"Fastly," the Fastly logo, and other trademarks or service marks of Fastly, Inc. appearing in this prospectus are the property of Fastly, Inc. This prospectus contains additional trade names, trademarks, and service marks of others, which are the property of their respective owners. Solely for convenience, trademarks and trade names referred to in this prospectus may appear without the ® or TM symbols.

We have two classes of authorized common stock, Class A common stock and Class B common stock. The rights of the holders of Class A common stock and Class B common stock are identical, except with respect to voting and conversion. Each share of Class A common stock is entitled to one vote per share. Each share of Class B common stock is entitled to 10 votes per share and is convertible into one share of Class A common stock. Outstanding shares of Class B common stock will represent approximately % of the voting power of our outstanding capital stock immediately following this offering, and our directors, executive officers, and principal stockholders will continue to have substantial control over the company, representing voting power of approximately %.

Implications of Being an Emerging Growth Company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 (JOBS Act) and therefore we intend to take advantage of certain exemptions from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm pursuant to Section 404(b) of the Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley Act), reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved. We may take advantage of these exemptions for up to five years or until we are no longer qualify as an "emerging growth company," whichever is earlier. In addition, the JOBS Act provides that an "emerging growth company" can delay adopting new or revised accounting standards until those standards apply to private companies. We have elected to use this extended transition period under the JOBS Act. As a result, our consolidated financial statements may not be comparable to the financial statements of issuers who are required to comply with the effective dates for new or revised accounting standards that are applicable to public companies.

The Offering

Class A common stock offered	shares

Class A common stock to be outstanding after this offering	shares (shares if the underwriters' option to purchase additional shares of Class A common stock is exercised in full)
Class B common stock to be outstanding after this offering	shares
Total Class A and Class B common stock to be outstanding after this offering	shares
Underwriters' option to purchase additional shares of Class A common stock	shares
Voting rights	We have two classes of authorized common stock: Class A common stock and Class B common stock. The rights of the holders of Class A and Class B common stock are identical, except with respect to voting and conversion rights. The holders of Class A common stock are entitled to one vote per share, and the holders of Class B common stock are entitled to 10 votes per share, on all matters that are subject to stockholder vote. Following this offering, each share of Class B common stock may be converted into one share of Class A common stock at the option of the holder thereof, and will be converted into one share of Class A common stock upon transfer thereof, subject to certain exceptions. See the section titled "Description of Capital Stock" for additional information.
Use of proceeds	We estimate that we will receive net proceeds of approximately $ million, or approximately $ million if the underwriters exercise their option to purchase additional shares in full, based upon an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. The principal purposes of this offering are to increase our financial flexibility, create a public market for our Class A common stock, and facilitate our future access to the capital markets. We expect to use the net proceeds of this offering for working capital and other general corporate purposes. We may use a portion of the net proceeds we receive from this offering to repay up to approximately $47.5 million of indebtedness under our credit facilities. We may also use a portion of the net proceeds from this offering for acquisitions or strategic investments in complementary businesses or technologies, although we do not currently have any plans for any such acquisitions or investments. These expectations are subject to change. See "Use of Proceeds" for additional information.
Risk factors	See "Risk Factors" and the other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in our Class A common stock.
Proposed NYSE symbol	"FSLY"

The number of shares of our Class A and Class B common stock that will be outstanding after this offering is based on no shares of Class A common stock and 157,865,413 shares of Class B common stock (including preferred stock on an as-converted basis and reclassified as Class B common stock) outstanding as of December 31, 2018, and excludes:

- 24,357,214 shares of Class B common stock issuable upon the exercise of options outstanding as of December 31, 2018, at a weighted-average exercise price of $1.48 per share;
- 1,036,835 shares of Class B common stock issuable upon the exercise of warrants outstanding as of December 31, 2018 with a weighted-average exercise price of $3.28 per share, which are expected to remain outstanding after the closing of this offering;
- 1,219,609 shares of Class B common stock reserved for issuance under our 2011 Equity Incentive Plan, which shares will cease to be available for issuance at the time our 2019 Equity Incentive Plan becomes effective;
- shares of our Class A common stock reserved for future issuance pursuant to our 2019 Equity Incentive Plan, which will become effective prior to the completion of this offering and will include provisions that automatically increase the number of shares of Class A common stock reserved for issuance thereunder each year; and
- shares of Class A common stock reserved for future issuance under our 2019 Employee Stock Purchase Plan, which will become effective prior to the completion of this offering and will include provisions that automatically increase the number of shares of Class A common stock reserved for issuance thereunder each year.

Unless otherwise indicated, this prospectus reflects and assumes the following:

- the reclassification of all 50,604,959 outstanding shares of our common stock into an equal number of shares of our Class B common stock and the authorization of our Class A common stock;
- the conversion of all of our outstanding shares of our preferred stock into an aggregate of 107,260,454 shares of our Class B common stock immediately upon the closing of this offering;
- the conversion of all of our outstanding warrants to purchase shares of preferred stock into warrants to purchase an equal number of shares of our Class B common stock immediately upon the closing of this offering;
- the filing and effectiveness of our amended and restated certificate of incorporation in Delaware and the adoption of our amended and restated bylaws, each of which will occur immediately prior to the completion of this offering;
- no exercise of outstanding options or warrants after December 31, 2018; and
- no exercise by the underwriters of their option to purchase additional shares of our Class A common stock.

Summary Consolidated Financial and Other Data

The following tables summarize our consolidated financial and other data. We derived the summary consolidated statements of operations data for the years ended 2017 and 2018 from our audited consolidated financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results to be expected in the future.

When you read this summary consolidated financial data, it is important that you read it together with the historical consolidated financial statements and related notes to those statements, as well as "Selected Consolidated Financial and Other Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," included elsewhere in this prospectus.

Consolidated Statements of Operations Data	Year Ended December 31,	
(in thousands)	2017	2018
Revenue	$104,900	$144,563
Cost of revenue[1]	48,672	65,499
Gross profit	$56,228	79,064
Operating expenses:		
Research and development[1]	28,989	34,618
Sales and marketing[1]	40,818	50,134
General and administrative[1]	17,451	23,450
Total operating expenses	87,258	108,202
Loss from operations	(31,030)	(29,138)
Interest income	443	939
Interest expense	(1,116)	(1,810)
Other expense, net	(539)	(741)
Loss before income taxes	(32,242)	(30,750)
Income taxes	208	185
Net loss	$(32,450)	$(30,935)
Net loss attributable to common stockholders	$(32,450)	$(30,935)
Net loss per share attributable to common stockholders, basic and diluted	$(0.69)	$(0.63)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	46,799,801	48,754,382

(1) Includes stock-based compensation expense as follows:

(in thousands)	2017	2018
Cost of revenue	$190	$265
Research and development	1,040	1,332
Sales and marketing	493	1,023
General and administrative	1,086	1,459
Total	$2,809	$4,079

	As of December 31, 2018		
	Actual	Pro Forma(1)(5)	Pro Forma, asadjusted(2)(3)
	(in thousands)		
Consolidated Balance Sheet Data:			
Cash and cash equivalents	$36,963	$36,963	
Working capital[4]	85,517	85,517	
Total assets	$162,754	$162,754	
Convertible preferred stock warrant liabilities	3,261		

Convertible preferred stock	219,584	—
Common stock	1	3
Additional paid-in-capital	16,403	239,246
Accumulated deficit	(146,186)	(146,186)
Total stockholders' equity (deficit)	$(131,927)	$90,918

(1) The pro forma column reflects the automatic conversion of all outstanding shares of our convertible preferred stock into 107,260,454 shares of Class B common stock immediately upon the closing of this offering with a par value of $0.00002 per share.

(2) The pro forma as adjusted column further reflects the receipt of $ million in net proceeds from our sale of shares of Class A common stock in this offering at an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

(3) Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, respectively, the amount of cash and cash equivalents, working capital, total assets, and total stockholders' deficit by $ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. An increase or decrease of 1,000,000 in the number of shares we are offering would increase or decrease, respectively, the amount of cash and cash equivalents, working capital, total assets, and total stockholders' deficit by approximately $ million, assuming the initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions. The pro forma as adjusted information is illustrative only, and we will adjust this information based on the actual initial public offering price and other terms of this offering determined at pricing.

(4) Working capital is defined as current assets less current liabilities.

(5) The pro forma column reflects the conversion of convertible preferred stock warrant liabilities to purchase up to 884,460 shares of preferred stock into warrants to purchase up to 884,460 shares of Class B common stock.

	2017	2018
Key Business Metrics(1)		
Number of Customers (as of end of period)	1,439	1,582
Number of Enterprise Customers (as of end of period)	170	227
Dollar-Based Net Expansion Rate	147.3%	132.0%

(1) See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Business Metrics" for our definitions of these metrics.

Risk Factors

RISK FACTORS *Investing in our Class A 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 contained in this prospectus, including our consolidated financial statements and the related notes appearing at the end of this prospectus, before deciding to invest in our Class A common stock. Unless otherwise indicated, references to our business being harmed in these risk factors will include harm to our business, reputation, customer growth, results of operations, financial condition, or prospects. Any of these events could cause the trading price of our Class A common stock to decline, which would cause you to lose all or part of your investment. Our business, results of operations, financial condition, or prospects could also be harmed by risks and uncertainties not currently known to us or that we currently do not believe are material.*

Risks Related to Our Business and Industry

If we are unable to attract new customers, our business will be harmed.

To grow our business, we must continue to attract new customers. To do so, we must successfully convince potential customers of the benefits and the value of our platform. This may require significant and costly sales efforts that are targeted at larger enterprises and senior management of these potential customers. These factors significantly impact our ability to add new customers and increase the time, resources, and sophistication required to do so. In addition, numerous other factors, many of which are out of our control, may now or in the future impact our ability to acquire new customers, including potential customers' commitments to other providers, real or perceived costs of switching to our platform, our failure to expand, retain, and motivate our sales and marketing personnel, our failure to develop or expand relationships with potential customers and channel partners, failure by us to help our customers to successfully deploy our platform, negative media or industry or financial analyst commentary regarding us or our solutions, litigation, and deteriorating general economic conditions. Any of these factors could impact our ability to attract new customers to our platform. As a result of these and other factors, we may be unable to attract new customers, which would harm our business.

Our business depends on customers increasing their use of our platform, and any loss of customers or decline in their use of our platform could harm our business.

Our ability to grow and generate incremental revenue depends, in part, on our ability to maintain and grow our relationships with existing customers and to have them increase their usage of our platform. If our customers do not increase their use of our platform, our revenue may decline and our results of operations may be harmed. Customers are charged based on the usage of our platform. Most of our customers do not have long-term contractual financial

commitments to us, and therefore, most of our customers may reduce or cease their use of our products at any time without penalty or termination charges. Customers may terminate or reduce their use of our platform for any number of reasons.

In order for us to maintain or improve our results of operations, it is important that our customers use our platform in excess of their commitment levels, if any, and continue to use our platform on the same or more favorable terms. Our ability to retain our customers and expand their usage could be impaired for a variety of reasons. For example, our customers may choose to use other providers. Because our customers' minimum usage commitments for our platform are relatively low compared to their expected usage, it can be easy for certain customers to reallocate usage or switch from our platform to an alternative platform altogether. In addition, even if our customers expand their usage of our platform, we cannot guarantee that they will maintain those usage levels for any meaningful period of time. If any of these events were to occur, our business may be harmed.

Our usage and revenue may decline or fluctuate as a result of a number of factors, including customer budget constraints, customer satisfaction, changes in our customers' underlying businesses, changes in the type and size of our customers, pricing changes, competitive conditions, the acquisition of our customers by other companies, and general economic conditions. In addition, our customers currently have no obligation to renew their commitments for our platform after the expiration of their contract term, and a majority of our current customer contracts are only one year in duration. The loss of customers or reductions in their usage of our platform may each have a negative impact on our business, results of operations, and financial condition. If our customers reduce their usage of or do not continue to use our platform, our revenue and other results of operations will decline and our business will suffer. In addition, existing customers may negotiate lower rates for their usage in exchange for an agreement to renew, expand their usage in the future, or adopt new products. As a result, these customers may not reduce their usage of our platform, but the revenue we derive from that usage will decrease. If our usage or revenue fall significantly below the expectations of the public market, securities analysts, or investors, our business would be harmed.

Our future success also depends in part on our ability to expand our existing customer relationships by selling additional products to our existing customers. The rate at which our customers purchase products from us depends on a number of factors, including general economic conditions and pricing and services offered by our competitors. If our efforts to sell additional products to our customers are not successful, our business may be harmed.

If our platform fails to perform properly due to defects, interruptions, delays in performance. or similar problems, and if we fail to develop enhancements to resolve any defect, interruption, delay, or other problems, we could lose customers, become subject to service performance or warranty claims or incur significant costs.

Our operations are dependent upon our ability to prevent system interruption. The applications underlying our edge cloud computing platform are inherently complex and may contain material defects or errors, which may cause disruptions in availability or other performance problems. We have from time to time found defects in our platform and may discover additional defects in the future that could result in data unavailability, unauthorized access to, loss, corruption, or other harm to our customers' data. These defects or errors could also be found in third-party applications on which we rely. We may not be able to detect and correct defects or errors before implementing our products. Consequently, we or our customers may discover defects or errors after our products have been deployed.

We currently serve our customers from our POPs located around the world. Our customers need to be able to access our platform at any time, without interruption or degradation of performance. However, we have not developed redundancies for all aspects of our platform. We depend, in part, on our third-party facility providers' ability to protect these facilities against damage or interruption from natural disasters, power or telecommunications failures, criminal acts, and similar events. In some cases, third-party cloud providers run their own platforms that we access, and we are, therefore, vulnerable to their service interruptions. In the event that there are any errors in software, failures of hardware, damages to a facility, or misconfigurations of any of our services, we could experience lengthy interruptions in our platform as well as delays and additional expenses in arranging new facilities and services. Our customers may choose to divert their traffic away from our platform as a result of interruptions or delays. Even with current and planned disaster recovery arrangements, including the existence of redundant data centers that become active during certain lapses of service or damage to a POP, any such traffic diversions could harm our business.

We design our system infrastructure and procure and own or lease the computer hardware used for our platform. Design and mechanical errors, spikes in usage volume, and failure to follow system protocols and procedures could cause our systems to fail, resulting in interruptions on our platform. Moreover, we have experienced and may in the future experience system failures or interruptions in our platform as a result of human error. Any interruptions or delays in our platform, whether caused by our products, third-party error, our own error, natural disasters, or security breaches, or whether accidental or willful, could harm our relationships with customers, reduce customers' usage of our platform, and cause our revenue to decrease and/or our expenses to increase. Also, in the event of damage or interruption, our insurance policies may not adequately compensate us for any losses that we may incur. These factors in turn could further reduce our revenue, subject us to liability and cause us to issue service credits or cause customers to fail to renew their customer contracts, any of which could harm our business.

The occurrence of any defects, errors, disruptions in service, or other performance problems, interruptions, or delays with our platform, whether in connection with the day-to-day operations or otherwise, could result in:

- loss of customers;
- reduced customer usage of our platforms;
- lost or delayed market acceptance and sales of our products;
- delays in payment to us by customers;
- injury to our reputation and brand;

- legal claims, including warranty and service level agreement claims, against us; or
- diversion of our resources, including through increased service and warranty expenses or financial concessions, and increased insurance costs.

The costs incurred in correcting any material defects, errors, or other performance problems in our platform may be substantial and could harm our business.

If we fail to forecast our revenue accurately, or if we fail to manage our expenditures, our operating results could be adversely affected.

Because our recent growth has resulted in the rapid expansion of our business and revenues, we do not have a long history upon which to base forecasts of future revenue and operating results. We cannot accurately predict customers' usage or renewal rates given the diversity of our customer base across industries, geographies and size, and other factors. Accordingly, we may be unable to accurately forecast our revenues notwithstanding our substantial investments in sales and marketing, infrastructure, and research and development in anticipation of continued growth in our business. If we do not realize returns on these investments in our growth, our results of operations could differ materially from our forecasts, which would adversely affect our results of operations and could disappoint analysts and investors, causing our stock price to decline.

Our limited operating history and our history of operating losses makes it difficult to evaluate our current business and prospects and may increase the risks associated with your investment.

We were founded in 2011 and have experienced net losses and negative cash flows from operations since inception. Our limited operating history makes it difficult to evaluate our current business and our future prospects, including our ability to plan for and model future growth. We have encountered and will continue to encounter risks and difficulties frequently experienced by rapidly growing companies in constantly evolving industries, including the risks described in this prospectus. If we do not address these risks successfully, our business may be harmed.

We generated a net loss of $30.9 million for the year ended December 31, 2018, and as of December 31, 2018, we had an accumulated deficit of $146.2 million. We will need to generate and sustain increased revenue levels and manage costs in future periods in order to become profitable; even if we achieve profitability, we may not be able to maintain or increase our level of profitability. We intend to continue to expend significant funds to support further growth and further develop our platform, including expanding the functionality of our platform, expanding our technology infrastructure and business systems to meet the needs of our customers, expanding our direct sales force and partner ecosystem, increasing our marketing activities, and growing our international operations. We will also face increased compliance costs associated with growth, expansion of our customer base, and the costs of being a public company. Our efforts to grow our business may be costlier than we expect, and we may not be able to increase our revenue enough to offset our increased operating expenses. We may incur significant losses in the future for a number of reasons, including the other risks described herein, and unforeseen expenses, difficulties, complications and delays, and other unknown events. If we are unable to achieve and sustain profitability, our business may be harmed.

Further, we have limited historical financial data and operate in a rapidly evolving market. As such, any predictions about our future revenue and expenses may not be as accurate as they would be if we had a longer operating history or operated in a more predictable market.

If we fail to adapt and respond effectively to rapidly changing technology, evolving industry standards, changing regulations, and changing customer needs, requirements, or preferences, our products may become less competitive.

The market in which we compete is relatively new and subject to rapid technological change, evolving industry standards and regulatory changes, as well as changing customer needs, requirements, and preferences. The success of our business will depend, in part, on our ability to adapt and respond effectively to these changes on a timely basis. If we are unable to develop and sell new products that satisfy our customers and provide enhancements, new features, and capabilities to our platform that keep pace with rapid technological and industry change, our revenue and operating results could be adversely affected. If new technologies emerge that enable our competitors to deliver competitive products and applications at lower prices, more efficiently, more conveniently, or more securely, such technologies could adversely impact our ability to compete. If our platform does not allow us or our customers to comply with the latest regulatory requirements, our existing customers may decrease their usage on our platform and new customers will be less likely to adopt out platform.

Our platform must also integrate with a variety of network, hardware, mobile, and software platforms and technologies, and we need to continuously modify and enhance our products and platform capabilities to adapt to changes and innovation in these technologies. If developers widely adopt new software platforms, we would have to attempt to develop new versions of our products and enhance our platform's capabilities to work with those new platforms. These development efforts may require significant engineering, marketing, and sales resources, all of which would affect our business and operating results. Any failure of our platform's capabilities to operate effectively with future infrastructure platforms, technologies, and software platforms could reduce the demand for our platform. If we are unable to respond to these changes in a cost-effective manner, our products may become less marketable and less competitive or obsolete, and our business may be harmed.

Moreover, our platform is highly technical and complex and relies on the Varnish Configuration Language (VCL). Potential developers may be unfamiliar or opposed to working with VCL and therefore decide to not adopt our platform, which may harm our business.

Failure to effectively develop and expand our marketing and sales capabilities could harm our ability to increase our customer base and achieve broader market acceptance of our platform.

We have historically benefitted from word-of-mouth and other organic marketing to attract new customers. Through this word-of-mouth marketing, we have been able to build our brand with relatively low marketing and sales costs. This strategy has allowed us to build a substantial customer base and community of users who use our products and act as advocates for our brand and our platform, often within their own corporate organizations. However, our ability to further increase our customer base and achieve broader market acceptance of our edge cloud platform will significantly depend on our ability to expand our marketing and sales operations. We plan to continue expanding our sales force and strategic partners, both domestically and internationally. We also plan to dedicate significant resources to sales, marketing, and demand-generation programs, including various online marketing activities as well as targeted

account-based advertising. The effectiveness of our targeted account-based advertising has varied over time and may vary in the future. All of these efforts will require us to invest significant financial and other resources and if they fail to attract additional customers our business will be harmed. We have also used a strategy of offering free trial versions of our platform in order to strengthen our relationship and reputation within the developer community by providing these developers with the ability to familiarize themselves with our platform without first becoming a paying customer. However, most trial accounts do not convert to paid versions of our platform, and to date, only a few users who have converted to paying customers have gone on to generate meaningful revenue. If our other lead generation methods do not result in broader market acceptance of our platform and the users of trial versions of our platform do not become, or are unable to convince their organizations to become, paying customers, we will not realize the intended benefits of this strategy, and our business will be harmed.

We believe that there is significant competition for sales personnel, including sales representatives, sales managers, and sales engineers, with the skills and technical knowledge that we require. Our ability to achieve significant revenue growth will depend, in large part, on our success in recruiting, training, and retaining sufficient numbers of sales personnel to support our growth. New hires require significant training and may take significant time before they achieve full productivity. Our recent hires may not become productive as quickly as we expect, if at all, and we may be unable to hire or retain sufficient numbers of qualified individuals in the markets where we do business or plan to do business. In addition, particularly if we continue to grow rapidly, new members of our sales force will have relatively little experience working with us, our platform, and our business model. If we are unable to hire and train sufficient numbers of effective sales personnel, our sales personnel do not reach significant levels of productivity in a timely manner, or our sales personnel are not successful in acquiring new customers or expanding usage by existing customers, our business will be harmed.

The markets in which we participate are competitive, and if we do not compete effectively, our business will be harmed.

The market for cloud computing platforms, particularly enterprise grade products, is highly fragmented, competitive, and constantly evolving. With the introduction of new technologies and market entrants, we expect that the competitive environment in which we compete will remain intense going forward. Legacy CDNs, such as Akamai, Limelight, EdgeCast (part of Verizon Digital Media), Level3, and Imperva, and small business-focused CDNs, such as Cloudflare, InStart, StackPath, and Section.io, offer products that compete with ours. We also compete with cloud providers who are starting to offer compute functionality at the edge like Amazon's CloudFront, AWS Lambda, and Google Cloud Platform, as well as traditional data center and appliance vendors like F5, Citrix, A10 Networks, Cisco, Imperva, Radware, and Arbor Networks, who offer a range of on-premise solutions for load balancing, WAF, and DDoS. Some of our competitors have made or may make acquisitions or may enter into partnerships or other strategic relationships that may provide more comprehensive offerings than they individually had offered. Such acquisitions or partnerships may help competitors achieve greater economies of scale than us. In addition, new entrants not currently considered to be competitors may enter the market through acquisitions, partnerships, or strategic relationships. We compete on the basis of a number of factors, including:

- our platform's functionality, scalability, performance, ease of use, reliability, security availability, and cost effectiveness relative to that of our competitors' products and services;
- our global network coverage;
- our ability to utilize new and proprietary technologies to offer services and features previously not available in the marketplace;
- our ability to identify new markets, applications, and technologies;
- our ability to attract and retain customers;
- our brand, reputation, and trustworthiness;
- our credibility with developers;
- the quality of our customer support;
- our ability to recruit software engineers and sales and marketing personnel; and
- our ability to protect our intellectual property.

We face substantial competition from legacy CDNs, small business-focused CDNs, cloud providers, traditional data center, and appliance vendors. In addition, existing and potential customers may not use our platform, or may limit their use, because they pursue a "do-it-yourself" approach by putting in place equipment, software, and other technology products for content and application delivery within their internal systems; enter into relationships directly with network providers instead of relying on an overlay network like ours; or implement multi-vendor policies to reduce reliance on external providers like us.

Our competitors vary in size and in the breadth and scope of the products and services offered. Many of our competitors and potential competitors have greater name recognition, longer operating histories, more established customer relationships and installed customer bases, larger marketing budgets, and greater resources than we do. While some of our competitors provide a platform with applications to support one or more use cases, many others provide point-solutions that address a single use case. Other potential competitors not currently offering competitive applications may expand their product offerings to compete with our platform. Our competitors may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards, and customer requirements. An existing competitor or new entrant could introduce new technology that reduces demand for our

platform. In addition to application and technology competition, we face pricing competition. Some of our competitors offer their applications or services at a lower price, which has resulted in pricing pressures. Some of our larger competitors have the operating flexibility to bundle competing applications and services with other offerings, including offering them at a lower price or for no additional cost to customers as part of a larger sale of other products. For all of these reasons, we may not be able to compete successfully and competition could result in the failure of our platform to achieve or maintain market acceptance, any of which could harm our business.

If we fail to maintain and enhance our brand, our ability to expand our customer base will be impaired and our business, results of operations and financial condition may suffer.

We believe that maintaining and enhancing our brand is important to continued market acceptance of our existing and future products, attracting new customers, and retaining existing customers. We also believe that the importance of brand recognition will increase as competition in our market increases. Successfully maintaining and enhancing our brand will depend largely on the effectiveness of our marketing efforts, our ability to provide reliable products that continue to meet the needs of our customers at competitive prices, our ability to maintain our customers' trust, our ability to continue to develop new functionality and products, and our ability to successfully differentiate our platform from competitive products and services. Additionally, our brand and reputation may be affected if customers do not have a positive experience with our partners' services. Our brand promotion activities may not generate customer awareness or yield increased revenue, and even if they do, any increased revenue may not offset the expenses we incurred in building our brand. If we fail to successfully promote and maintain our brand, our business may be harmed.

We receive a substantial portion of our revenues from a limited number of customers, and the loss of, or a significant reduction in usage by, one or more of our major customers would result in lower revenues and could harm our business.

Our future success is dependent on establishing and maintaining successful relationships with a diverse set of customers. We currently receive a substantial portion of our revenues from a limited number of customers. For the year ended December 31, 2018, our top ten customers accounted for approximately 32% of our revenue. It is likely that we will continue to be dependent upon a limited number of customers for a significant portion of our revenues for the foreseeable future and, in some cases, the portion of our revenues attributable to individual customers may increase in the future. The loss of one or more key customers or a reduction in usage by any major customers would reduce our revenues. If we fail to maintain existing customers or develop relationships with new customers, our business would be harmed.

We may not be able to scale our business quickly enough to meet our customers' growing needs. If we are not able to grow efficiently, our business could be harmed.

As usage of our edge cloud computing platform grows and as the breadth of use cases for our platform expands, we will need to devote additional resources to improving our platform architecture, integrating with third-party applications and maintaining infrastructure performance. In addition, we will need to appropriately scale our processes and procedures that support our growing customer base, including increasing our number of POPs around the world and investments in systems, training, and customer support.

Any failure of or delay in these efforts could cause impaired system performance and reduced customer satisfaction. These issues could reduce the attractiveness of our platform to customers, resulting in decreased sales to new customers, lower renewal rates by existing customers, the issuance of service credits, or requested refunds, which would hurt our revenue growth and our reputation. Even if we are able to upgrade our systems and expand our staff, any such expansion will be expensive and complex, and require the dedication of significant management time and attention. We could also face inefficiencies or operational failures as a result of our efforts to scale our cloud infrastructure. We cannot be sure that the expansion and improvements to our cloud infrastructure will be effectively implemented on a timely basis, if at all, and such failures would harm our business.

We may have insufficient transmission bandwidth and colocation space, which could result in disruptions to our platform and loss of revenue.

Our operations are dependent in part upon transmission bandwidth provided by third-party telecommunications network providers and access to colocation facilities to house our servers. There can be no assurance that we are adequately prepared for unexpected increases in bandwidth demands by our customers, particularly when customers experience cyber-attacks. The bandwidth we have contracted to purchase may become unavailable for a variety of reasons, including service outages, payment disputes, network providers going out of business, natural disasters, networks imposing traffic limits, or governments adopting regulations that impact network operations. In some regions, bandwidth providers have their own services that compete with us, or they may choose to develop their own services that will compete with us. These bandwidth providers may become unwilling to sell us adequate transmission bandwidth at fair market prices, if at all. This risk is heightened where market power is concentrated with one or a few major networks. We also may be unable to move quickly enough to augment capacity to reflect growing traffic or security demands. Failure to put in place the capacity we require could result in a reduction in, or disruption of, service to our customers and ultimately a loss of those customers. Such a failure could result in our inability to acquire new customers demanding capacity not available on our platform.

Security incidents and attacks on our platform could lead to significant costs and disruptions that could harm our business, financial results, and reputation.

Our business is dependent on providing our customers with fast, efficient, and reliable distribution of applications and content over the internet. We transmit and store our customers' information, data, and encryption keys as well as our own; customer information and data may include personally identifiable data of and about their end-users. Maintaining the security and availability of our platform, network, and internal IT systems and the security of information we hold on behalf of our customers is a critical issue for us and our customers. Attacks on our customers and our own network are frequent and take a variety of forms, including DDoS attacks, infrastructure attacks, botnets, malicious file attacks, cross-site scripting, credential abuse, ransomware, bugs, viruses, worms, and malicious software programs. Malicious actors can attempt to fraudulently induce employees or suppliers to disclose sensitive information through spamming, phishing, or other tactics. In addition, unauthorized parties may attempt to gain physical access to our facilities in order to infiltrate our information systems. We have in the past been subject to cyber-attacks from third parties, including parties who we believe are sponsored by government actors. Since our customers share our multi-tenant architecture, an attack on any one of our customers could have a negative effect on other customers. These attacks have significantly increased the bandwidth used on our platform and have strained our network. If attacks like these were to occur in the future and if we do not have the systems and processes in place to respond to them, our business could be harmed.

Security incidents, whether as a result of third-party action, employee or customer error, technology impairment or failure, malfeasance or criminal activity, or hostile state actors, could result in unauthorized access to, or loss or unauthorized disclosure of, this information, litigation, indemnity obligations, and other possible liabilities. Further, certain of our insurance policies and the laws of some states may limit or prohibit insurance coverage for punitive or certain other types of damages or liability arising from gross negligence or intentional misconduct of us and our suppliers and we cannot assure you that we are adequately insured against the risks that we face.

In recent years, cyber-attacks have increased in size, sophistication, and complexity, increasing exposure for our customers and us. In addition, as we expand our emphasis on selling security-related products, we may become a more attractive target for attacks on our infrastructure intended to destabilize, overwhelm, or shut down our platform. For example, we have had security incidents in the past that have tested the limits of our infrastructure and impacted the performance of our platform. The costs to us to avoid or alleviate cyber or other security problems and vulnerabilities are significant. However, our efforts to address these problems and vulnerabilities may not be successful. Any significant breach of our security measures could:

- lead to the dissemination of proprietary information or sensitive, personal, or confidential data about us, our employees, or our customers—including personally identifiable information of individuals involved with our customers and their end-users;
- lead to interruptions or degradation of performance in our platform;
- threaten our ability to provide our customers with access to our platform;
- generate negative publicity about us;
- result in litigation and increased legal liability or fines; or
- lead to governmental inquiry or oversight.

The occurrence of any of these events could harm our business or damage our brand and reputation, lead to customer credits, loss of customers, higher expenses, and possibly impede our present and future success in retaining and attracting new customers. A successful security breach or attack on our infrastructure would be damaging to our reputation and could harm our business.

Similar security risks exist with respect to our business partners and the third-party vendors that we rely on for aspects of our information technology support services and administrative functions. As a result, we are subject to the risk that cyber-attacks on our business partners and third-party vendors may adversely affect our business even if an attack or breach does not directly impact our systems. It is also possible that security breaches sustained by our competitors could result in negative publicity for our entire industry that indirectly harms our reputation and diminishes demand for our platform.

The nature of our business exposes us to inherent liability risks.

Our platform and related applications, including our WAF and DDoS solutions, are designed to provide rapid protection against web application vulnerabilities and cyber-attacks. However, no security product can provide absolute protection against all vulnerabilities and cyber-attacks. Our platform is subject to cyber-attacks, and the failure of our platform and related applications to adequately protect against these cyber-attacks may allow our customers to be attacked. Any adverse consequences of these attacks, and our failure to meet our customers' expectations as they relate to such attacks, could harm our business.

Due to the nature of our applications, we are potentially exposed to greater risks of liability for product or system failures than may be inherent in other businesses. Although substantially all of our customer agreements contain provisions that limit our liability to our customers, these limitations may not be sufficient, and we cannot assure you that these limitations will be enforced or the costs of any litigation related to actual or alleged omissions or failures would not have a material adverse effect on us even if we prevail.

Failure to comply with governmental laws and regulations could harm our business.

Our business is subject to regulation by various federal, state, local, and foreign governments. If we do not comply with these laws or regulations or if we become liable under these laws or regulations due to the failure of our customers to comply with these laws, we could face direct liability or delivery of content by our platform may be blocked by certain governments. In certain jurisdictions, these regulatory requirements may be more stringent than those in the United States. Noncompliance with applicable regulations or requirements could subject us to investigations, sanctions, enforcement actions, disgorgement of profits, fines, damages, civil and criminal penalties, injunctions, or other collateral consequences. If any governmental sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business could be harmed. In addition, responding to any action will likely result in a significant diversion of management's attention and resources and an increase in professional fees. Enforcement actions and sanctions could harm our business.

Our sales to highly regulated organizations and government entities are subject to a number of challenges and risks.

We sell to customers in highly regulated industries such as financial services, insurance, and healthcare, as well as to various governmental agency customers, including state and local agency customers, and foreign governmental agency customers. Sales to such entities are subject to a number of challenges and risks. Selling to such entities can be highly competitive, expensive, and time-consuming, often requiring significant upfront time and expense without any assurance that these efforts will generate a sale. Government contracting requirements may change and in doing so restrict our ability to sell into the government sector until we comply with the revised requirements. Government demand and payment for our offerings are affected by public sector budgetary cycles and funding authorizations, with funding reductions or delays adversely affecting public sector demand for our offerings.

Further, highly regulated and governmental entities may demand shorter contract terms or other contractual provisions that differ from our standard arrangements, including terms that can lead those customers to obtain broader rights in our offerings than would be standard. Such entities may have statutory, contractual, or other legal rights to terminate contracts with us or our partners due to a default or for other reasons, and any such termination may harm our business. In addition, these governmental agencies may be required to publish the rates we negotiate with them, which could harm our negotiating leverage with other potential customers and in turn harm our business.

Our dedication to our values may negatively influence our financial results.

We have taken, and may continue to take, actions that we believe are in the best interests of our customers and our business, even if those actions do not maximize financial results in the short term. For instance, we do not knowingly allow our platform to be used to deliver content from groups that promote violence or hate, and that conflict with our values like strong ethical principles of integrity and trustworthiness, among others. However, this approach may not result in the benefits that we expect or may result in negative publicity, in which case our business could be harmed.

If we cannot maintain our company culture as we grow, our success and our business may be harmed.

We believe our culture has been a key contributor to our success to date and that the critical nature of the products that we provide promotes a sense of greater purpose and fulfillment in our employees. We have invested in building a strong corporate culture and believe it is one of our most important and sustainable sources of competitive advantage. Any failure to preserve our culture could negatively affect our ability to recruit and retain personnel and to effectively focus on and pursue our corporate objectives. As we grow and develop the systems and processes associated with being a public company, we may find it difficult to maintain these important aspects of our culture. In addition, while we have historically benefitted from having a dispersed workforce, as we grow and our resources become more globally dispersed and our organizational management structures become more complex, we may find it increasingly difficult to maintain these beneficial aspects of our corporate culture. If we fail to maintain our company culture, our business may be harmed.

Slower usage growth on our platform and numerous other factors could cause our revenue growth rate to slow.

Increasing usage on our platform is key to our revenue growth. Numerous factors can impact the usage growth of our platform, including:

- the pace of introduction of over-the-top (OTT) streaming video and other forms of digital content that consume bandwidth by our customers;
- the popularity of our customers' offerings as compared to those offered by companies that do not use our platform;
- adoption of new technologies that allow end-users to access content from a core cloud without having to access our network;
- customers, particularly large internet platform companies, utilizing their own data centers and implementing delivery approaches that limit or eliminate reliance on third-party providers like us; and
- macro-economic market and industry pressures.

We base our decisions about expense levels and investments on estimates of our future revenue and future anticipated rate of growth. Many of our expenses are fixed cost in nature for some minimum amount of time, such as with colocation and bandwidth providers, so it may not be possible to reduce costs in a timely manner or without the payment of fees to exit certain obligations early. If we experience slower usage growth on our platform than we expect or than we have experienced in recent years, our revenue growth rate will slow down and our business may be harmed.

Our growth depends in large part on the success of our partner relationships.

We maintain a partner ecosystem of companies who build edge applications to integrate with our platform. We are dependent on these partner relationships to amplify our reach and provide our customers with enhanced value from our platform. Our future growth will be increasingly dependent on the success of our partner relationships, including their development of useful applications for our platform. If those partnerships do not provide these benefits or if our partners are unable to serve our customers effectively, we may need to allocate resources internally to provide these services or our customers may not realize the full value of our platform, which could harm our business.

Moreover, our partners' business partners may not completely align with our core values and therefore may do business with companies that we otherwise would not. Our association with these companies could damage our brand and reputation and potentially harm our business.

We operate in an emerging and evolving market, which may develop more slowly or differently than we expect. If our market does not grow as we expect, or if we cannot expand our services to meet the demands of this market, our revenue may decline, or fail to grow, and we may incur operating losses.

The market for edge computing is in an early stage of development. There is considerable uncertainty over the size and rate at which this market will grow, as well as whether our platform will be widely adopted. Our success will depend, to a substantial extent, on the widespread adoption of our platform as an alternative to other solutions, such as legacy CDNs, enterprise data centers, central cloud, and small business-focused CDNs. Some organizations may be reluctant or unwilling to use our platform for a number of reasons, including concerns about additional costs, uncertainty regarding the reliability, and security of cloud-based offerings or lack of awareness of the benefits of our platform. Moreover, many organizations have invested substantial personnel and financial resources to integrate traditional on-premise services into their businesses, and therefore may be reluctant or unwilling to migrate to cloud-based services. Our ability to expand sales of our product into new and existing markets depends on several factors, including potential customer awareness of our platform; the timely completion of data centers in those markets; introduction and market acceptance of enhancements to our platform or new applications that we may introduce; our ability to attract, retain and effectively train sales and marketing personnel; our ability to develop relationships with partners; the effectiveness of our marketing programs; the pricing of our services; and the success of our competitors. If we are unsuccessful in developing and marketing our product into new and existing markets, or if organizations do not perceive or value the benefits of our platform, the market for our product might not continue to develop or might develop more slowly than we expect, either of which may harm our business.

The estimates of market opportunity, forecasts of market growth included in this prospectus may prove to be inaccurate, and any real or perceived inaccuracies may harm our reputation and negatively affect our business. Even if the market in which we compete achieves the forecasted growth, our business could fail to grow at similar rates, if at all.

Market opportunity estimates and growth forecasts included in this prospectus are subject to significant uncertainty and are based on assumptions and estimates that may not prove to be accurate. The variables that go into the calculation of our market opportunity are subject to change over time, and there is no guarantee that any particular number or percentage of addressable companies or end-users covered by our market opportunity estimates will purchase our products at all or generate any particular level of revenues for us. Even if the market in which we compete meets the size estimates and growth forecasted in this prospectus, our business could fail to grow for a variety of reasons, including reasons outside of our control, such as competition in our industry.

Usage of our platform accounts for substantially all of our revenue.

We expect that we will be substantially dependent on our edge cloud platform to generate revenue for the foreseeable future. As a result, our operating results could suffer due to:

- any decline in demand for our edge cloud platform;
- the failure of our edge cloud platform to achieve continued market acceptance;
- the market for edge cloud computing services not continuing to grow, or growing more slowly than we expect;
- the introduction of products and technologies that serve as a replacement or substitute for, or represent an improvement over, our edge cloud platform;
- technological innovations or new standards that our edge cloud platform does not address;
- sensitivity to current or future prices offered by us or our competitors;
- our customers' development of their own edge cloud platform; and
- our inability to release enhanced versions of our edge cloud platform on a timely basis.

If the market for our edge cloud platform grows more slowly than anticipated or if demand for our edge cloud platform does not grow as quickly as anticipated, whether as a result of competition, pricing sensitivities, product obsolescence, technological change, unfavorable economic conditions, uncertain geopolitical environment, budgetary constraints of our customers, or other factors, our business would be harmed.

We expect fluctuations in our financial results and key metrics, making it difficult to project future results, and if we fail to meet the expectations of securities analysts or investors, our stock price and the value of your investment could decline.

Our operating results, as well as our key metrics (including our DBNER) have fluctuated in the past and are expected to fluctuate in the future due to a variety of factors, many of which are outside of our control. As a result, our past results may not be indicative of our future performance and period-to-period comparisons of our operating results and key metrics may not be meaningful. In addition to the other risks described herein, factors that may affect our operating results include the following:

- fluctuations in demand for or pricing of our platform;
- our ability to attract new customers;
- our ability to retain our existing customers;
- fluctuations in the usage of our platform by our customers, which is directly related to the amount of revenue that we recognize from our customers;
- fluctuations in customer delays in purchasing decisions in anticipation of new products or product enhancements by us or our competitors;
- changes in customers' budgets and in the timing of their budget cycles and purchasing decisions;
- the timing of customer payments and any difficulty in collecting accounts receivable from customers;
- potential and existing customers choosing our competitors' products or developing their own products in-house;
- timing of new functionality of our existing platform;
- our ability to control costs, including our operating expenses;

- the amount and timing of payment for operating expenses, particularly research and development and sales and marketing expenses, including commissions;
- the amount and timing of non-cash expenses, including stock-based compensation, goodwill impairments, and other non-cash charges;
- the amount and timing of costs associated with recruiting, training, and integrating new employees;
- the effects of acquisitions or other strategic transactions;
- expenses in connection with acquisitions or other strategic transactions;
- our ability to successfully deploy POPs in new regions;
- general economic conditions, both domestically and internationally, as well as economic conditions specifically affecting industries in which our customers participate;
- the ability to maintain our partnerships;
- the impact of new accounting pronouncements;
- changes in the competitive dynamics of our market, including consolidation among competitors or customers;
- significant security breaches of, technical difficulties with, or interruptions to, the delivery and use of our platform; and
- awareness of our brand and our reputation in our target markets.

Additionally, certain large scale events, such as major elections and sporting events, can significantly impact usage of our platform, which could cause fluctuations in our results of operations. While increased usage of our platform during these events could result in increased revenue, these seasonal and one-time events could also impact the performance of our platform during those events and lead to a sub-optimal experience for some customers. Such annual and one-time events may cause fluctuations in our results of operations as they would impact both our revenue and our operating expenses.

Any of the foregoing and other factors may cause our results of operations to vary significantly. If our quarterly results of operations fall below the expectations of investors and securities analysts who follow our stock, the price of our Class A common stock could decline substantially, and our business could be harmed.

Our recent rapid growth may not be indicative of our future growth and, if we continue to grow rapidly, we may not be able to manage our growth effectively.

We have experienced substantial growth in our business since inception. For example, our headcount has grown from 379 employees as of December 31, 2017 to 449 employees as of December 31, 2018. In addition, we are rapidly expanding, and expect to continue to expand in the future, our international operations. We have also experienced significant growth in the number of customers, usage, and amount of data delivered across our platform. This growth has placed and may continue to place significant demands on our corporate culture, operational infrastructure, and management. We may not continue to grow as rapidly in the future. Overall growth of our revenue depends on a number of factors, including our ability to:

- address new and developing markets, such as large enterprise customers outside the United States;
- control expenses;
- recruit, hire, train, and manage additional qualified engineers;
- recruit, hire, train, and manage additional sales and marketing personnel;
- maintain our corporate culture;
- expand our international operations;
- implement and improve our administrative, financial and operational systems, procedures, and controls;
- attract new customers and increase our existing customers' usage on our platform;
- expand the functionality and use cases for the products we offer on our platform;
- provide our customers with customer support that meets their needs; and

- successfully identify and acquire or invest in businesses, products, or technologies that we believe could complement or expand our products.

We may not successfully accomplish any of the above objectives. We expect to continue to expend substantial financial and other resources on:

- sales and marketing, including a significant expansion of our sales organization;
- our infrastructure, including POP deployments, systems architecture, management tools, scalability, availability, performance, and security, as well as disaster recovery measures;
- product development, including investments in our product development team and the development of new products and new functionality for our existing products;
- acquisitions or strategic investments;
- international expansion; and
- general administration, including increased legal and accounting expenses associated with being a public company.

We employ a pricing model that subjects us to various challenges that could make it difficult for us to derive sufficient value from our customers.

We generally charge our customers for their usage of our platform based on the combined total usage, as well as the features and functionality enabled. Additionally, once our product is purchased, customers can also buy any combination of our add-on products. We do not know whether our current or potential customers or the market in general will continue to accept this pricing model going forward and, if it fails to gain acceptance, our business could be harmed. We also generally purchase bandwidth from internet service providers and server colocation space from third parties based on expected usage from our customers. Moreover, if our customers use our platform in a manner that is inconsistent with how we have purchased bandwidth, servers, and colocation space, our business could be harmed.

We do not have sufficient history with our pricing model to accurately predict the optimal pricing necessary to attract new customers and retain existing customers.

We have limited experience with respect to determining the optimal prices for our products and, as a result, we have in the past and expect that we will need to change our pricing model from time to time in the future. As the market for our products matures, or as new competitors introduce new products or services that compete with ours, we may be unable to attract new customers at the same price or based on the same pricing models as we have used historically. Pricing decisions may also impact the mix of adoption among our customers and negatively impact our overall revenue. Moreover, larger organizations may demand substantial price concessions. As a result, in the future we may be required to reduce our prices or develop new pricing models, which could adversely affect our revenue, gross margin, profitability, financial position, and cash flow.

Our sales and onboarding cycles with customers can be long and unpredictable, and our sales and onboarding efforts require considerable time and expense.

The timing of our sales with our enterprise customers and related revenue recognition is difficult to predict because of the length and unpredictability of the sales cycle for these customers. In addition, for our enterprise customers, the lengthy sales cycle for the evaluation and implementation of our products may also cause us to experience a delay between expenses for such sales efforts and the generation of corresponding revenue. The length of our sales cycle for these customers, from initial evaluation to payment, can range from several months to well over a year and can vary substantially from customer to customer. Similarly, the onboarding and ramping process with new enterprise customers can take several months. As the purchase of our products can be dependent upon customer initiatives, our sales cycle can extend to even longer periods of time. Customers often view a switch to our platform as a strategic decision requiring significant investment and, as a result, frequently require considerable time to evaluate, test, and qualify our product offering prior to entering into or expanding a contract commitment. During the sales cycle, we expend significant time and money on sales and marketing and contract negotiation activities, which may not result in a completed sale. Additional factors that may influence the length and variability of our sales cycle include:

- the effectiveness of our sales force, particularly new salespeople, as we increase the size of our sales force and train our new salespeople to sell to enterprise customers;
- the discretionary nature of customers' purchasing decisions and budget cycles;
- customers' procurement processes, including their evaluation of competing products;
- economic conditions and other factors affecting customer budgets;
- the regulatory environment in which our customers operate;
- integration complexity for a customer deployment;
- the customer's familiarity with edge cloud computing platforms;
- evolving customer demands; and

- competitive conditions.

Given these factors, it is difficult to predict whether and when a customer will switch to our platform.

Given that it can take several months for our customers to ramp up their usage of our platform, during that time, we may not be able to generate enough revenue from a particular customer or that customer may not increase their usage in a meaningful way. Moreover, because the switching costs are fairly low, our customers are able to switch from our platform to alternative services relatively easily.

We rely on the performance of highly skilled personnel, including our management and other key employees, and the loss of one or more of such personnel, or of a significant number of our team members, could harm our business.

We believe our success has depended, and continues to depend, on the efforts and talents of senior management and key personnel, including Artur Bergman, our Founder and Chief Executive Officer. From time to time, there may be changes in our management team resulting from the hiring or departure of executives and key employees, which could disrupt our business. We also are dependent on the continued service of our existing software engineers because of the complexity of our platform. Our senior management and key employees are employed on an at-will basis. We cannot ensure that we will be able to retain the services of any member of our senior management or other key employees or that we would be able to timely replace members of our senior management or other key employees should any of them depart. The loss of one or more of our senior management or other key employees could harm our business.

The failure to attract and retain additional qualified personnel could prevent us from executing our business strategy.

To execute our business strategy, we must attract and retain highly qualified personnel. Competition for executive officers, software developers, sales personnel, and other key employees in our industry is intense. In particular, we compete with many other companies for software developers with high levels of experience in designing, developing, and managing cloud-based software, as well as for skilled sales and operations professionals. In addition, we believe that the success of our business and corporate culture depends on employing people with a variety of backgrounds and experiences, and the competition for such diverse personnel is significant. While the market for such talented personnel is particularly competitive in the San Francisco Bay Area, where our headquarters is located, it is also competitive in other markets where we maintain operations. Many of the companies with which we compete for experienced personnel have greater resources than we do and can frequently offer such personnel substantially greater compensation than we can offer. If we fail to attract new personnel or fail to retain and motivate our current personnel, our business would be harmed.

If our platform does not achieve sufficient market acceptance, our financial results and competitive position will suffer.

To meet our customers' rapidly evolving demands, we invest substantial resources in research and development of enhanced products to incorporate additional functionality or expand the use cases that our platform addresses. Maintaining adequate research and development resources, such as the appropriate personnel and development technology, to meet the demands of the market is essential. If we are unable to develop products internally due to inadequate research and development resources, we may not be able to address our customers' needs on a timely basis or at all. In addition, if we seek to supplement our research and development capabilities or the breadth of our products through acquisitions, such acquisitions could be expensive and we may not successfully integrate acquired technologies or businesses into our business. When we develop or acquire new or enhanced products, we typically incur expenses and expend resources upfront to develop, market, promote, and sell the new offering. Therefore, when we develop or acquire and introduce new or enhanced products, they must achieve high levels of market acceptance in order to justify the amount of our investment in developing or acquiring and bringing them to market. Our new products or enhancements and changes to our existing products could fail to attain sufficient market acceptance for many reasons, including:

- failure to predict market demand accurately in terms of functionality and a failure to supply products that meet this demand in a timely fashion;
- defects, errors, or failures;
- negative publicity about our platform's performance or effectiveness;
- changes in the legal or regulatory requirements, or increased legal or regulatory scrutiny, adversely affecting our platform;
- emergence of a competitor that achieves market acceptance before we do;
- delays in releasing enhancements to our platform to the market; and
- introduction or anticipated introduction of competing products by our competitors.

If our platform and any future enhancements do not achieve adequate acceptance in the market, or if products and technologies developed by others achieve greater acceptance in the market, our business could be harmed.

Beyond overall acceptance of our platform by our customers, it is important that we maintain and grow acceptance of our platform among the developers that work for our customers. We rely on developers to choose our platform over other options they may have, and to continue to use and promote our platform as they move between companies. These developers often make design decisions and influence the product and vendor processes within our customers. If we fail to gain or maintain their acceptance of our platform, our business would be harmed.

We rely on third-party hosting providers that may be difficult to replace.

We rely on third-party hosting services such as Amazon Web Services (AWS), Google, Softlayer (acquired by IBM), and other cloud providers that facilitate the offering of our platform. Some of these third-party hosting services offer competing products to ours and therefore may not continue to be available on commercially reasonable terms, or at all. These providers may be unwilling to do business with us if they view our platform as a threat. Any loss of the right to use any of the hosting providers could impair our ability to offer our platform until we are able to obtain alternative hosting providers.

If we do not or cannot maintain the compatibility of our platform with third-party applications that our customers use in their businesses, our business will be harmed.

Because our customers choose to integrate our products with certain capabilities provided by third-party providers, the functionality and popularity of our platform depends, in part, on our ability to integrate our platform and applications with third-party applications. These third parties may change the features of their technologies, restrict our access to their applications, or alter the terms governing use of their applications in a manner that is adverse to our business. Such changes could functionally limit or prevent our ability to use these third-party technologies in conjunction with our platform, which would negatively affect adoption of our platform and harm our business. If we fail to integrate our platform with new third-party applications that our customers use, we may not be able to offer the functionality that our customers need, which would harm our business.

The success of our business depends on customers' continued and unimpeded access to our platform on the internet.

Our customers must have internet access in order to use our platform. Some internet providers may take measures that affect their customers' ability to use our platform, such as degrading the quality of the content we transmit over their lines, giving that content lower priority, giving other content higher priority than ours, blocking our content entirely, or attempting to charge their customers more for using our platform.

In December 2010, the Federal Communications Commission (FCC) adopted net neutrality rules barring internet providers from blocking or slowing down access to online content, protecting services like ours from such interference. The FCC has repealed the net neutrality rules, and it is currently uncertain how the U.S. Congress will respond to this decision. To the extent network operators attempt to interfere with our platform, extract fees from us to deliver our platform, or otherwise engage in discriminatory practices, our business could be adversely impacted. Within such a regulatory environment, we could experience discriminatory or anti-competitive practices that could impede our domestic and international growth, cause us to incur additional expense, or otherwise harm our business.

We provide service level commitments under our customer agreements. If we fail to meet these contractual commitments, we could be obligated to provide credits for future service, or face contract termination with refunds of prepaid amounts, which could harm our business.

Most of our customer agreements contain service level commitments. If we are unable to meet the stated service level commitments, including failure to meet the uptime and delivery requirements under our customer agreements, we may be contractually obligated to provide the affected customers with service credits which could significantly affect our revenues in the periods in which the uptime and/or delivery failure occurs and the credits are applied. We could also face customer terminations, which could significantly affect both our current and future revenues. Any service level failures could harm our business.

If we fail to offer high quality support, our business may be harmed.

Our customers rely on our support team to assist them in deploying our products effectively and resolve technical and operational issues. High-quality support is important for the renewal and expansion of our agreements with existing customers. The importance of maintaining high quality support will increase as we expand our business and pursue new customers. If we do not help our customers quickly resolve issues and provide effective ongoing support, our ability to maintain and expand our relationships with existing and new customers could suffer and our business could be harmed. Further, increased demand for customer support, without corresponding revenue, could increase costs and adversely affect our business. In addition, as we continue to grow our operations and expand internationally, we will need to be able to provide efficient customer support that meets our customers' needs globally at scale and our customer support team will face additional challenges, including those associated with delivering support and documentation in multiple languages. Our failure to do so could harm our business.

Future acquisitions, strategic investments, partnerships, or alliances could be difficult to identify and integrate, divert the attention of management, disrupt our business, and dilute stockholder value.

We may in the future seek to acquire or invest in businesses, products, or technologies that we believe could complement or expand our platform, enhance our technical capabilities, or otherwise offer growth opportunities. The pursuit of potential acquisitions may divert the attention of management and cause us to incur various expenses in identifying, investigating, and pursuing acquisitions, whether or not such acquisitions are completed. In addition, we have only limited experience in acquiring other businesses and we may not successfully identify desirable acquisition targets or, if we acquire additional businesses, we may not be able to integrate them effectively following the acquisition. Acquisitions could also result in dilutive issuances of equity securities or the incurrence of debt, which could adversely affect our operating results, may cause unfavorable accounting treatment, may expose us to claims and disputes by third parties, including intellectual property claims, and may not generate sufficient financial returns to offset additional costs and expenses related to the acquisitions. In addition, if an acquired business fails to meet our expectations, our business may be harmed.

Because we recognize revenue from usage on our platform over the term of the relevant contract, downturns or upturns in sales contracts are not immediately reflected in full in our operating results.

Revenue for usage on our platform accounts for substantially all of our total revenue. We recognize revenue over the term of each of our customer contracts, which are typically one year in length but may be longer in length. As a result, much of our revenue is generated from contracts entered into during previous periods. Consequently, a decline in new or renewed contracts in any one quarter may not significantly reduce our revenue for that quarter but could negatively affect our revenue in future quarters. Our revenue recognition model also makes it difficult for us to rapidly increase our revenue through new contracts in any period, as revenue from customers is recognized over the applicable term of their contracts.

Seasonality may cause fluctuations in our sales and operating results.

We have experienced, and expect to continue to experience in the future, seasonality in our business, and our operating results and financial condition may be affected by such trends in the future. We generally experience seasonal fluctuations in demand for our platform. For example, we typically have customers who increase their usage and requests when they need more capacity during busy periods, especially in the fourth quarter of the year, and then subsequently scale back. We believe that the seasonal trends that we have experienced in the past may continue for the foreseeable future, particularly as we expand our sales to larger enterprises. To the extent we experience this seasonality, it may cause fluctuations in our operating results and financial metrics, and make forecasting our future operating results and financial metrics difficult. Additionally, we do not have sufficient experience in selling certain of our products to determine if demand for these products are or will be subject to material seasonality.

Unfavorable conditions in our industry or the global economy or reductions in information technology spending could harm our business.

Our results of operations may vary based on the impact of changes in our industry or the global economy on us or our customers and potential customers. Current or future economic uncertainties or downturns could adversely affect our business and results of operations. Negative conditions in the general economy both in the United States and abroad, including conditions resulting from changes in gross domestic product growth, financial and credit market fluctuations, political turmoil, natural catastrophes, warfare, and terrorist attacks on the United States, Europe, the Asia Pacific region, or elsewhere, could cause a decrease in business investments, including spending on information technology, which would harm our business. To the extent that our platform and our products are perceived by customers and potential customers as too costly, or difficult to deploy or migrate to, our revenue may be disproportionately affected by delays or reductions in general information technology spending. Also, our competitors, many of whom are larger and have greater financial resources than we do, may respond to market conditions by lowering prices and attempting to lure away our customers. In addition, the increased pace of consolidation in certain industries may result in reduced overall spending on our products. We cannot predict the timing, strength, or duration of any economic slowdown, instability, or recovery, generally or within any particular industry.

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

Our net operating loss (NOL) carryforwards could expire unused and be unavailable to offset future income tax liabilities because of their limited duration or because of restrictions under U.S. tax law. Our NOLs generated in tax years ending on or prior to December 31, 2018 are only permitted to be carried forward for 20 years under applicable U.S. tax law. Under the Tax Cuts and Jobs Act (Tax Act), our federal NOLs generated in tax years ending after December 31, 2018 may be carried forward indefinitely, but the deductibility of such federal NOLs is limited (as described below under "The Tax Act could adversely affect our business and financial condition"). It is uncertain if and to what extent various states will conform to the Tax Act.

In addition, under Section 382 of the United States Internal Revenue Code of 1986, as amended (Code), a corporation that undergoes an "ownership change" is generally subject to limitations on its ability to utilize its pre-change NOLs to offset future taxable income. We may have experienced ownership changes in the past and may experience ownership changes in the future as a result of this offering and/or subsequent shifts in our stock ownership (some of which shifts are outside our control). Furthermore, our ability to utilize NOLs of companies that we have acquired or may acquire in the future may be subject to limitations. For these reasons, we may not be able to utilize a material portion of the NOLs, even if we were to achieve profitability.

Our current operations are international in scope and we plan on further geographic expansion, creating a variety of operational challenges.

A component of our growth strategy involves the further expansion of our operations and customer base internationally. For the year ended December 31, 2018, the percentage of revenue generated from customers outside the United States was 23% of our total revenue. We currently have offices in Japan, the United Kingdom, and the United States, as well as employees located throughout the world. We are continuing to adapt to and develop strategies to address international markets but there is no guarantee that such efforts will have the desired effect. As of December 31, 2018, approximately 16% of our full-time employees were located outside of the United States. We expect that our international activities will continue to grow over the foreseeable future as we continue to pursue opportunities in existing and new international markets, which will require significant management attention and financial resources. In connection with such expansion, we may face difficulties including costs associated with, varying seasonality patterns, potential adverse movement of currency exchange rates, longer payment cycle difficulties in collecting accounts receivable in some countries, tariffs and trade barriers, a variety of regulatory or contractual limitations on our ability to operate, adverse tax events, reduced protection of intellectual property rights in some countries, and a geographically and culturally diverse workforce and customer base. Failure to overcome any of these difficulties could harm our business.

Our current and future international business and operations involve a variety of risks, including:

- changes in a specific country's or region's political or economic conditions;
- greater difficulty collecting accounts receivable and longer payment cycles;
- potential or unexpected changes in trade relations, regulations, or laws;
- more stringent regulations relating to privacy and data security and the unauthorized use of, or access to, commercial and personal information, particularly in Europe;
- differing labor regulations, especially in Europe and Japan, where labor laws are generally more advantageous to employees as compared to the United States, including deemed hourly wage and overtime regulations in these locations;
- challenges inherent in efficiently managing an increased number of employees over large geographic distances, including the need to implement appropriate systems, policies, benefits, and compliance programs;
- challenges to our corporate culture resulting from a dispersed workforce;

- difficulties in managing a business in new markets with diverse cultures, languages, customs, legal systems, alternative dispute systems, and regulatory systems;
- increased travel, real estate, infrastructure, and legal compliance costs associated with international operations;
- currency exchange rate fluctuations and the resulting effect on our revenue and expenses, and the cost and risk of entering into hedging transactions if we chose to do so in the future;
- challenges related to providing support and developing products in foreign languages;
- limitations on our ability to reinvest earnings from operations in one country to fund the capital needs of our operations in other countries;
- laws and business practices favoring local competitors or general market preferences for local vendors;
- potential tariffs and trade barriers;
- limited or insufficient intellectual property protection or difficulties enforcing our intellectual property;
- political instability or terrorist activities;
- exposure to liabilities under anti-corruption and anti-money laundering laws, and similar laws and regulations in other jurisdictions; and
- adverse tax burdens and foreign exchange controls that could make it difficult to repatriate earnings and cash.

Our limited experience in operating our business internationally increases the risk that any potential future expansion efforts that we may undertake will not be successful. If we invest substantial time and resources to further expand our international operations and are unable to do so successfully and in a timely manner, our business may be harmed.

Our international operations may subject us to potential adverse tax consequences.

We are expanding our international operations and staff to better support our growth into international markets. Our corporate structure and associated transfer pricing policies contemplate future growth into the international markets, and consider the functions, risks, and assets of the various entities involved in the intercompany transactions. The amount of taxes we pay in different jurisdictions may depend on: the application of the tax laws of the various jurisdictions, including the United States, to our international business activities; changes in tax rates; new or revised tax laws or interpretations of existing tax laws and policies; and our ability to operate our business in a manner consistent with our corporate structure and intercompany arrangements. The taxing authorities of the jurisdictions in which we operate may challenge our methodologies for pricing intercompany transactions pursuant to our intercompany arrangements or disagree with our determinations as to the income and expenses attributable to specific jurisdictions. If such a challenge or disagreement were to occur, and our position was not sustained, we could be required to pay additional taxes, interest, and penalties, which could result in one-time tax charges, higher effective tax rates, reduced cash flows, and lower overall profitability of our operations. Our financial statements could fail to reflect adequate reserves to cover such a contingency.

Legal, political, and economic uncertainty surrounding the planned exit of the United Kingdom (UK) from the European Union (EU) may be a source of instability in international markets, create significant currency fluctuations, adversely affect our operations in the UK, and pose additional risks to our business, revenue, financial condition, and results of operations.

The UK held a referendum on June 23, 2016 to determine whether the UK should leave the EU or remain as a member state, the outcome of which was in favor of leaving the EU. The UK's withdrawal from the EU is commonly referred to as Brexit. Under Article 50 of the 2009 Lisbon Treaty, the UK will cease to be an EU Member State when a withdrawal agreement is entered into (such agreement will also require parliamentary approval in the UK) or, failing that, two years following the notification of an intention to leave under Article 50, unless the European Council (together with the UK) unanimously decides to extend this period (the Brexit Date). On March 29, 2017, the UK formally notified the European Council of its intention to leave the EU.

It is unclear how long it will take to negotiate a withdrawal agreement, but it appears likely that Brexit will continue to involve a process of lengthy negotiations between the UK and the EU Member States to determine the future terms of the UK's relationship with the EU. For example, in March 2018, the UK reached a provisional agreement (the Withdrawal Agreement) with the EU on transitional arrangements following the UK's exit (which are intended to enable the UK to remain within the EU single market and customs union for a transitional period through 2020), but this Withdrawal Agreement needs to be formally agreed as part of the withdrawal arrangements currently under negotiation. Given that no formal withdrawal arrangements have been agreed upon, there have been several extensions to the Brexit Date and the UK has yet to formally leave the EU. On April 11, 2019, the EU granted the UK a further extension to the Brexit Date until October 31, 2019. The purpose of this extension is to allow for the ratification of the Withdrawal Agreement by the UK House of Commons. If the Withdrawal Agreement is ratified, the UK will leave the EU earlier than October 31, 2019. As a condition of the extension, the UK must take part in EU elections on May 23, 2019. If it does not, the UK must leave the EU on June 1, 2019 without any formal withdrawal arrangements.

Lack of clarity about future UK laws and regulations as the UK determines which EU rules and regulations to replace or replicate in the event of a withdrawal, including financial laws and regulations, tax and free trade agreements, intellectual property rights, data protection laws (including in respect of cross-border transfers of data from our entity in the UK to the EU), supply chain logistics, environmental, health and safety laws and regulations,

immigration laws, and employment laws, could decrease foreign direct investment in the UK, increase costs, depress economic activity, and restrict access to capital.

Until the UK officially exits the EU, EU laws and regulations will continue to apply, and changes to the application of these laws and regulations are unlikely to occur during negotiations. However, due to the size and importance of the UK economy, the uncertainty and unpredictability concerning the UK's legal, political, and economic relationship with the EU after Brexit may continue to be a source of instability in the international markets, create significant currency fluctuations, or otherwise adversely affect trading agreements or similar cross-border co-operation arrangements (whether economic, tax, fiscal, legal, regulatory, or otherwise) for the foreseeable future, including beyond the date of Brexit.

These developments, or the perception that any of them could occur, have had and may continue to have a significant adverse effect on global economic conditions and the stability of global financial markets, and could significantly reduce global market liquidity and limit the ability of key market participants to operate in certain financial markets. In particular, it could also lead to a period of considerable uncertainty in relation to the UK financial and banking markets, as well as on the regulatory process in Europe. Asset valuations, currency exchange rates, and credit ratings may also be subject to increased market volatility.

If the UK and the EU are unable to negotiate acceptable withdrawal terms or if other EU Member States pursue withdrawal, barrier-free access between the UK and other EU Member States or among the European Economic Area (EEA) overall could be diminished or eliminated. The long-term effects of Brexit will depend on any agreements (or lack thereof) between the UK and the EU and, in particular, any arrangements for the UK to retain access to EU markets either during a transitional period or more permanently.

Such a withdrawal from the EU is unprecedented, and it is unclear how the UK's access to the European single market for goods, capital, services, and labor within the EU, or single market, and the wider commercial, legal, and regulatory environment, will impact our UK operations and customers. Our UK operations service customers in the UK as well as in other countries in the EU and EEA and these operations could be disrupted by Brexit, particularly if there is a change in the UK's relationship to the single market.

We may also face new regulatory costs and challenges that could have an adverse effect on our operations. Depending on the terms of the UK's withdrawal from the EU, the UK could lose the benefits of global trade agreements negotiated by the EU on behalf of its members, which may result in increased trade barriers that could make our doing business in the EU and the EEA more difficult. Even prior to any change to the UK's relationship with the EU, the announcement of Brexit has created economic uncertainty surrounding the terms of Brexit and its consequences could adversely impact customer confidence resulting in customers reducing their spending budgets on our solutions, which could harm our business.

Our ability to timely raise capital in the future may be limited, or may be unavailable on acceptable terms, if at all, and our failure to raise capital when needed could harm our business, and debt or equity issued to raise additional capital may reduce the value of our Class A common stock.

We have funded our operations since inception primarily through payments received from our customers, sales of equity securities, and borrowings under our credit facilities. We cannot be certain when or if our operations will generate sufficient cash to fully fund our ongoing operations or the growth of our business. We intend to continue to make investments to support our business and may require additional funds. Additional financing may not be available on favorable terms, if at all. If adequate funds are not available on acceptable terms, we may be unable to invest in future growth opportunities, which could harm our business, operating results, and financial condition. Furthermore, if we issue additional equity securities, stockholders will experience dilution, and the new equity securities could have rights senior to those of our common stock. Because our decision to issue securities in future offerings will depend on numerous considerations, including factors beyond our control, we cannot predict or estimate the amount, timing, or nature of any future issuances of debt or equity securities. As a result, our stockholders bear the risk of future issuances of debt or equity securities reducing the value of our Class A common stock and diluting their interests.

We are exposed to fluctuations in currency exchange rates.

Our sales contracts are primarily denominated in U.S. dollars, and therefore substantially all of our revenue is not subject to foreign currency risk. However, a strengthening of the U.S. dollar could increase the real cost of our platform to our customers outside of the United States, which could adversely affect our operating results. In addition, an increasing portion of our operating expenses is incurred and an increasing portion of our assets is held outside the United States. These operating expenses and assets are denominated in foreign currencies and are subject to fluctuations due to changes in foreign currency exchange rates. While we do not currently engage in hedging efforts, if we do not successfully hedge against the risks associated with currency fluctuations, our business may be harmed.

Changes in our effective tax rate or tax liability may harm our business.

Our effective tax rate could be adversely impacted by several factors, including:

- Changes in the relative amounts of income before taxes in the various jurisdictions in which we operate that have differing statutory tax rates;
- Changes in tax laws, tax treaties, and regulations or the interpretation of them, including the Tax Act;
- Changes to our assessment about our ability to realize our deferred tax assets that are based on estimates of our future results, the prudence and feasibility of possible tax planning strategies, and the economic and political environments in which we do business;
- The outcome of current and future tax audits, examinations, or administrative appeals; and
- Limitations or adverse findings regarding our ability to do business in some jurisdictions.

Should our effective tax rate rise, our business could be harmed.

We could be required to collect additional sales taxes or be subject to other tax liabilities that may increase the costs our clients would have to pay for our offering and harm our business.

An increasing number of states have considered or adopted laws that attempt to impose tax collection obligations on out-of-state companies. Additionally, the Supreme Court of the United States recently ruled in *South Dakota v. Wayfair, Inc. et al* (Wayfair) that online sellers can be required to collect sales and use tax despite not having a physical presence in the buyer's state. In response to Wayfair, or otherwise, states or local governments may adopt, or begin to enforce, laws requiring us to calculate, collect, and remit taxes on sales in their jurisdictions. A successful assertion by one or more states requiring us to collect taxes where we presently do not do so, or to collect more taxes in a jurisdiction in which we currently do collect some taxes, could result in substantial tax liabilities, including taxes on past sales, as well as penalties and interest. The imposition by state governments or local governments of sales tax collection obligations on out-of-state sellers could also create additional administrative burdens for us, put us at a competitive disadvantage if they do not impose similar obligations on our competitors and decrease our future sales, which could harm our business.

The Tax Act could adversely affect our business and financial condition.

On December 22, 2017, President Trump signed into law H.R. 1, "An Act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018," informally titled the Tax Act, which significantly revises the Code. The Tax Act, among other things, reduces the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, limits the tax deduction for interest expense to 30% of adjusted taxable income (except for certain small businesses), limits the deduction for net operating losses carried forward from taxable years beginning after December 31, 2017 to 80% of current year taxable income, eliminates net operating loss carrybacks, imposes a one-time tax on offshore earnings at reduced rates regardless of whether they are repatriated, eliminates U.S. tax on foreign earnings (subject to certain important exceptions), allows immediate deductions for certain new investments instead of deductions for depreciation expense over time, and modifies or repeals many business deductions and credits. Notwithstanding the reduction in the corporate income tax rate, the overall impact of the Tax Act is uncertain and our business and financial condition could be adversely affected. In addition, it is uncertain if and to what extent various states will conform to the Tax Act. The impact of the Tax Act on holders of our Class A common stock is also uncertain and could be adverse. We urge our stockholders to consult with their legal and tax advisors with respect to this legislation and the potential tax consequences of investing in or holding our Class A common stock.

We are subject to anti-corruption, anti-bribery, anti-money laundering and similar laws, and non-compliance with such laws can subject us to criminal and/or civil liability and harm our business.

We are subject to the U.S. Foreign Corrupt Practices Act, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the UK Bribery Act, and other anti-bribery and anti-money laundering laws in the countries in which we conduct activities. Anti-corruption and anti-bribery laws have been enforced aggressively in recent years and are interpreted broadly to generally prohibit companies and their employees and third-party intermediaries from authorizing, offering or providing, directly or indirectly, improper payments, or benefits to recipients in the public or private sector. As we increase our international sales and business and sales to the public sector, we may engage with business partners and third-party intermediaries to market our platform and to obtain necessary permits, licenses, and other regulatory approvals. In addition, we or our third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities. We can be held liable for the corrupt or other illegal activities of these third-party intermediaries, our employees, representatives, contractors, partners, and agents, even if we do not explicitly authorize such activities.

While we have policies and procedures to address compliance with such laws, we cannot assure you that all of our employees and agents will not take actions in violation of our policies and applicable laws, for which we may be ultimately held responsible. As we increase our international sales and business, our risks under these laws may increase.

Detecting, investigating, and resolving actual or alleged violations can require a significant diversion of time, resources, and attention from senior management. In addition, noncompliance with anti-corruption, anti-bribery, or anti-money laundering laws could subject us to whistleblower complaints, investigations, sanctions, settlements, prosecution or other enforcement actions, disgorgement of profits, significant fines, damages, other civil and criminal penalties or injunctions, suspension or debarment from contracting with certain persons, the loss of export privileges, reputational harm, adverse media coverage, and other collateral consequences. If any subpoenas or investigations are launched, or governmental or other sanctions are imposed or if we do not prevail in any possible civil or criminal litigation, our business could be harmed. In addition, responding to any action will likely result in a materially significant diversion of management's attention and resources and significant defense costs and other professional fees. Enforcement actions and sanctions could further harm our business.

Our financial results may be adversely affected by changes in accounting principles applicable to us.

Generally accepted accounting principles in the United States (U.S. GAAP) are subject to interpretation by the Financial Accounting Standards Board (FASB), the SEC and other various bodies formed to promulgate and interpret appropriate accounting principles. For example, in May 2014, the FASB issued accounting standards update No. 2014-09 (Topic 606), Revenue from Contracts with Customers, which supersedes nearly all existing revenue recognition guidance under U.S. GAAP. The core principle of Topic 606 is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services; this new accounting standard also impacts the recognition of sales commissions. As an "emerging growth company," the JOBS Act allows us to delay adoption of new or revised accounting pronouncements applicable to public companies until such pronouncements are made applicable to private companies. We have elected to use this extended transition period under the JOBS Act with respect to new or revised accounting pronouncements, including Topic 606, and as a result Topic 606 became applicable to us on January 1, 2019.

Topic 606 permits the use of either a modified retrospective or full retrospective transition method. We are in the process of completing our assessment of the impact of adopting this standard and do not believe adoption will have a material impact on revenue, as currently reported. We believe the adoption of this standard will reduce the amount of commission expense previously recorded by $2.5 million to $5.0 million. We will adopt using the modified

retrospective method. The final application of this new guidance could have an adverse effect on our operating results in one or more periods as compared to what they would have been under current standards.

Under Topic 606, more estimates, judgments, and assumptions are required within the revenue recognition process than were previously required. Our reported financial position and financial results may be adversely affected if our estimates or judgments prove to be wrong, assumptions change, or actual circumstances differ from those in our assumptions. We currently believe the most significant impact of the standard on our financial results relates to sales commissions. These or other changes in accounting principles could adversely affect our financial results. Any difficulties in implementing these pronouncements could cause us to fail to meet our financial reporting obligations, which could result in regulatory discipline and harm our business.

If our estimates or judgments relating to our critical accounting policies prove to be incorrect, our results of operations could be adversely affected.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, as provided in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies." The results of these estimates form the basis for making judgments about the carrying values of assets, liabilities, and equity and the amount of revenue and expenses that are not readily apparent from other sources. Significant assumptions and estimates used in preparing our consolidated financial statements include those related to allowance for doubtful accounts, fair value of financial instruments, valuation of stock-based compensation, valuation of warrant liabilities, and the valuation allowance for deferred income taxes. Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below the expectations of securities analysts and investors, resulting in a decline in the trading price of our Class A common stock.

Current and future indebtedness could restrict our operations, particularly our ability to respond to changes in our business or to take specified actions.

Our current credit facilities contain, and any future indebtedness would likely contain, a number of restrictive covenants that impose significant operating and financial restrictions on us, including restrictions on our ability to take actions that may otherwise be in our best interests. Our ability to meet those financial covenants can be affected by events beyond our control, and we may not be able to continue to meet those covenants. In addition, a breach of a covenant under any one of our credit facilities may result cross-default under a separate credit facility. If we seek to enter into a credit facility we may not be able to obtain debt financing on terms that are favorable to us, if at all. If we incur additional debt, the debt holders would have rights senior to holders of common stock to make claims on our assets, and the terms of any debt could restrict our operations, including our ability to pay dividends on our common stock. If we are unable to obtain adequate financing or financing on terms that are satisfactory to us when we require it, our ability to continue to support our business growth and to respond to business challenges could be significantly impaired, and our business may be harmed.

We have previously identified material weaknesses in our internal control over financial reporting, and if we are unable to implement and maintain effective internal control over financial reporting in the future, investors may lose confidence in the accuracy and completeness of our financial reports, and the market price of our Class A common stock may be seriously harmed.

As a public company, we will be required to maintain internal control over financial reporting and to report any material weaknesses in those internal controls, subject to any exemptions that we avail ourselves to under the JOBS Act. For example, we will be required to perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting, as required by Section 404. We are in the process of designing, implementing, and testing internal control over financial reporting required to comply with this obligation. That process is time-consuming, costly, and complicated.

We and our independent registered public accounting firm identified material weaknesses in our internal control over financial reporting for the years ended December 31, 2017 and 2018, related to the lack of sufficient qualified accounting personnel, which led to incorrect application of generally accepted accounting principles, insufficiently designed segregation of duties, and insufficiently designed controls over business processes, including the financial statement close and reporting processes with respect to the development of accounting policies, procedures, and estimates. After these material weaknesses were identified, management implemented a remediation plan that included hiring key accounting personnel, creating a formal month-end close process, and establishing more robust processes supporting internal controls over financial reporting, including accounting policies, procedures, and estimates.

If we identify future material weaknesses in our internal control over financial reporting, if we are unable to comply with the requirements of Section 404 in a timely manner or assert that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion or expresses a qualified or adverse opinion about the effectiveness of our internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports and the market price of our Class A common stock could be negatively affected. In addition, we could become subject to investigations by the stock exchange on which our securities are listed, the SEC, and other regulatory authorities, which could require additional financial and management resources.

We may not be able to successfully manage the growth of our business if we are unable to improve our internal systems, processes and controls.

We need to continue to improve our internal systems, processes, and controls to effectively manage our operations and growth. We may not be able to successfully implement and scale improvements to our systems and processes in a timely or efficient manner or in a manner that does not negatively affect our operating results. For example, we may not be able to effectively monitor certain extraordinary contract requirements or provisions that are individually negotiated by our sales force as the number of transactions continues to grow. In addition, our systems and processes may not prevent or detect all errors, omissions, or fraud. We may experience difficulties in managing improvements to our systems, processes, and controls or in connection with third-party software, which could impair our ability to offer our platform to our customers in a timely manner, causing us to lose customers, limit us to smaller deployments of our products, or increase our technical support costs.

We could incur substantial costs in protecting or defending our proprietary rights, and any failure to adequately protect our rights could impair our competitive position and we may lose valuable assets, experience reduced revenue, and incur costly litigation to protect our rights.

Our success is dependent, in part, upon protecting our proprietary technology. We rely on a combination of patents, copyrights, trademarks, service marks, trade secret laws, and contractual provisions in an effort to establish and protect our proprietary rights. However, the steps we take to protect our intellectual property may be inadequate. While we have issued patents in the United States and other countries and have additional pending patent applications, we may be unable to obtain patent protection for the technology covered in our patent applications. In addition, any patents issued in the future may not provide us with competitive advantages, or may be successfully challenged by third parties. Any of our patents, trademarks, or other intellectual property rights may be challenged or circumvented by others or invalidated through administrative process or litigation. There can be no guarantee that others will not independently develop similar products, duplicate any of our products, or design around our patents. Furthermore, legal standards relating to the validity, enforceability, and scope of protection of intellectual property rights are uncertain. Despite our precautions, it may be possible for unauthorized third parties to copy our products and use information that we regard as proprietary to create products and services that compete with ours. Some license provisions protecting against unauthorized use, copying, transfer, and disclosure of our products may be unenforceable under the laws of jurisdictions outside the United States. To the extent we expand our international activities, our exposure to unauthorized copying and use of our products and proprietary information may increase.

We enter into confidentiality and invention assignment agreements with our employees and consultants and enter into confidentiality agreements with the parties with whom we have strategic relationships and business alliances. No assurance can be given that these agreements will be effective in controlling access to and distribution of our products and proprietary information. Further, these agreements do not prevent our competitors or partners from independently developing technologies that are substantially equivalent or superior to our platform.

In order to protect our intellectual property rights, we may be required to spend significant resources to monitor and protect these rights. Litigation may be necessary in the future to enforce our intellectual property rights and to protect our trade secrets. Litigation brought to protect and enforce our intellectual property rights could be costly, time consuming, and distracting to management and could result in the impairment or loss of portions of our intellectual property. Furthermore, our efforts to enforce our intellectual property rights may be met with defenses, counterclaims, and countersuits attacking the validity and enforceability of our intellectual property rights. Our inability to protect our proprietary technology against unauthorized copying or use, as well as any costly litigation or diversion of our management's attention and resources, could delay further sales or the implementation of our platform, impair the functionality of our platform, delay introductions of new products, result in our substituting inferior or more costly technologies into our products, or injure our reputation. We will not be able to protect our intellectual property if we are unable to enforce our rights or if we do not detect unauthorized use of our intellectual property. Moreover, policing unauthorized use of our technologies, trade secrets, and intellectual property may be difficult, expensive, and time-consuming, particularly in foreign countries where the laws may not be as protective of intellectual property rights as those in the United States and where mechanisms for enforcement of intellectual property rights may be weak. If we fail to meaningfully protect our intellectual property and proprietary rights, our business may be harmed.

We may in the future be subject to legal proceedings and litigation, including intellectual property disputes, which are costly and may subject us to significant liability and increased costs of doing business. Our business may suffer if it is alleged or determined that our technology infringes the intellectual property rights of others.

The software industry is characterized by the existence of a large number of patents, copyrights, trademarks, trade secrets, and other intellectual property rights. Companies in the software industry are often required to defend against litigation claims based on allegations of infringement or other violations of intellectual property rights. Our technologies may not be able to withstand any third-party claims or rights against their use. In addition, many of these companies have the capability to dedicate substantially greater resources to enforce their intellectual property rights and to defend claims that may be brought against them. Any litigation may also involve patent holding companies or other adverse patent owners that have no relevant product revenue and against which our patents may therefore provide little or no deterrence. If a third party is able to obtain an injunction preventing us from accessing such third-party intellectual property rights, or if we cannot license or develop technology for any infringing aspect of our business, we would be forced to limit or stop selling products impacted by the claim or injunction or cease business activities covered by such intellectual property, and may be unable to compete effectively. Any inability to license third party technology in the future would have an adverse effect on our business or operating results, and would adversely affect our ability to compete. We may also be contractually obligated to indemnify our customers in the event of infringement of a third party's intellectual property rights. We receive demands for such indemnification from time to time and expect to continue to do so. Responding to such claims, including those currently pending, regardless of their merit, can be time consuming, costly to defend in litigation, and damage our reputation and brand.

Lawsuits are time-consuming and expensive to resolve and they divert management's time and attention. Although we carry insurance, our insurance may not cover potential claims of this type or may not be adequate to indemnify us for all liability that may be imposed. We cannot predict the outcome of lawsuits, and the results of any such actions may harm our business.

Elements of our platform use open source software, which may restrict the functionality of our platform or require that we release the source code of certain products subject to those licenses.

Our platform incorporates software licensed under open source licenses. Such open source licenses typically require that source code subject to the license be made available to the public and that any modifications or derivative works to open source software continue to be licensed under open source licenses. Few courts have interpreted open source licenses, and the manner in which these licenses may be interpreted and enforced is therefore subject to some uncertainty. We rely on multiple software programmers to design our proprietary technologies, and we do not exercise complete control over the development efforts of our programmers and we cannot be certain that our programmers have not incorporated open source software into our proprietary products and technologies or that they will not do so in the future. In the event that portions of our proprietary technology are determined to be subject to an open source license, we could be required to publicly release the affected portions of our source code, re-engineer all or a portion of our technologies, or otherwise be limited in the licensing of our technologies, each of which could reduce or eliminate the value of our platform and technologies and materially and adversely affect our ability to sustain and grow our business.

Provisions in various agreements potentially expose us to substantial liability for intellectual property infringement, data protection, and other losses.

Our agreements with customers and other third parties generally include provisions under which we are liable or agree to indemnify them for losses suffered or incurred as a result of claims of intellectual property infringement, data protection, damages caused by us to property or persons, or other liabilities relating to or arising from our platform, services, or other contractual obligations. Some of these agreements provide for uncapped liability for which we would be responsible, and some provisions survive termination or expiration of the applicable agreement. Large liability payments could harm our business, results of operations, and financial condition. Although we normally contractually limit our liability with respect to such obligations, we may still incur substantial liability related to them, and in case of an intellectual property infringement indemnification claim, we may be required to cease use of certain functions of our platform as a result of any such claims. Any dispute with a customer with respect to such obligations could have adverse effects on our relationship with that customer and other existing customers and new customers and harm our business. Even when we have contractual protections against such customer claims, we may choose to honor a customer's request for indemnification or otherwise seek to maintain customer satisfaction by issuing customer credits, assisting our customer in defending against claims, or in other ways.

We are subject to governmental regulation and other legal obligations, particularly those related to privacy, data protection, and information security, and our actual or perceived failure to comply with such obligations could harm our business, by resulting in litigation, fines, penalties, or adverse publicity and reputational damage that may negatively affect the value of our business and decrease the price of our common stock. Compliance with such laws could also result in additional costs and liabilities to us or inhibit sales of our products.

We receive, store, and process personal information and other data from and about actual and prospective customers and users, in addition to our employees and service providers. In addition, our customers use our platform to collect personally identifiable information, personal health information, and personal financial information from their end-users. Our handling of data is subject to a variety of laws and regulations, including regulation by various government agencies, such as the U.S. Federal Trade Commission (FTC), and various state, local, and foreign agencies. Our data handling also is subject to contractual obligations and industry standards.

The U.S. federal and various state and foreign governments have adopted or proposed limitations on the collection, distribution, use, and storage of data relating to individuals and businesses, including the use of contact information and other data for marketing, advertising, and other communications with individuals and businesses. In the United States, various laws and regulations apply to the collection, processing, disclosure, and security of certain types of data, including the Electronic Communications Privacy Act, the Computer Fraud and Abuse Act, the Health Insurance Portability and Accountability Act of 1996, the Gramm Leach Bliley Act, and state laws relating to privacy and data security, including the California Consumer Privacy Act. Additionally, the FTC and many state attorneys general are interpreting federal and state consumer protection laws as imposing standards for the online collection, use, dissemination, and security of data. The laws and regulations relating to privacy and data security are evolving, can be subject to significant change and may result in ever-increasing regulatory and public scrutiny and escalating levels of enforcement and sanctions.

In addition, several foreign countries and governmental bodies, including the EU, have laws and regulations dealing with the handling and processing of personal information obtained from their residents, which in certain cases are more restrictive than those in the United States. Laws and regulations in these jurisdictions apply broadly to the collection, use, storage, disclosure, and security of various types of data, including data that identifies or may be used to identify an individual, such as names, email addresses, and in some jurisdictions, Internet Protocol (IP) addresses. Such laws and regulations may be modified or subject to new or different interpretations, and new laws and regulations may be enacted in the future.

Within the EU, the General Data Protection Regulation (GDPR) significantly increases the level of sanctions for non-compliance from those in existing EU data protection law and imposes direct obligations on data processors in addition to data controllers and may require us to make further changes to our policies and procedures in the future, beyond what we have already done. EU data protection authorities will have the power to impose administrative fines for violations of the GDPR of up to a maximum of €20 million or 4% of the data controller's or data processor's total worldwide global turnover for the preceding fiscal year, whichever is higher, and violations of the GDPR may also lead to damages claims by data controllers and data subjects. Such penalties are in addition to any civil litigation claims by data controllers, customers, and data subjects. Since we act as a data processor for our customers, we are taking steps to cause our processes to be compliant with applicable portions of the GDPR, but we cannot assure you that such steps will be effective. In particular, although the UK enacted a Data Protection Act in May 2018 that is designed to be consistent with the GDPR, due to Brexit (see "—Legal, political, and economic uncertainty surrounding the planned exit of the United Kingdom, or UK, from the European Union, or EU, may be a source of instability in international markets, create significant currency fluctuations, adversely affect our operations in the UK, and pose additional risks to our business, revenue, financial condition, and results of operations"), uncertainty remains regarding how data transfers to and from the UK will be regulated.

The scope and interpretation of the laws that are or may be applicable to us are often uncertain and may be conflicting, particularly laws outside the United States, as a result of the rapidly evolving regulatory framework for privacy issues worldwide. For example, laws relating to the liability of providers of online services for activities of their users and other third parties are currently being tested by a number of claims, including actions based on invasion of privacy and other torts, unfair competition, copyright and trademark infringement, and other theories based on the nature and content of the materials searched, the ads posted, or the content provided by users. As a result of the laws that are or may be applicable to us, and due to the sensitive nature of the information we collect, we have implemented policies and procedures to preserve and protect our data and our customers' data against loss, misuse, corruption, misappropriation caused by systems failures, unauthorized access, or misuse. If our policies, procedures, or measures relating to privacy, data protection, marketing, or customer communications fail to comply with laws, regulations, policies, legal obligations, or industry standards, we may be subject to governmental enforcement actions, litigation, regulatory investigations, fines, penalties, and negative publicity and could cause our application providers, customers, and partners to lose trust in us, and have an adverse effect on our business, operating results, and financial condition.

In addition to government regulation, privacy advocates, and industry groups may propose new and different self regulatory standards that may apply to us. Because the interpretation and application of privacy and data protection laws, regulations, rules, and other standards are still uncertain, it is possible that these laws, rules, regulations, and other actual or alleged legal obligations, such as contractual or self-regulatory obligations, may be interpreted and applied in a manner that is inconsistent with our existing data management practices or the functionality of our platform. If so, in addition to the possibility of fines, lawsuits, and other claims, we could be required to fundamentally change our business activities and practices or modify our software, which could have an adverse effect on our business.

Any failure or perceived failure by us to comply with laws, regulations, policies, legal, or contractual obligations, industry standards, or regulatory guidance relating to privacy or data security, may result in governmental investigations and enforcement actions (including, for example, a ban by EU Supervisory Authorities on the processing of EU personal data under the GDPR), litigation, fines and penalties, or adverse publicity, and could cause our customers and partners to lose trust in us, which could have an adverse effect on our reputation and business. Our obligation to assist our customers in their compliance with laws, regulations, and policies, like data processing and data protection requirements under the GDPR may also result in government enforcement actions litigation, fines and penalties, or adverse publicity. We expect that there will continue to be new proposed laws, regulations, and industry standards relating to privacy, data protection, marketing, consumer communications, and information security in the United States, the EU, and other jurisdictions, and we cannot determine the impact such future laws, regulations, and standards may have on our business. Future laws, regulations, standards, and other obligations or any changed interpretation of existing laws or regulations could impair our ability to develop and market new functionality and maintain and grow our customer base and increase revenue. Future restrictions on the collection, use, sharing, or disclosure of data or additional requirements for express or implied consent of our customers, partners, or end-users for the use and disclosure of such information could require us to incur additional costs or modify our platform, possibly in a material manner, and could limit our ability to develop new functionality.

If we are not able to comply with these laws or regulations or if we become liable under these laws or regulations, we could be directly harmed, and we may be forced to implement new measures to reduce our exposure to this liability. This may require us to expend substantial resources or to discontinue certain products, which would negatively affect our business, financial condition, and results of operations. In addition, the increased attention focused upon liability issues as a result of lawsuits and legislative proposals could harm our reputation or otherwise adversely affect the growth of our business. Furthermore, any costs incurred as a result of this potential liability could harm our operating results.

We are subject to governmental export and import controls that could impair our ability to compete in international markets or subject us to liability if we violate such controls.

Our products are subject to U.S. export controls, including the Export Administration Regulations administered by the U.S. Commerce Department, and economic sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department (OFAC), and we incorporate encryption technology into certain of our products. These encryption products and the underlying technology may be exported outside of the United States only with the required export authorizations.

Furthermore, our activities are subject to U.S. economic sanctions laws and regulations that generally prohibit the direct or indirect exportation or provision of products and services without the required export authorizations to countries, governments, and individuals and entities targeted by U.S. embargoes or sanctions, except to the extent authorized by OFAC or exempt from sanctions. Additionally, the Trump administration has been critical of existing trade agreements and may impose more stringent export and import controls. Obtaining the necessary export license or other authorization for a particular sale may not always be possible, and, even if the export license is ultimately granted, the process may be time-consuming and may result in the delay or loss of sales opportunities. Violations of U.S. sanctions or export control laws can result in significant fines or penalties, and possible incarceration for responsible employees and managers could be imposed for criminal violations of these laws.

Other countries also regulate the import and export of certain encryption products and technology through import and export licensing requirements, and have enacted laws that could limit our ability to distribute our products or could limit our customers' ability to implement our products in those countries. Changes in our products or future changes in export and import regulations may create delays in the introduction of our products in international markets, prevent our customers with international operations from deploying our products globally, or, in some cases, prevent the export or import of our products to certain countries, governments, or persons altogether. From time to time, various governmental agencies have proposed additional regulation of encryption products and technology, including the escrow and government recovery of private encryption keys. Any change in export or import regulations, economic sanctions or related legislation, increased export and import controls, or change in the countries, governments, persons, or technologies targeted by such regulations could result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or potential customers with international operations. Any decreased use of our products or limitation on our ability to export or sell our products would harm our business.

Risks Related to This Offering and Ownership of Our Class A Common Stock

The dual class structure of our common stock as contained in our amended and restated certificate of incorporation has the effect of concentrating voting control with those stockholders who held our stock prior to this offering, including our executive officers, employees, and directors and their affiliates, and limiting your ability to influence corporate matters.

Our Class B common stock has 10 votes per share, and our Class A common stock, which is the stock we are offering in this initial public offering, has one vote per share. Stockholders who hold shares of Class B common stock, including our executive officers and directors and their affiliates, will together hold approximately % of the voting power of our outstanding capital stock following this offering, and our founder and Chief Executive Officer, Artur Bergman, will hold approximately % of our outstanding classes of common stock as a whole, but will control approximately % of the voting power of our outstanding common stock, following this offering. As a result, our executive officers, directors, and other affiliates and potentially our CEO on his own will have significant influence over our management and affairs and over all matters requiring stockholder approval, including election of directors and significant corporate transactions, such as a merger or other sale of the company or our assets, for the foreseeable future. If Mr. Bergman's employment with us is terminated, he will continue to have the same influence over matters requiring stockholder approval.

In addition, the holders of Class B common stock collectively will continue to be able to control all matters submitted to our stockholders for approval even if their stock holdings represent less than 50% of the outstanding shares of our common stock. Because of the 10-to-1 voting ratio between our Class B and Class A common stock, the holders of our Class B common stock collectively will continue to control a majority of the combined voting power of our common stock even when the shares of Class B common stock represent as little as 10% of the combined voting power of all outstanding shares of our Class A and Class B common stock. This concentrated control will limit your ability to influence corporate matters for the foreseeable future, and, as a result, the market price of our Class A common stock could be adversely affected.

Future transfers by holders of Class B common stock will generally result in those shares converting to Class A common stock, which will have the effect, over time, of increasing the relative voting power of those holders of Class B common stock who retain their shares in the long term. If, for example, Mr. Bergman retains a significant portion of his holdings of Class B common stock for an extended period of time, he could, in the future, control a majority of the combined voting power of our Class A and Class B common stock. As a board member, Mr. Bergman owes a fiduciary duty to our stockholders and must act in good faith in a manner he reasonably believes to be in the best interests of our stockholders. As a stockholder, even a controlling stockholder, Mr. Bergman is entitled to vote his shares in his own interests, which may not always be in the interests of our stockholders generally.

Our stock price may be volatile, and the value of our Class A common stock may decline.

The market price of our Class A common stock may be highly volatile and may fluctuate or decline substantially as a result of a variety of factors, some of which are beyond our control or are related in complex ways, including:

- actual or anticipated fluctuations in our financial condition and operating results;
- variance in our financial performance from expectations of securities analysts or investors;
- changes in the pricing we offer our customers;
- changes in our projected operating and financial results;
- changes in laws or regulations applicable to our platform or related products;
- announcements by us or our competitors of significant business developments, acquisitions, or new offerings;
- publicity associated with network downtime and problems;
- our involvement in litigation;
- future sales of our Class A common stock or other securities, by us or our stockholders, as well as the anticipation of lock-up releases;
- changes in senior management or key personnel;
- the trading volume of our Class A common stock;
- changes in the anticipated future size and growth rate of our market; and
- general economic, regulatory, and market conditions.

Broad market and industry fluctuations, as well as general economic, political, regulatory, and market conditions, may negatively impact the market price of our Class A common stock. In addition, given the relatively small public float of shares of our Class A common stock on the NYSE, the trading market for our shares may be subject to increased volatility. In the past, companies that have experienced volatility in the market price of their securities have been subject to securities class action litigation. We may be the target of this type of litigation in the future, which could result in substantial costs and divert our management's attention.

There has been no prior market for our Class A common stock. An active market may not develop or be sustainable and investors may not be able to resell their shares at or above the initial public offering price.

There has been no public market for our Class A common stock prior to this offering. The initial public offering price for our Class A common stock will be determined through negotiations between the underwriters and us and may vary from the market price of our Class A common stock following this offering. If you purchase shares of our Class A common stock in this offering, you may not be able to resell those shares at or above the initial public offering price, if at all. An active or liquid market in our Class A common stock may not develop after this offering or, if it does develop, it may not be sustainable.

You will experience immediate and substantial dilution in the net tangible book value of the shares of Class A common stock you purchase in this offering.

The initial public offering price of our Class A common stock will be substantially higher than the pro forma net tangible book value per share of our Class A common stock immediately after this offering. If you purchase shares of our Class A common stock in this offering, you will suffer immediate dilution of $ per share, or $ per share if the underwriters exercise their option to purchase additional shares in full, representing the difference between our pro forma as adjusted net tangible book value per share after giving effect to the sale of Class A common stock in this offering and the assumed public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus. See "Dilution." If outstanding options or warrants are exercised in the future, you will experience additional dilution.

Future sales and issuances of our capital stock or rights to purchase capital stock could result in additional dilution of the percentage ownership of our stockholders and could cause the price of our Class A common stock to decline.

We may issue additional securities following the closing of this offering. Future sales and issuances of our capital stock or rights to purchase our capital stock could result in substantial dilution to our existing stockholders. We may sell Class A common stock, convertible securities, and other equity securities in one or more transactions at prices and in a manner as we may determine from time to time. If we sell any such securities in subsequent transactions, investors may be materially diluted. New investors in such subsequent transactions could gain rights, preferences, and privileges senior to those of holders of our Class A common stock.

We will have broad discretion in the use of proceeds from this offering and may invest or spend the proceeds in ways with which you do not agree and in ways that may not yield a return.

We will have broad discretion over the use of proceeds from this offering. Investors may not agree with our decisions, and our use of the proceeds may not yield any return on your investment. We currently intend to use the net proceeds from this offering for working capital and other general corporate purposes. Our failure to apply the net proceeds of this offering effectively could impair our ability to pursue our growth strategy or could require us to raise additional capital. In addition, pending their use, the proceeds of this offering may be placed in investments that do not produce income or that may lose value.

Future sales of our Class A common stock in the public market could cause the market price of our Class A common stock to decline.

Sales of a substantial number of shares of our Class A common stock in the public market following the completion of this offering, or the perception that these sales might occur, could depress the market price of our Class A common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that such sales may have on the prevailing market price of our Class A common stock.

Based on shares outstanding as of December 31, 2018, upon the closing of this offering, we will have outstanding a total of no shares of Class A common stock and 157,865,413 shares of Class B common stock, assuming no exercise of the underwriters' option to purchase additional shares and no exercise of outstanding options or warrants, after giving effect to the conversion of all outstanding shares of our preferred stock into shares of Class B common stock immediately upon the closing of this offering. Of these shares, only the shares of Class A common stock sold in this offering will be freely tradable, without restriction, in the public market immediately after the offering. All of our executive officers and directors and the holders of substantially all the shares of our capital stock are subject to lock-up agreements that restrict their ability to transfer shares of our capital stock during the period ending on, and including, the 180th day after the date of this prospectus, subject to specified exceptions. Merrill Lynch, Pierce, Fenner & Smith Incorporated, Citigroup Global Markets Inc., and Credit Suisse Securities (USA) LLC may, in their discretion, permit our stockholders who are subject to these lock-up agreements to sell shares prior to the expiration of the lock-up agreements. After the lock-up agreements expire, all 157,865,413 shares of Class B common stock outstanding as of December 31, 2018 will become eligible for sale, of which 88,751,338 shares held by directors, executive officers, and other affiliates will be subject to volume limitations under Rule 144 under the Securities Act of 1933, as amended (Securities Act), and various vesting agreements.

In addition, as of December 31, 2018, there were 24,357,214 shares of Class B common stock subject to outstanding options. We intend to register all of the shares of Class A common stock issuable upon conversion of the shares of Class B common stock issuable upon exercise of outstanding options, and upon exercise of settlement of any options or other equity incentives we may grant in the future, for public resale under the Securities Act. Accordingly, these shares will be able to be freely sold in the public market upon issuance as permitted by any applicable vesting requirements, subject to the lock-up agreements described above. The shares of Class A common stock issuable upon conversion of these shares will become eligible for sale in the public market to the extent such options or warrants are exercised, subject to the lock-up agreements described above and compliance with applicable securities laws.

Holders of 108,297,289 shares of our Class B common stock issuable upon the conversion of outstanding shares of preferred stock and shares of preferred stock issuable upon the exercise of outstanding warrants have rights, subject to some conditions, to require us to file registration statements for the public resale of the Class A common stock issuable upon conversion of such shares or to include such shares in registration statements that we may file on our behalf or for other stockholders. See "Shares Eligible for Future Sale" and "Underwriting."

If securities or industry analysts do not publish research or publish unfavorable or inaccurate research about our business, our Class A common stock price and trading volume could decline.

Our stock price and trading volume are heavily influenced by the way analysts and investors interpret our financial information and other disclosures. If securities or industry analysts do not publish research or reports about our business, delay publishing reports about our business, or publish negative reports about our business, regardless of accuracy, our Class A common stock price and trading volume could decline.

The trading market for our Class A common stock depends, in part, on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. We expect that only a limited number of analysts will cover our company following our initial public offering. If the number of analysts that cover us declines, demand for our Class A common stock could decrease and our Class A common stock price and trading volume may decline.

Even if our Class A common stock is actively covered by analysts, we do not have any control over the analysts or the measures that analysts or investors may rely upon to forecast our future results. Over-reliance by analysts or investors on any particular metric to forecast our future results may result in forecasts that differ significantly from our own.

Regardless of accuracy, unfavorable interpretations of our financial information and other public disclosures could have a negative impact on our stock price. If our financial performance fails to meet analyst estimates, for any of the reasons discussed above or otherwise, or one or more of the analysts who cover us downgrade our Class A common stock or change their opinion of our Class A common stock, our stock price would likely decline.

We do not intend to pay dividends for the foreseeable future and, as a result, your ability to achieve a return on your investment will depend on appreciation in the price of our Class A common stock.

We have never declared or paid any cash dividends on our capital stock, and we do not intend to pay any cash dividends in the foreseeable future. Any determination to pay dividends in the future will be at the discretion of our board of directors and may be restricted by the terms of any then-current credit facility. Accordingly, investors must rely on sales of their Class A common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

We are an "emerging growth company" and our compliance with the reduced reporting and disclosure requirements applicable to emerging growth companies could make our Class A common stock less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and we expect to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies" including, the auditor attestation requirements of Section 404 reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved and extended adoption period for accounting pronouncements. We cannot predict whether investors will find our Class A common stock less attractive as a result of our reliance on these exemptions. If some investors find our Class A common stock less attractive as a result, there may be a less active trading market for our Class A common stock and our stock price may be more volatile.

We will incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to compliance with our public company responsibilities and corporate governance practices.

As a public company, we will incur significant legal, accounting, and other expenses that we did not incur as a private company. We expect such expenses to further increase after we are no longer an "emerging growth company." The Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of the NYSE, and other applicable securities rules and regulations impose various requirements on public companies. Furthermore, the senior members of our management team do not have significant experience with operating a public company. As a result, our management and other personnel will have to devote a substantial amount of time to compliance with these requirements. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. We cannot predict or estimate the amount of additional costs we will incur as a public company or the timing of such costs.

As a result of being a public company, we are obligated to develop and maintain proper and effective internal controls over financial reporting and any failure to maintain the adequacy of these internal controls may adversely affect investor confidence in our company and, as a result, the value of our Class A common stock.

We will be required, pursuant to Section 404 to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. In addition, our independent registered public accounting firm will be required to attest to the effectiveness of our internal control over financial reporting in our first annual report required to be filed with the SEC following the date we are no longer an "emerging growth company." We have not yet commenced the costly and challenging process of compiling the system and processing documentation necessary to perform the evaluation required under Section 404, and we may not be able to complete our evaluation, testing, and any required remediation in a timely fashion once initiated. Our compliance with Section 404 will require that we incur substantial accounting expense and expend significant management efforts. We currently do not have an internal audit group, and we will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge and compile the system and process documentation necessary to perform the evaluation needed to comply with Section 404.

During the evaluation and testing process of our internal controls, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to certify that our internal control over financial reporting is effective. We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition or results of operations. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our Class A common stock could decline and we could be subject to sanctions or investigations by the exchange on which our shares of Class A common stock are listed, the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of our company more difficult, limit attempts by our stockholders to replace or remove our current management and limit the market price of our Class A common stock.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws may have the effect of delaying or preventing a change of control or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that:

- authorize our board of directors to issue, without further action by the stockholders, shares of undesignated preferred stock with terms, rights, and preferences determined by our board of directors that may be senior to our common stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;
- specify that special meetings of our stockholders can be called only by our board of directors, the chairperson of our board of directors, or our chief executive officer;
- establish an advance notice procedure for stockholder proposals to be brought before an annual meeting, including proposed nominations of persons for election to our board of directors;

- establish that our board of directors is divided into three classes, with each class serving three-year staggered terms;
- prohibit cumulative voting in the election of directors;
- provide that our directors may be removed for cause only upon the vote of the holders of a majority of our outstanding shares of common stock;
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- require the approval of our board of directors or the holders of at least sixty-six and two-thirds percent ($66^{2}/_{3}\%$) of our outstanding shares of common stock to amend our bylaws and certain provisions of our certificate of incorporation; and
- reflect our two classes of common stock as described above.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally, subject to certain exceptions, prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any "interested" stockholder for a period of three years following the date on which the stockholder became an "interested" stockholder. Any delay or prevention of a change of control transaction or changes in our management could cause the market price of our Class A common stock to decline.

Our amended and restated certificate of incorporation that will be in effect at the closing of this offering will provide that the Court of Chancery of the State of Delaware and, to the extent enforceable, the federal district courts of the United States of America will be the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, or employees.

Our amended and restated certificate of incorporation that will be in effect at the closing of this offering will provide that the Court of Chancery of the State of Delaware is the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law for:

- any derivative action or proceeding brought on our behalf;
- any action asserting a breach of fiduciary duty;
- any action asserting a claim against us arising under the Delaware General Corporation Law,
- our amended and restated certificate of incorporation, or our amended and restated bylaws; and
- any action asserting a claim against us that is governed by the internal-affairs doctrine.

In addition, our amended and restated certificate of incorporation will provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, subject to and contingent upon a final adjudication in the State of Delaware of the enforceability of such exclusive forum provision. These exclusive-forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, or other employees, which may discourage lawsuits against us and our directors, officers, and other employees. If a court were to find either exclusive-forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable, we may incur additional costs associated with resolving the dispute in other jurisdictions. For example, the Court of Chancery of the State of Delaware recently determined that the exclusive forum provision of federal district courts of the United States of America for resolving any complaint asserting a cause of action arising under the Securities Act is not enforceable. However, this decision may be reviewed and ultimately overturned by the Delaware Supreme Court. If this ultimate adjudication were to occur, the federal district court exclusive forum provision in our amended and restated certificate of incorporation would no longer be contingent.

Special Note Regarding Forward-Looking Statements

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS This prospectus contains forward-looking statements about us and our industry that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future results of operations and financial condition, business strategy, plans, and objectives of management for future operations and statements that are necessarily dependent upon future events are forward-looking statements. In some cases, you can identify forward-looking statements by words such as "anticipate," "believe," "continue," "could," "design," "estimate," "expect," "intend," "may," "plan," "potentially," "predict," "project," "should," "will," or the negative of these terms or other similar expressions.

We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy, and financial needs. These forward-looking statements are subject to a number of known and unknown risks, uncertainties, and assumptions, including risks described in the section titled "Risk Factors." These risks are not exhaustive. Other sections of this prospectus include additional factors that could harm our business and financial performance. Moreover, we operate in a

very competitive and rapidly changing environment. New risk factors emerge from time to time, and it is not possible for our management to predict all risk factors 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 from those contained in, or implied by, any forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. We cannot assure you that the events and circumstances reflected in the forward-looking statements will be achieved or occur. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus or to conform these statements to actual results or to changes in our expectations.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement of which this prospectus is a part with the understanding that our actual future results, levels of activity, performance, and achievements may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

Industry and Market Data

INDUSTRY AND MARKET DATA Unless otherwise indicated, information contained in this prospectus concerning our industry and the market in which we operate, including our general expectations and market position, market opportunity, and market size is based on information from various sources, including independent industry publications. In presenting this information, we have also made assumptions based on such data and other similar sources, and on our knowledge of, and in our experience to date in, the markets for our platform. This information involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. Although neither we nor the underwriters have independently verified the accuracy or completeness of any third-party information, we believe the market position, market opportunity, and market size information included in this prospectus is reliable. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the "Risk Factors" section. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

Certain information in the text of this prospectus is contained in industry publications or data provided by third parties. The sources of these industry publications and data are provided below:

- Forrester, "*The Sorry State Of Digital Transformation In 2018*," dated April 24, 2018.
- Gartner, "*Modernization and Digital Transformation Projects are Behind Growth in Enterprise Application Software Market*," dated August 27, 2015.
- Gartner, "*What Edge Computing Means for Infrastructure and Operations Leaders*," dated October 3, 2018.
- Google, "*Find Out How You Stack Up to New Industry Benchmarks for Mobile Page Speed*," dated February 2018.
- IDC, "*IDC Predictions Provide a Blueprint and Key Building Blocks for Becoming a Digital Native Enterprise*," dated October 31, 2017.
- IDC, "*Worldwide Application Delivery Controller Forecast, 2018-2022*," dated December 2018.
- IDC, "*Worldwide DDoS Prevention Products and Services Forecast, 2018-2022*," dated July 2018.
- LogicMonitor, "*Cloud Vision 2020: The Future of the Cloud Study*," dated November 2017.
- MarketsandMarkets "*Botnet Detection Market Global Forecast to 2023*," dated April 2018.
- MarketsandMarkets "*Content Delivery Network Market Global Forecast to 2022*," dated November 2017.
- MarketsandMarkets "*Edge Computing Market Global Forecast to 2022*," dated October 2017.
- MarketsandMarkets "*Web Application Firewall Market Global Forecast to 2022*," dated September 2017.
- Pew Research Center, "*About a quarter of U.S. adults say they are 'almost constantly' online*," dated March 14, 2018.
- Verizon, "*2018 Data Breach Investigations Report, 11th Edition*," dated March 2018.

The content of the foregoing sources, except to the extent specifically set forth in this prospectus, does not constitute a portion of this prospectus and is not incorporated herein.

Use of Proceeds

USE OF PROCEEDS We estimate that the net proceeds from our issuance and sale of shares of our Class A common stock in this offering will be approximately $ million, or approximately $ million if the underwriters exercise their option to purchase additional shares in full, based upon an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the net proceeds to us from this offering by approximately $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. A 1,000,000 share increase or decrease in the number of shares offered by us would increase or decrease the net proceeds to us from this offering by approximately $ million, assuming that the assumed initial offering price to the public remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We do not expect that a change in the initial offering price to the public or the number of shares by these amounts would have a material effect on uses of the proceeds from this offering, although it may accelerate the time at which we will need to seek additional capital.

The principal purposes of this offering are to increase our financial flexibility, create a public market for our Class A common stock, and facilitate our future access to the capital markets. Although we have not yet determined with certainty the manner in which we will allocate the net proceeds of this offering, we expect to use the net proceeds from this offering for working capital and other general corporate purposes. We may use a portion of the net proceeds we receive from this offering to repay up to approximately $47.5 million of indebtedness under our credit facilities, which, to date, has been used for general operating expenses, including personnel related costs as we expanded our employee base, and capital expenditures for our network. We may also use a portion of the net proceeds from this offering for acquisitions or strategic investments in complementary businesses or technologies. We do not currently have any plans for any such acquisitions or investments. We have not allocated specific amounts of net proceeds for any of these purposes.

$27.5 million of the outstanding indebtedness that we may repay under our credit facilities is scheduled to mature in November 2021 and interest on such amount accrues at a rate of prime plus 1.75%. $20.0 million of the outstanding indebtedness that we may repay under our credit facilities is scheduled to mature in December 2021 and interest on such amount accrues at a rate of prime plus 4.25%. See the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Credit Facilities.”

The expected use of net proceeds from this offering represents our intentions based upon our present plans and business conditions. We cannot predict with certainty all of the particular uses for the proceeds of this offering or the amounts that we will actually spend on the uses set forth above. Accordingly, our management will have significant flexibility in applying the net proceeds of this offering. The timing and amount of our actual expenditures will be based on many factors, including cash flows from operations and the anticipated growth of our business. Pending their use, we intend to invest the net proceeds of this offering in a variety of capital-preservation investments, including short- and intermediate-term, interest-bearing, investment-grade securities.

Dividend Policy

DIVIDEND POLICY We have never declared or paid any dividends on our capital stock. We currently intend to retain all available funds and any future earnings for the operation and expansion of our business and, therefore, we do not anticipate declaring or paying cash dividends in the foreseeable future. The payment of dividends will be at the discretion of our board of directors and will depend on our results of operations, capital requirements, financial condition, prospects, contractual arrangements, any limitations on payment of dividends present in our current and future debt agreements, and other factors that our board of directors may deem relevant. We are subject to covenants under our credit facilities that place restrictions on our ability to pay dividends.

Capitalization

CAPITALIZATION The following table sets forth our cash and cash equivalents and our capitalization as of December 31, 2018:

- on an actual basis;
- on a pro forma basis to reflect (1) the automatic conversion of all shares of preferred stock outstanding as of December 31, 2018 into shares of Class B common stock immediately upon the closing of this offering; (2) the reclassification of all shares of common stock into an equal number of shares of our Class B common stock and the authorization of our Class A common stock; (3) the conversion of warrants to purchase up to 884,640 shares of our preferred stock into warrants to purchase up to 884,640 shares of Class B common stock; and (4) the filing of our amended and restated certificate of incorporation; and
- on a pro forma as adjusted basis to reflect (1) the pro forma items described immediately above, and (2) the sale of shares of Class A common stock in this offering at an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this table together with “Selected Consolidated Financial and Other Data,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and our consolidated financial statements and the related notes appearing elsewhere in this prospectus.

	As of December 31, 2018		
	Actual	Pro Forma	Pro Forma, asAdjusted
	(in thousands, except share and per share data)		
Cash and cash equivalents	$36,963	$36,963	$
Convertible preferred stock warrant liabilities	3,261		
Convertible preferred stock; $0.00002 par value; 108,297,289 shares authorized, actual; 107,260,454 shares issued and outstanding; no shares authorized, no shares issued and outstanding, pro forma	219,584	—	
Stockholders' deficit:			
Preferred stock; par value $0.00002 par value; no shares authorized, issued and outstanding, actual; 10,000,000 shares authorized, no shares issued and outstanding, pro forma and pro forma as adjusted			
Common stock; $0.00002 par value; 195,000,000 shares authorized, actual; 50,051,765 shares issued and outstanding, actual; shares authorized, pro forma; no shares issued and outstanding, pro forma and pro forma as adjusted	1	—	
Class A common stock; $0.00002 par value; no shares authorized, issued and outstanding, actual; shares authorized, pro forma; no shares issued and outstanding, pro forma; shares authorized, shares issued and outstanding, pro forma as adjusted	—	—	
Class B common stock; $0.00002 par value; no shares authorized, issued and outstanding, actual; shares authorized, no shares issued and outstanding, pro forma; shares authorized, shares issued and outstanding, pro forma as adjusted	—	3	
Additional paid-in-capital	16,403	239,246	
Treasury stock	(2,109)	(2,109)	
Accumulated other comprehensive loss	(36)	(36)	
Accumulated deficit	(146,186)	(146,186)	
Total stockholders' equity (deficit)	(131,927)	90,918	
Total capitalization	$87,657	$90,918	

The outstanding share information in the table above is based on no shares of our Class A common stock and 157,865,413 shares of our Class B common stock (including preferred stock on an as-converted basis and reclassified as Class B common stock) outstanding as of December 31, 2018, and excludes:

- 24,357,214 shares of Class B common stock issuable upon the exercise of options outstanding as of December 31, 2018, at a weighted average exercise price of $1.48 per share;
- 1,036,835 shares of Class B common stock issuable upon the exercise of warrants outstanding as of December 31, 2018 with a weighted-average exercise price of $3.28 per share, which are expected to remain outstanding after the closing of this offering;
- 1,219,609 shares of Class B common stock reserved for issuance under our 2011 Equity Incentive Plan, which shares will cease to be available for issuance at the time our 2019 Equity Incentive Plan becomes effective;
- shares of our Class A common stock reserved for future issuance pursuant to our 2019 Equity Incentive Plan, which will become effective prior to the completion of this offering and will include provisions that automatically increase the number of shares of Class A common stock reserved for issuance thereunder each year; and
- shares of Class A common stock reserved for future issuance under our 2019 Employee Stock Purchase Plan, which will become effective prior to the completion of this offering and will include provisions that automatically increase the number of shares of Class A common stock reserved for issuance thereunder each year.

Dilution

DILUTION

If you invest in our Class A common stock, your interest will be diluted to the extent of the difference between the initial public offering price per share of our Class A common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after the completion of this offering.

Our historical net tangible book value as of December 31, 2018 was $ million, or $ per share of common stock. Our historical net tangible book value per share represents our total tangible assets less our total liabilities and preferred stock (which is not included within stockholders' deficit), divided by the number of shares of common stock outstanding as of December 31, 2018.

Our pro forma net tangible book value as of December 31, 2018 was $ million, or $ per share of common stock. Pro forma net tangible book value per share represents our total tangible assets less our total liabilities, divided by the number of shares of common stock outstanding as of December 31, 2018, after giving effect to (1) the automatic conversion of all shares of preferred stock outstanding as of December 31, 2018 into shares of common stock immediately

upon the closing of this offering, (2) the reclassification of all shares of common stock in to an equal number of shares of our Class B common stock and the authorization of our Class A common stock, and (3) the conversion our outstanding warrants to purchase preferred stock into warrants to purchase Class B common stock.

Our pro forma as adjusted net tangible book value represents our pro forma net tangible book value, plus the effect of the sale of shares of Class A common stock in this offering at an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

Our pro forma as adjusted net tangible book value as of December 31, 2018 was $ million, or $ per share of common stock. This amount represents an immediate increase in pro forma as adjusted net tangible book value of $ per share to our existing stockholders and an immediate dilution of $ per share to investors participating in this offering. We determine dilution per share to investors participating in this offering by subtracting pro forma as adjusted net tangible book value per share after this offering from the assumed initial public offering price per share paid by investors participating in this offering.

The following table illustrates this dilution on a per share basis to new investors:

Assumed initial public offering price per share	$
Historical net tangible book value per share as of December 31, 2018	
Increase per share attributable to the pro forma transactions described above	
Pro forma net tangible book value per share as of December 31, 2018	
Increase in pro forma net tangible book value per share attributed to new investors purchasing shares from us in this offering	
Pro forma as adjusted net tangible book value per share after giving effect to this offering	
Dilution in pro forma as adjusted net tangible book value per share to new investors in this offering	$

The dilution information discussed above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the pro forma as adjusted net tangible book value per share by $ per share and the dilution per share to investors participating in this offering by $ per share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. A 1,000,000 share increase in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase the pro forma as adjusted net tangible book value per share by $ and decrease the dilution per share to investors participating in this offering by $, assuming the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. A 1,000,000 share decrease in the number of shares offered by us, as set forth on the cover page of this prospectus, would decrease the pro forma as adjusted net tangible book value per share after this offering by $ and increase the dilution per share to new investors participating in this offering by $, assuming the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information discussed above is illustrative only and will adjust based on the actual initial offering price to public and other terms of this offering determined at pricing.

If the underwriters exercise their option in full to purchase additional shares of our Class A common stock in this offering, the pro forma as adjusted net tangible book value of our common stock would increase to $ per share, representing an immediate increase to existing stockholders of $ per share and an immediate dilution of $ per share to investors participating in this offering.

The following table summarizes as of December 31, 2018, on the pro forma as adjusted basis described above, the number of shares of our Class A common stock, the total consideration and the average price per share (1) paid to us by our existing stockholders and (2) to be paid by investors purchasing our Class A common stock in this offering at an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, before deducting underwriting discounts and commissions and estimated offering expenses payable by us.

	Shares Purchased		Total Consideration		Weighted-Average PricePer Share
	Number	Percent	Amount	Percent	
Existing stockholders					$$
New investors					
Total		100%		$100%	$

The outstanding share information in the table above is based on no shares of our Class A common stock and 157,865,413 shares of our Class B common stock (including preferred stock on an as-converted basis and reclassified as Class B common stock) outstanding as of December 31, 2018, and excludes:

- 24,357,214 shares of Class B common stock issuable upon the exercise of options outstanding as of December 31, 2018, at a weighted-average exercise price of $1.48 per share;
- 1,036,835 shares of Class B common stock issuable upon the exercise of warrants outstanding as of December 31, 2018 with a weighted-average exercise price of $3.28 per share, which are expected to remain outstanding after the closing of this offering;

- 1,219,609 shares of Class B common stock reserved for issuance under our 2011 Equity Incentive Plan, which shares will cease to be available for issuance at the time our 2019 Equity Incentive Plan becomes effective;
- shares of our Class A common stock reserved for future issuance pursuant to our 2019 Equity Incentive Plan, which will become effective prior to the completion of this offering and will include provisions that automatically increase the number of shares of Class A common stock reserved for issuance thereunder each year; and
- shares of Class A common stock reserved for future issuance under our 2019 Employee Stock Purchase Plan, which will become effective prior to the completion of this offering and will include provisions that automatically increase the number of shares of Class A common stock reserved for issuance thereunder each year.

Selected Consolidated Financial and Other Data

SELECTED CONSOLIDATED FINANCIAL AND OTHER DATA We derived the selected consolidated statements of operations data for the years ended December 31, 2017 and 2018 and the selected consolidated balance sheet data as of December 31, 2017 and 2018 from our audited consolidated financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results to be expected in the future.

When you read this selected consolidated financial and other data, it is important that you read it together with the historical consolidated financial statements and related notes to those statements, as well as "Management's Discussion and Analysis of Financial Condition and Results of Operations," included elsewhere in this prospectus.

	Year Ended December 31,	
(in thousands, except per share data)	**2017**	**2018**
Revenue	$104,900	$144,563
Cost of revenue	48,672	65,499
Gross profit	56,228	79,064
Operating expenses:		
Research and development[(1)]	28,989	34,618
Sales and marketing[(1)]	40,818	50,134
General and administrative[(1)]	17,451	23,450
Total operating expenses	87,258	108,202
Loss from operations	(31,030)	(29,138)
Interest income	443	939
Interest expense	(1,116)	(1,810)
Other expense, net	(539)	(741)
Loss before income taxes	(32,242)	(30,750)
Income taxes	208	185
Net loss	$(32,450)	$(30,935)
Net loss attributable to common stockholders	$(32,450)	$(30,935)
Net loss per share attributable to common shareholders, basic and diluted	$(0.69)	$(0.63)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	46,799,801	48,754,382
Key Business Metrics(2)		
Number of Customers (as of end of period)	1,439	1,582
Number of Enterprise Customers (as of end of period)	170	227
Dollar-Based Net Expansion Rate	147.3%	132.0%

(1) Includes stock-based compensation expense as follows:

	Year Ended December 31,

(in thousands)	2017	2018
Cost of revenue	$190	$265
Research and development	1,040	1,332
Sales and marketing	493	1,023
General and administrative	1,086	1,459
Total	$2,809	$4,079

(2) See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Business Metrics" for our definitions of these metrics.

	As of December 31, 2018		
	Actual	Pro Forma(1)	Pro Forma, asadjusted(2)(3)
	(in thousands)		
Consolidated Balance Sheet Data:			
Cash and cash equivalents	$36,963	$36,963	
Working capital[4]	85,517	85,517	
Total assets	$162,754	$162,754	
Convertible preferred stock warrant liabilities	3,261		
Convertible preferred stock	219,584	—	
Common Stock	1	3	
Additional paid-in-capital	16,403	239,246	
Accumulated deficit	(146,186)	(146,186)	
Total stockholders' equity (deficit)	$(131,927)	$90,918	

(1) The pro forma column reflects the automatic conversion of all outstanding shares of our convertible preferred stock into 107,260,454 shares of Class B common stock immediately upon the closing of this offering.

(2) The pro forma as adjusted column further reflects the receipt of $ million in net proceeds from our sale of shares of common stock in this offering at an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

(3) Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, respectively, the amount of cash and cash equivalents, working capital, total assets, and total stockholders' deficit by $ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. An increase or decrease of 1,000,000 in the number of shares we are offering would increase or decrease, respectively, the amount of cash and cash equivalents, working capital, total assets, and total stockholders' deficit by approximately $ million, assuming the initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information is illustrative only, and we will adjust this information based on the actual initial public offering price and other terms of this offering determined at pricing.

(4) Working capital is defined as current assets less current liabilities.

Management's Discussion and Analysis of Financial Condition and Results of Operations

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS *You should read the following discussion and analysis of our financial condition and results of operations together with the consolidated financial statements and related notes that are included elsewhere in this prospectus. This discussion contains forward-looking statements based upon current plans, expectations and beliefs that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Risk Factors" and in other parts of this prospectus. Our fiscal year ends on December 31.*

Overview

Developers are reinventing the way we live, work, and play online. Yet they repeatedly encounter innovation barriers when delivering modern digital experiences. Expectations for digital experiences are at an all-time high; they must be fast, secure, and highly personalized. If they aren't reliable, end-users simply take their business elsewhere. The challenge today is enabling developers to deliver a modern digital experience while simultaneously providing scale, security, and performance. We built our edge cloud platform to solve this problem.

The edge cloud is a new category of IaaS that enables developers to build, secure, and deliver digital experiences, at the edge of the internet. This service represents the convergence of the CDN with functionality that has been traditionally delivered by hardware-centric appliances such as ADC, WAF, Bot Detection, and DDoS solutions. It also includes the emergence of a new, but growing, edge computing market which aims to move compute power and logic as close to the end-user as possible. The edge cloud uses the emerging cloud computing, serverless paradigm in which the cloud provider runs the server and dynamically manages the allocation of machine resources. When milliseconds matter, processing at the edge is an ideal way to handle highly dynamic and time-sensitive data. The edge cloud complements data center, central cloud, and hybrid solutions.

Our mission is to fuel the next modern digital experience by providing developers with a programmable and reliable edge cloud platform that they adopt as their own.

Organizations must keep up with complex and ever-evolving end-user requirements. We help them surpass their end-users' expectations by powering fast, secure, and scalable digital experiences. We built a powerful edge cloud platform, designed from the ground up to be programmable and support agile software development. We believe our platform gives our customers a significant competitive advantage, whether they were born into the digital age or are just embarking on their digital transformation journey. Our platform consists of three key components: a programmable edge, a software-defined modern network, and a philosophy of customer empowerment. Our programmable edge provides developers with real-time visibility and control, where they can write and deploy code to push application logic to the edge. It supports modern application delivery processes, freeing developers to innovate without constraints. Our software-defined modern network is built for the software-defined future. It is powerful, efficient, and flexible, designed to enable us to rapidly scale to meet the needs of the most demanding customers and never be a barrier to their growth. Our 45 terabit software-centric network is located in 60 uniquely designed POPs across the world as of March 31, 2019. Finally, being developers ourselves, we empower customers to build great things while supporting their efforts through frictionless tools and a deeply technical support team that facilitates ongoing collaboration.

We serve both established enterprises and technology-savvy organizations. Our customers represent a diverse set of organizations across many industries with one thing in common: they are competing by using the power of software to build differentiation at the edge. With our edge cloud platform, our customers are disrupting existing industries and creating new ones. For example, several of our customers have reinvented digital publishing by connecting readers through subscription models to indispensable content, helping people understand the world through deeply reported independent journalism. Our customers' software applications use our edge cloud platform to ensure concert goers can buy tickets to the live events they love, travelers can book flights seamlessly and embark on their next great adventure, and sports fans can stream events in real time, across all devices. The range of applications that developers build with our edge cloud platform continues to surpass our expectations.

We generate substantially all of our revenue from charging our customers based on their usage of our platform. Initially, customers typically choose to become platform customers, for which we charge fees based on their committed or actual use of our platform, as measured in gigabytes and requests. Many of our customers generate billings in excess of their minimum commitment. We also generate revenue from additional products as well as professional and other services, such as implementation. We charge a flat one-time or recurring fee for these additional products and services.

Our edge cloud platform has experienced a rapid increase in the number of customers from 530 as of December 31, 2014 to 1,582 as of December 31, 2018. Potential customers have the opportunity to test our platform for free. If they choose to make use of our platform for live production delivery, they have the ability to sign up online by providing their credit card information and agreeing to a minimum monthly fee of $50.

We focus our direct selling efforts on medium to large organizations as well as smaller companies that are exhibiting rapid growth. We engage with and support these customers with our field sales representatives, account managers, and technical account managers who focus on customer satisfaction and drive expansion of their usage of our platform and products. These teams work with technical and business leaders to help our customers' end-users receive the best possible digital experience, while also lowering our customers' total cost of ownership. We have established and continue to maintain our position by improving upon our programmable edge platform and software-defined modern network architecture. We continue to focus on empowering our developer community through events and conferences, including our Altitude conferences. The success of these direct selling efforts is reflected by our 227 enterprise customers as of December 31, 2018 that generated 84% of our total revenue.

As our customers become more successful and grow, they increase their usage of our platform and adopt additional Fastly products. A meaningful indicator of the increased activity from our existing customer accounts and overall customer satisfaction is our DBNER, which was 147.3% and 132.0% for the years ended December 31, 2017 and 2018, respectively. We believe that an annual cohort analysis of our customers, as depicted in the chart below, demonstrates our success in customer expansion. Once a customer begins to generate revenue for us, they tend to increase their usage of our platform, in particular in their second year. Customer accounts acquired in 2014, 2015, 2016, 2017 and 2018 are referred to as the 2014 Cohort, 2015 Cohort, 2016 Cohort, 2017 Cohort and 2018 Cohort, respectively. Our 2014 cohort increased its revenue 3 times after its first year and has grown at approximately a 50% CAGR over the last four years.

In 2014, we generated $4.9 million of revenue from the 2014 Cohort. Revenue from the 2014 Cohort grew to $14.9 million in 2015, year-over-year growth rate of 204%. In 2015, we generated $7.8 million of revenue from the 2015 Cohort. Revenue from the 2015 Cohort grew to $20.1 million in 2016, representing a year-over-year growth rate of 157%. In 2016, we generated $6.6 million of revenue from the 2016 Cohort. Revenue from the 2016 Cohort grew to $22.0 million in 2017, representing 233% year-over-year growth. In 2017, we generated $5.6 million of revenue from the 2017 Cohort. Revenue from the 2017 Cohort grew to $16.8 million in 2018, representing 200% year-over-year growth.

Summary of Revenue Generated by Customer Cohorts Over Time:

Customers that have negotiated contracts with us generate a substantial majority of our revenue. These customers typically purchase one or more products, for which we charge a monthly recurring or one-time fee depending on the products selected. Some of these customers also choose to purchase various levels of account management and enhanced customer support for a monthly fee. Typically, the term of these contracts is 12 months and includes a minimum monthly billing commitment in exchange for more favorable pricing terms. Many of these customers generate billings in excess of their minimum commitment. In addition, customers can sign up online by providing their credit card information and agreeing to a minimum monthly fee.

The timing of our sales is difficult to predict. The length of our sales cycle, from initial evaluation to payment, can range from several months to well over a year and can vary substantially from customer to customer. Similarly, the onboarding and ramping process with new enterprise customers can take several months.

We have achieved significant growth in recent periods. For the years ended December 31, 2017 and 2018, our revenue was $104.9 million and $144.6 million, respectively. Our 10 largest customers generated an aggregate of 37% and 32% of our revenue in 2017 and 2018, respectively. We incurred a net loss of $32.5 million and $30.9 million for the years ended December 31, 2017 and 2018, respectively.

Factors Affecting Our Performance

Winning New Customers

We are focused on continuing to attract new customers. Our customer base includes both large, established enterprises that are undergoing digital transformation and emerging companies spanning a wide array of industries and verticals. In both instances, developers within these companies often use and advocate the adoption of our platform by their companies. We also benefit from word-of-mouth promotion across the broader developer community. We will continue to invest in our developer outreach, leveraging it as a cost-efficient approach to attracting new customers. We also plan to dedicate significant resources to sales and marketing programs, including various online marketing activities as well as targeted account-based advertising.

This will require us to dedicate significant resources to further develop the market for our platform and differentiate our platform from competitive products and services. We will also need to expand, retain, and motivate our sales and marketing personnel in order to target our sales efforts at larger enterprises and senior management of these potential customers.

Expanding within our Existing Customer Base

We emphasize retaining our customers and expanding their usage of our platform and adoption of our other products. Customers often begin with smaller deployments of our programmable edge platform and then expand their usage over time. In addition, our programmable edge platform includes a variety of other offerings, such as load balancing, shielding, web security, and WAF. As our customers mature, we assist them in expanding their use of our platform, including the use of additional offerings beyond edge cloud delivery. As enterprises grow and experience increased traffic, their needs evolve, leading them to find additional use cases for our platform and expand their usage accordingly. In addition, given that customer acquisition costs are incurred largely for acquiring and initial onboarding, we gain operating leverage to the extent that existing customers expand their use of our platform and products.

Our ability to retain our customers and expand their usage could be impaired for a variety of reasons, including a customer moving to another provider or reducing usage within the term of their contract to their minimum usage commitment. Even if our customers expand their usage of our platform, we cannot guarantee that they will maintain those usage levels for any meaningful period of time or that they will renew their commitments.

International Customer Growth

We intend to continue expanding our efforts to attract customers outside of the United States by augmenting our sales teams and strategically increasing the number of POPs in select international locations. As of December 31, 2017 and 2018, 42% and 46% of our customers were headquartered outside of the United States.

Our international expansion, including our global sales efforts, will add increased complexity and cost to our business. This will require us to significantly expand our sales and marketing capabilities outside of the United States, as well as increase the number of POPs around the world to support our customers. We have limited experience managing the administrative aspects of a global organization, and we have only recently begun to establish and operate offices in foreign countries, which could place a strain on our business and culture.

Investing in Sales and Marketing

Our customers have been pivotal in driving brand awareness and broadening our reach. While we continue to leverage our self-service approach to drive adoption by developers, we intend to continue to expand our sales and marketing efforts, with an increased focus on sales to enterprises globally. Utilizing our direct sales force, we have multiple selling points within organizations to acquire new customers and increase usage from our existing customers. We intend to increase our discretionary marketing spend, including account based and brand spend, to drive the effectiveness of our sales teams. As a result, we expect our total operating expenses to increase as we continue to expand. Our investments in our sales and marketing teams are intended to help accelerate our sales, onboarding, and ramp cycles. As of December 31, 2018, we had 56 sales representatives and sales managers across our company.

These efforts will require us to invest significant financial and other resources. Furthermore, we believe that there is significant competition for sales personnel with the skills and technical knowledge that we require. Our ability to achieve significant revenue growth will depend, in large part, on our success in recruiting, training, and retaining sufficient numbers of sales personnel to support our growth.

Continued Investment in Our Platform and Network Infrastructure

We must continue to invest in our platform and network infrastructure to maintain our position in the market. We expect our revenue growth to be dependent on an expanding customer base and continued adoption of our edge cloud platform. In anticipation of winning new customers and staying ahead of our customers' needs, we plan to continue to invest to expand the scale and capacity of our software-defined modern network, resulting in increased network service provider fees, which could adversely affect our gross margins if we are unable to offset these costs with revenue from new customers and increase revenue from existing customers. Our customers require constant innovation within their own organizations and expect the same from us. Therefore, we will continue to invest resources to enhance our development capabilities and introduce new products and features on our platform. We believe that investment in research and development will contribute to our long-term growth but may also negatively impact our short-term profitability. For the year ended December 31, 2018, our research and development expenses as a percentage of revenue was 24%.

Developers use our platform to build custom applications and require a state-of-the-art infrastructure to test and run these applications. We will continue to invest in our network infrastructure by strategically increasing our POPs. We also anticipate making investments in upgrading our technology and hardware to continue providing our customers a fast and secure platform. Our capital expenditures for the years ended December 31, 2017 and 2018 were $20.0 million and $18.7 million, respectively, representing 19% and 13% of our revenue in such periods. We expect our capital expenditures to increase on an absolute basis and may increase as a percentage of revenue in future periods. Our gross margins and operating results are impacted by these investments. As of March 31, 2019, we had 60 POPs across 21 countries.

In the event that there are errors in software, failures of hardware, damages to a facility, or misconfigurations of any of our services – whether caused by our products, third-party error, our own error, natural disasters, or security breaches – we could experience lengthy interruptions in our platform as well as delays and additional expenses in arranging new facilities and services. In addition, there can be no assurance that we are adequately prepared for unexpected increases in bandwidth demands by our customers, particularly when customers experience cyber-attacks. The bandwidth we have contracted to purchase may become unavailable for a variety of reasons, including service outages, payment disputes, network providers going out of business, natural disasters, networks imposing traffic limits, or governments adopting regulations that impact network operations.

Key Business Metrics

We regularly review a number of metrics, including the key metrics presented in the table below, to evaluate our business, measure our performance, identify trends affecting our business, prepare financial projections, and make strategic decisions. The calculation of the key metrics and other measures discussed below may differ from other similarly titled metrics used by other companies, securities analysts or investors.

	Year Ended December 31,	
	2017	2018
Number of Customers (as of end of period)	1,439	1,582
Number of Enterprise Customers (as of end of period)	170	227
Dollar-Based Net Expansion Rate	147.3%	132.0%

Number of Customers

We believe that the number of customers is an important indicator of the adoption of our platform. Our definition of a customer consists of identifiable operating entities with which we have a billing relationship in good standing and from which we recognized revenue during the period. In addition to our paying customers, we also have trial, developer, nonprofit and open source program, and other non-paying accounts that are excluded from our customer count metric. As of December 31, 2017 and 2018, we had 1,439 and 1,582 customers, respectively.

Number of Enterprise Customers

Historically our revenue has been driven primarily by a subset of customers who have leveraged our platform substantially from a usage standpoint. These enterprise customers are defined as customers with revenue in excess of $100,000 over the previous 12-month period. As of December 31, 2017, we had 170 enterprise customers which generated 82% of revenue for the year ended December 31, 2017. As of December 31, 2018, we had 227 enterprise customers which generated 84% of revenue for the year ended December 31, 2018. We believe the recruitment and cultivation of enterprise customers is critical to our long term success.

Dollar-Based Net Expansion Rate

Our ability to generate and increase our revenue is dependent upon our ability to increase the number of new customers and increase the usage of our platform and increase the purchase of additional products by our existing customers. We track our performance in this area by measuring our DBNER. Our DBNER increases when customers increase their usage of our platform or purchase additional products and declines when they reduce their usage, benefit from lower pricing on their existing usage or curtail their purchases of additional products. We believe DBNER is a key metric in measuring the long-term value of our customer relationships and our ability to grow our revenue through increased usage of our platform and purchase of additional products by our existing customers. However, our calculation of DBNER indicates only expansion among continuing customers and does not indicate any decrease in revenue attributable to former customers, which may differ from similar metrics of other companies. We calculate DBNER by dividing the revenue for a given period from customers who remained customers as of the last day of the given period (current period) by the revenue from the same customers for the same period measured one year prior (base period). The revenue included in the current period excludes revenue from (i) customers that churned after the end of the base period and (ii) new customers that entered into a customer agreement after the end of the base period. For example, to calculate our DBNER for the year ended December 31, 2018, we divided (i) revenue for the 12 months ended December 31, 2018, from customers that entered into a customer agreement prior to January 1, 2018, and that remained customers as of December 31, 2018, by (ii) revenue for the 12 months ended December 31, 2017 from the same set of customers.

For the years ended December 31, 2017 and 2018, our DBNER was 147.3% and 132.0%, respectively. As described above, our customers tend to increase their usage of our platform in their second year, which is typically followed by more modest increases in usage, if any, in ensuing years. As a result, while DBNER may fluctuate from quarter to quarter based on, among other things, the timing associated with new customer accounts, we expect our DBNER to continue to decrease on an annual basis as customers that have used our platform for more than two years become a larger portion of both our overall customer base and the revenue that we use to calculate DBNER.

We separately monitor customer retention and churn on an annual basis by measuring our annual revenue retention rate, which we calculate by multiplying the final full month of revenue from a customer that terminated its contract with us (a Churned Customer) by the number of months remaining in the same calendar year (Annual Revenue Churn). The quotient of the Annual Revenue Churn from all of our Churned Customers divided by our annual revenue of the same calendar year is then subtracted from 100% to determine our annual revenue retention rate. We believe this calculation is helpful in that it is based on the amount of revenue that we would expect to have received in the remaining portion of a particular period had a customer not terminated its contract with us. It is not indicative of the actual revenue contribution from churned customers in past periods. By comparing this amount to actual revenue for the period, we are able to assess our ability to replace terminated revenue by generating revenue from new and continuing customers. Our annual revenue retention rate for the years ended December 31, 2017 and 2018 was 99.0% and 98.9%, respectively.

Key Components of Statement of Operations

Revenue

We derive our revenue primarily from usage-based fees earned from customers using our platform. We also earn flat fees from certain products and services.

Customers are generally invoiced in arrears on a monthly basis. Many customers have tiered usage pricing which reflects discounted rates as usage increases. Our larger customers often enter into contracts that contain minimum billing commitments and reflect discounted pricing associated with such usage levels.

We define U.S. revenue as revenue from customers that have a billing address in the United States and we define international revenue as revenue from customers that have a billing address outside of the United States. Our revenue has been and will continue to be impacted by new and existing customers' usage of our products, international expansion and the success of our sales efforts.

Cost of Revenue and Gross Margin

Cost of revenue consists primarily of fees paid for bandwidth, peering, and colocation. Cost of revenue also includes personnel costs, such as salaries, benefits, bonuses, and stock-based compensation for our customer support and infrastructure employees, and non-personnel costs, such as amortization of capitalized internal-use software development costs, and depreciation of our network equipment. Our arrangements with network service providers require us to pay fees based on bandwidth use, in some cases subject to minimum commitments, which may be underutilized. We expect our cost of revenue to continue to increase on an absolute basis and may increase as a percentage of revenue, including as a result of depreciation and amortization associated with capital expenditures in future periods.

Our gross margin has been and will continue to be affected by a number of factors, including the timing and extent of our investments in our operations, our ability to manage our network service providers and cloud infrastructure-related fees, the timing of amortization of capitalized software development costs, and depreciation of our network equipment and the extent to which we periodically choose to pass on our cost savings from network optimization efforts to our customers in the form of lower usage rates.

Research and Development

Research and development expenses consist primarily of personnel costs, including salaries, benefits, bonuses, and stock-based compensation, cloud infrastructure fees for development and testing, amortization of capitalized internal-use software development costs, and an allocation of our general overhead expenses. We capitalize the portion of our software development costs that meet the criteria for capitalization.

We continue to focus our research and development efforts on adding new features and products including new use cases, improving the efficiency and performance of our network, and increasing the functionality of our existing products. We expect our research and development expenses to continue to increase on an absolute basis and may increase as a percentage of revenue in future periods.

Sales and Marketing

Sales and marketing expenses consist primarily of personnel costs, including commissions for our sales employees, as well as salaries, benefits, bonuses, and stock-based compensation. Sales and marketing expenses also include expenditures related to advertising, marketing, our brand awareness activities, costs related to our Altitude conferences, professional services fees, and an allocation of our general overhead expenses.

We focus our sales and marketing efforts on generating awareness of our company, platform, and products, creating sales leads, and establishing and promoting our brand, both domestically and internationally. We plan to increase our investment in sales and marketing by hiring additional sales and marketing personnel, expanding our sales channels, driving our go-to-market strategies, building our brand awareness, and sponsoring additional marketing events. We expect our sales and marketing expenses to continue to increase on an absolute basis and may increase as a percentage of revenue in future periods.

General and Administrative

General and administrative expenses consist primarily of personnel costs, including salaries, benefits, bonuses, and stock-based compensation, for our accounting, finance, legal, human resources, and administrative support personnel and executives. General and administrative expenses also include costs related to legal and other professional services fees, sales and other taxes, depreciation and amortization, an allocation of our general overhead expenses, and bad debt expense. We expect that we will incur costs associated with supporting the growth of our business, our transition to, and operation as, a public company and to meet the increased compliance requirements associated with our international expansion.

Our general and administrative expenses include a significant amount of sales and other taxes to which we are subject based on the manner we sell and deliver our products. Historically, we have not collected such taxes from our customers and have therefore recorded such taxes as general and administrative expenses. We expect that these expenses will decline in future years as we continue to implement our sales tax collection mechanisms and start collecting these taxes from our customers. We expect our general and administrative expenses to continue to increase on an absolute basis and may increase as a percentage of revenue in future periods.

Income Taxes

Our income tax expense consists primarily of income taxes in certain foreign jurisdictions where we conduct business and state minimum income taxes in the United States. We have a valuation allowance for deferred tax assets, including net operating loss carryforwards. We expect to maintain this valuation allowance for the foreseeable future.

Results of Operations

The following tables set forth our results of operations for the period presented and as a percentage of our revenue for that period.

	Year Ended December 31,	
	2017	2018
	(in thousands)	
Consolidated Statement of Operations:		
Revenue	$104,900	$144,563
Cost of revenue[(1)]	48,672	65,499
Gross profit	56,228	79,064
Operating expenses:		
Research and development[(1)]	28,989	34,618
Sales and marketing[(1)]	40,818	50,134
General and administrative[(1)]	17,451	23,450
Total operating expenses	87,258	108,202
Loss from operations	(31,030)	(29,138)
Other expenses, net	(1,212)	(1,612)
Loss before income taxes	(32,242)	(30,750)
Income taxes	208	185
Net loss attributable to common stockholders	$(32,450)	$(30,935)

(1) Includes stock-based compensation expense as follows:

	Year Ended December 31,	
	2017	2018
	(in thousands)	
Cost of revenue	$190	$ 265
Research and development	1,040	1,332
Sales and marketing	493	1,023
General and administrative	1,086	1,459
Total	$2,809	$4,079

	Year Ended December 31,	
	2017	2018
Consolidated Statement of Operations, as a percentage of revenue:**		
Revenue	100%	100%
Cost of revenue	46	45
Gross profit	54	55
Operating expenses:		
Research and development	27	24

Sales and marketing	39	35
General and administrative	17	16
Total operating expenses	83	75
Loss from operations	(30)	(20)
Other expenses, net	(1)	(1)
Loss before income taxes	(31)	(21)
Income taxes	*	*
Net loss attributable to common stockholders	(31)%	(21)%

* Less than 0.5% of revenue.

** Columns may not add up to 100% due to rounding.

Years Ended December 31, 2017 and 2018

Revenue

	Year Ended December 31,		
	2017	**2018**	**Change**
	(in thousands)		
Revenue	$104,900	$144,563	38%

Revenue was $104.9 million for 2017 compared to $144.6 million for 2018, an increase of $39.7 million, or 38%. We had 1,439 customers and 170 enterprise customers as of December 31, 2017. We had 1,582 customers and 227 enterprise customers as of December 31, 2018. This is an increase of 143, or 10%, in customers and 57, or 33%, in enterprise customers from December 31, 2017. Approximately 95% of our revenue in 2018 was driven by usage on our platform. The remainder of our revenue was generated by our other products and services, including support and professional services.

U.S. revenue was $82.7 million and 79% of revenue in 2017. U.S. revenue was $110.9 million and 77% of revenue in 2018. This is an increase of $28.2 million, or 34%, from U.S. revenue in 2017. International revenue was $22.2 million and 21% of revenue in 2017. International revenue was 33.7 million and 23% of revenue in 2018. This is an increase of $11.5 million, or 52%, from international revenue in 2017. We had 830 domestic customers and 609 international customers in 2017. We had 861 domestic customers and 721 international customers in 2018. This is an increase in domestic customers of 31, or 4%, from 2017 and an increase in international customers of 112, or 18%, from 2017.

Cost of Revenue

	Year EndedDecember 31		
	2017	**2018**	**Change**
	(in thousands)		
Cost of revenue	$48,672	$65,499	35%

Cost of revenue was $48.7 million for 2017 compared to $65.5 million for 2018, an increase of $16.8 million, or 35%. In 2017 and 2018, our cost of revenue consisted of bandwidth, peering, and colocation fees as well as personnel costs, including salaries, benefits, bonuses, and stock-based compensation for employees who support the buildout and operation of the network. Our cost of revenue also includes depreciation expense for network equipment, amortization of capitalized internal-use software, and other network costs. The increase in cost of revenue was due to an increase in bandwidth costs of $3.5 million, an increase of colocation costs of $2.3 million, and an increase in other network costs of $2.3 million due to increased traffic on our platform. Depreciation and amortization expense increased by $3.2 million due to increased investments in our platform. Personnel costs increased by $2.7 million due to an increase in headcount.

Gross Profit and Gross Margin

	Year EndedDecember 31		
	2017	2018	Change
	(in thousands)		
Gross profit	$56,228	$79,064	41%
Gross margin	53.6%	54.7%	1.1%

Gross profit was $56.2 million for 2017 compared to $79.1 million for 2018, an increase of $22.8 million, or 41%. The increase in gross profit is due to an increase in revenue from usage of our platform.

Gross margin was 53.6% for 2017 compared to 54.7% for 2018, an increase of 1.1%. The increase is due to better optimization of our platform.

Operating Expenses

	Year Ended December 31,		
	2017	2018	Change
	(in thousands)		
Research and development	$28,989	$34,618	20%
Sales and marketing	40,818	50,134	23%
General and administrative	17,451	23,450	34%
Total operating expenses	$87,258	$108,202	24%
Percentage of revenue:			
Research and development	27%	24%	(3)%
Sales and marketing	39%	35%	(4)%
General and administrative	17%	16%	(1)%

Research and development expenses were $29.0 million for 2017 compared to $34.6 million for 2018, an increase of $5.7 million, or 20%. This increase is due to an increase of $6.2 million of personnel related costs, such as salaries, benefits, bonuses, and stock-based compensation. This was offset by an increase in capitalized internal-use software of $1.9 million.

Sales and marketing expenses were $40.9 million for 2017 compared to $50.1 million for 2018, an increase of $9.3 million, or 23%. This increase is due to a $5.1 million increase in personnel related costs, such as salaries, sales commissions, benefits and stock-based compensation, due to an increase in headcount, an increase of $1.5 million in the allocation of corporate costs for facilities and information systems costs, an increase in travel costs of $1.1 million, and an increase in external marketing costs of $0.8 million, such as marketing events, including our Altitude conferences, sponsorship, and advertising.

General and administrative costs were $17.5 million in 2017 compared to $23.5 million in 2018, an increase of $6.0 million, or 34%. This increase is due to an increase of $6.2 million of personnel related costs, such as salaries, benefits, and stock-based compensation due to an increase in headcount, and an increase of $1.0 million in external professional services such as legal, accounting, and enterprise systems. Transaction taxes decreased by $1.3 million primarily due to the release of a reserve of $1.9 million that was no longer required.

Other Income and Expense

Interest Income

	Year EndedDecember 31		
	2017	2018	Change
	(in thousands)		
Interest income	$443	$939	112%

Interest income was $443,000 for 2017 as compared to $939,000 for 2018, an increase of $496,000, or 112%. This increase is due to interest on cash raised from our Series F convertible Preferred Stock financing in 2018.

Interest Expense

	Year EndedDecember 31		
	2017	2018	Change
	(in thousands)		
Interest expense	$1,116	$1,810	62%

Interest expense was $1.1 million for 2017 as compared to $1.8 million for 2018, an increase of $0.7 million, or 62%. This increase is due to additional borrowings during 2018.

Other expense, net

	Year EndedDecember 31		
	2017	2018	Change
	(in thousands)		
Other expense, net	$539	$741	37%

Other expense, net was $539,000 for 2017 as compared to $741,000 for 2018, an increase of $202,000, or 37%. This increase is primarily due to mark-to-market adjustments for warrant liabilities.

Quarterly Results of Operations and Other Data

The following table sets forth our unaudited quarterly statements of operations data for each of the quarters indicated. The unaudited quarterly statements of operations data set forth below have been prepared on the same basis as our audited consolidated financial statements and, in the opinion of management, reflect all adjustments, consisting only of normal recurring adjustments, that are necessary for the fair statement of such data. Our historical results are not necessarily indicative of the results that may be expected in the future, and the results for any quarter are not necessarily indicative of results to be expected for a full year or any other period. The following quarterly financial data should be read in conjunction with our consolidated financial statements and the related notes included elsewhere in this prospectus.

	(Unaudited)							
	Three Months Ended							
	March 31, 2017	June 30, 2017	September 30, 2017	December 31, 2017	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018
	(in thousands)							
Revenue	$24,401	$24,271	$26,191	$30,037	$32,498	$34,448	$36,820	$40,797
Cost of revenue[(1)]	10,469	10,915	12,794	14,494	15,384	15,695	16,711	17,709
Gross profit	13,932	13,356	13,397	15,543	17,114	18,753	20,109	23,088
Operating Expense								
Research and development[(1)]	6,139	6,751	8,188	7,911	7,979	8,099	9,233	9,307
Sales and marketing[(1)]	8,839	9,910	10,784	11,285	12,343	11,973	12,331	13,487
General and administrative[(1)]	3,280	3,857	4,873	5,441	5,703	4,130	6,265	7,352
Total operating expenses	18,258	20,518	23,845	24,637	26,025	24,202	27,829	30,146
Loss from operations	(4,326)	(7,162)	(10,448)	(9,094)	(8,911)	(5,449)	(7,720)	(7,058)
Interest income	46	117	156	124	137	147	293	362
Interest expense	(231)	(226)	(340)	(319)	(381)	(359)	(479)	(591)
Other income (expense), net	(171)	(118)	(184)	(66)	(94)	(140)	(530)	23
Loss before income taxes	(4,682)	(7,389)	(10,816)	(9,355)	(9,249)	(5,801)	(8,436)	(7,264)
Income taxes	31	48	71	58	56	35	51	43
Net loss	$(4,713)	$(7,437)	$(10,887)	$(9,413)	$(9,305)	$(5,836)	$(8,487)	$(7,307)
(1) Includes stock based compensation as follows:								
Cost of revenue	$43	$40	$43	$64	$52	$71	$55	$87

Research and development	244	239	276	281	276	324	307	425
Sales and marketing	128	82	123	160	225	226	242	330
General and administrative	236	268	292	290	295	369	357	438
	$651	$629	$734	$795	$848	$990	$961	$1,280

(Unaudited)

Three Months Ended

	March 31, 2017	June 30, 2017	September 30, 2017	December 31, 2017	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018
	(percentage values)							
Revenue	100%	100%	100%	100%	100%	100%	100%	100%
Cost of revenue	43%	45%	49%	48%	47%	46%	45%	43%
	57%	55%	51%	52%	53%	54%	55%	57%
Gross profit								
Operating Expense								
Research and development	25%	28%	31%	26%	25%	24%	25%	23%
Sales and marketing	36%	41%	41%	38%	38%	35%	33%	33%
General and administrative	13%	16%	19%	18%	18%	12%	17%	18%
Total operating expenses	75%	85%	91%	82%	80%	70%	76%	74%
Loss from operations	(18)%	(30)%	(40)%	(30)%	(27)%	(16)%	(21)%	(17)%
Interest income	0%	0%	1%	0%	0%	0%	1%	1%
Interest expense	(1)%	(1)%	(1)%	(1)%	(1)%	(1)%	(1)%	(1)%
Other income (expense), net	(1)%	0%	(1)%	0%	0%	0%	(1)%	0%
Loss before income taxes	(19)%	(30)%	(41)%	(31)%	(28)%	(17)%	(23)%	(18)%
Income taxes	0%	0%	0%	0%	0%	0%	0%	0%
Net loss	(19)%	(31)%	(41)%	(32)%	(29)%	(17)%	(23)%	(18)%

Three Months Ended

	March 31,2017	June 30,2017	September 30,2017	December 31,2017	March 31,2018	June 30,2018	September 30,2018	December 31,2018
Key Business Metrics(1)								
Number of Customers (as of end of period)	1,261	1,284	1,365	1,439	1,444	1,529	1,516	1,582
Number of Enterprise Customers (as of end of period)	132	143	157	170	182	189	212	227
Dollar-Based Net Expansion Rate	146.7%	145.0%	148.6%	147.3%	140.3%	139.1%	136.1%	132.0%

(1) See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Business Metrics" for our definitions of these metrics.

Quarterly Revenue Trends

Our quarterly revenue increased in each period presented, with the exception of the three months ended June 30, 2017, primarily due to an increase in the usage of our platform by our existing customers and the addition of new customers. There was a decrease in revenue for the three months ended June 30, 2017 due to several customers renewing at lower rates.

Quarterly Cost of Revenue Trends

Our cost of revenue increased sequentially in each of the quarters presented, primarily driven by expanded use of our platform by existing and new customers, which resulted in increased network costs. We expect our cost of revenue to continue to increase on an absolute basis in future quarters and may increase as a percentage of revenue based on the timing of investments made in our network.

Quarterly Gross Margin Trends

Our gross margin can fluctuate quarter to quarter due to the timing of investments made in our network.

Quarterly Operating Expense Trends

Our operating expenses generally have increased in almost every fiscal quarter primarily due to increases in headcount and other related expenses to support our growth. Our research and development costs in the quarter ended September 30, 2017 reflect an increase in allocation due to an increase in hiring as compared to the rest of the Company. The allocation decreased in the quarter ended December 31, 2017 as hiring in other areas of the Company increased. Our sales and marketing costs can fluctuate based on the timing of our external conferences, such as Altitude. Our general and administrative expenses for the quarter ended June 30, 2018 reflect the release of $1.9 million of reserves related to a transaction tax matter that was favorably resolved. We expect our operating expenses to continue to increase on an absolute basis in future quarters.

Liquidity and Capital Resources

To date, our principal sources of liquidity have been payments received from customers, the net proceeds we received through sales of equity securities, as well as borrowings under our credit facilities. From our inception through December 31, 2018, we have completed several rounds of equity financings through the sales of shares of our convertible preferred stock for total net proceeds of $219.6 million. We believe that our cash and cash equivalents balances, our credit facilities, and the cash flows generated by our operations will be sufficient to satisfy our anticipated cash needs for working capital and capital expenditures for at least the next 12 months.

Credit Facilities

In November 2017 we entered into a $30 million term loan pursuant to a Second Amended and Restated Loan and Security Agreement (Senior Loan Agreement). All amounts outstanding under the Senior Loan Agreement accrue interest at a rate of prime plus 1.75%. All obligations owed in connection with the Senior Loan Agreement are secured by a lien on substantially all of our assets other than our intellectual property. All outstanding loans under the Senior Loan Agreement, if not paid earlier, will become due and payable on November 1, 2021. We are required to comply with certain affirmative and negative covenants in the Senior Loan Agreement, including a requirement that we maintain a ratio of cash and cash equivalents plus net unbilled accounts receivable to current liabilities plus long term debt minus the current portion of any deferred revenue (an Adjusted Quick Ratio) at all times of at least 1.15 to 1.0, as well as a requirement that we achieve trailing three-month revenue tested on a monthly basis in amounts not less than 80% of our board approved annual budget. We are also required to maintain at least $10 million in unrestricted cash with the lender or its affiliates at all times.

In December 2018, we entered into a Second Lien Credit Agreement pursuant to which the lenders thereunder committed to lend us up to an additional $30 million in term loans. We were required by the terms of the Second Lien Credit Agreement to draw at least $20 million by not later than December 31, 2018. As of December 31, 2018 we have drawn a total of $20 million under the Second Lien Credit Agreement. All amounts outstanding under the Second Lien Credit Agreement accrue interest at a floating rate that is based on the prime rate plus 4.25%. All obligations that are owed in connection with the Second Lien Credit Agreement are secured by a second priority lien on substantially all of our assets other than our intellectual property. All outstanding loans under the Second Lien Credit Agreement, if not paid earlier, will become due and payable in December 2021. We are required to comply with certain affirmative and negative covenants in the Second Lien Credit Agreement, including a requirement that we achieve trailing three-month revenue tested on a monthly basis in amounts not less than 75% of our board approved annual budget.

We were in compliance with our covenants as of December 31, 2018.

Cash Flows

The following table summarizes our cash flows for the period indicated:

	Year Ended December 31,	
	2017	2018
	(in thousands)	
Cash used in operating activities	$(25,861)	$(16,985)
Cash used in investing activities	(15,780)	(47,020)
Cash provided by financing activities	55,406	69,637
Net increase in cash and cash equivalents	$13,733	$5,654

Cash Flows from Operating Activities

In 2017, cash used in operating activities consisted primarily of our net loss of $32.5 million adjusted for non-cash items, including $2.8 million of stock-based compensation expense, $9.6 million of depreciation and amortization, and an increase in our bad debt expense of $1.0 million. With respect to changes in operating assets and liabilities, accounts payable, accrued expenses, and other liabilities increased $2.2 million. This was partially offset by an increase in accounts receivable and prepaid expenses of $9.6 million, which primarily resulted from the growth of our business and the timing of cash receipts from certain of our larger customers, pre-payments for travel, benefits, and commissions as well as an increase in short-term deposits and VAT receivables.

In 2018, cash used in operating activities consisted primarily of our net loss of $30.9 million adjusted for non-cash items, including $13.4 million of depreciation and amortization expense, $4.1 million of stock-based compensation expense, and an increase in our bad debt expense of $0.6 million. With respect to changes in operating assets and liabilities, accounts payable, accrued expenses and other liabilities increased by $4.7 million. This was partially offset by an increase in accounts receivable of $6.2 million and prepaid expenses of $2.3 million, respectively, due to the growth of our business and the timing of cash receipts from certain of our larger customers, pre-payments for insurance, rent, and software licenses, as well as an increase in VAT receivable.

Cash Flows from Investing Activities

In 2017, cash used in investing activities was $15.8 million, primarily consisting of $13.2 million of payments related to purchases of property and equipment to expand our network. We also purchased an additional $46.1 million of marketable securities and sold $43.5 million of marketable securities.

In 2018, cash used in investing activities was $47.0 million, primarily consisting of $19.7 million of payments related to purchases of property and equipment to expand our network. We also purchased an additional $62.7 million of marketable securities and sold $35.2 million of marketable securities.

Cash Flows from Financing Activities

In 2017, cash provided by financing activities was $55.4 million, primarily consisting of $49.8 million in proceeds from our sale of Series E convertible preferred stock, net of issuance expenses, $4.9 million of net borrowings, and $0.6 million in proceeds from stock option exercises by our employees.

In 2018, cash provided by financing activities was $69.6 million, primarily consisting of $39.9 million in proceeds from our sales of Series F convertible preferred stock, net of issuance expenses, $27.1 million of net borrowings, and $2.6 million in proceeds from stock option exercises by our employees and directors.

Contractual Obligations and Other Commitments

The following table summarizes our non-cancelable contractual obligations as of December 31, 2018:

	Less than 1Year	1-3 Years	3-5 Years	After 5Years	Total
	(in thousands)				
Operating lease obligations[1]	$5,097	$2,390	$—	$—	$7,487
Purchase obligations[2]	43,691	12,447	402	—	56,540
Debt[3]	15,169	46,776	24	—	61,969
Total	$63,957	$61,613	$426	$—	$125,996

(1) Operating lease obligations represent total future minimum rent payments under non-cancelable operating lease agreements, net of sublease income of $1.5 million.

(2) Purchase obligations represent total future minimum payments under contracts with our cloud infrastructure provider, network service providers, and other vendors. Purchase obligations exclude agreements that are cancelable without penalty.

(3) Debt represents principal and interest payments under our loan and security agreements.

Off-Balance Sheet Arrangements

We have not entered into any off-balance sheet arrangements and do not have any holdings in variable interest entities.

Segment Information

We have one business activity and operate in one reportable segment.

Quantitative and Qualitative Disclosures about Market Risk

We are exposed to certain market risks in the ordinary course of our business. These risks primarily include interest rate and currency exchange risks as follows:

Interest Rate Risk

We had cash and cash equivalents of $37.0 million as of December 31, 2018, which consisted of bank deposits and money market funds. The cash and cash equivalents are held for working capital purposes. Such interest-earning instruments carry a degree of interest rate risk. To date, fluctuations in interest income have not been significant. The primary objective of our investment activities is to preserve principal while generating income without significantly increasing risk. We do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate risk exposure. Due to the short-term nature of our investments, we have not been exposed to, nor do we anticipate being exposed to, material risks due to changes in interest rates. Under our Senior Loan Agreement, amounts borrowed prior to December 2018 bear interest at a rate of prime plus 1.75%. Amounts borrowed under the Second Lien Credit Agreement bear interest at a rate of prime plus 4.25%. A hypothetical 10% change in interest rates during the period presented would not have had a material impact on our consolidated financial statements.

Currency Exchange Risks

The functional currency of our foreign subsidiaries is the U.S. dollar. Therefore, we are exposed to foreign exchange rate fluctuations as we convert the financial statements of our foreign subsidiaries into U.S. dollars. The local currencies of our foreign subsidiaries are the British pound and Japanese Yen. Our subsidiaries remeasure monetary assets and liabilities at period-end exchange rates, while non-monetary items are remeasured at historical rates. Revenue and expense accounts are remeasured at the average exchange rate in effect during the period. If there is a change in foreign currency exchange rates, the conversion of our foreign subsidiaries' financial statements into U.S. dollars would result in a realized gain or loss which is recorded in our consolidated statements of operations. We do not currently engage in any hedging activity to reduce our potential exposure to currency fluctuations, although we may choose to do so in the future. A hypothetical 10% change in foreign exchange rates during the period presented would not have had a material impact on our consolidated financial statements.

Critical Accounting Policies and Estimates

We prepare our consolidated financial statements in accordance with U.S. GAAP. The preparation of our consolidated financial statements requires us to make estimates, judgments, and assumptions that affect the reported amounts of assets, liabilities, revenue, costs, and expenses and related disclosures. Actual results and outcomes could differ significantly from our estimates, judgments, and assumptions. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations, and cash flows will be affected. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving our judgments and estimates.

Revenue Recognition

We recognize revenue in accordance with the authoritative guidance for revenue recognition, including guidance on revenue arrangements with multiple deliverables. Revenue is recognized only when the price is fixed or determinable, persuasive evidence of an arrangement exists, the service is performed, and collectability of the resulting receivable is reasonably assured.

We primarily derive revenue from customer usage of our platform. Customers can commit to a minimum monthly level of usage and specify the rate at which they will pay for actual usage above the monthly minimum. For contracts with a monthly commitment, we recognize the monthly minimum as revenue each month, provided that an enforceable contract has been executed, the service has been delivered to the customer, the fee is fixed or determinable, and collection is reasonably assured. Should a customer's usage of our platform exceed the monthly minimum, we recognize revenue for such excess in the period of additional usage. For customers without a monthly commitment, we recognize revenue monthly based upon the customer's actual usage provided that an enforceable contract has been executed, the service has been delivered to the customer, the fee is fixed or determinable, and collection is reasonably assured.

When more than one element is contained in a revenue arrangement, we determine the fair value for each element in the arrangement based on vendor-specific objective evidence (VSOE) or third-party evidence (TPE) for each respective element. For arrangements in which we are unable to establish VSOE or TPE for each element, we use the best estimate of selling price (BESP) to determine the fair value of the separate deliverables. We allocate arrangement consideration across the multiple elements using the relative selling price method. If we subsequently determine that collection from a customer is not reasonably assured, we record an allowance for doubtful accounts and bad debt expense for all of that customer's unpaid invoices.

Stock-Based Compensation

We account for stock-based compensation in accordance with the authoritative guidance on stock compensation. Under the fair value recognition provisions of this guidance, stock-based compensation is measured at the grant date based on the fair value of the award and is recognized as expense over the requisite service period, which is generally the vesting period of the respective award. We account for forfeitures as they occur.

Determining the fair value of stock-based awards at the grant date requires judgment. We use the Black-Scholes option-pricing model to determine the fair value of stock options granted to our employees and directors.

The determination of the grant date fair value of options using an option-pricing model is affected by our estimated common stock fair value as well as assumptions regarding a number of other complex and subjective variables. These variables include the fair value of our common stock, the expected term of the options, our expected stock price volatility over the expected term of the options, risk-free interest rates, and expected dividends, which are estimated as follows:

- *Fair Value of Common Stock.* Because our common stock is not yet publicly traded, we must estimate the fair value of common stock, as discussed in "Common Stock Valuations" below.
- *Expected Term.* The expected term represents the period that our stock-based awards are expected to be outstanding. The expected term assumptions were determined based on the vesting terms, exercise terms, and contractual lives of the options. The expected term was estimated using the simplified method allowed under SEC guidance.
- *Volatility.* Since we do not have a trading history of our common stock, the expected volatility is determined based on the historical stock volatilities of our comparable companies. Comparable companies consist of public companies in our industry, which are similar in size, stage of life cycle, and financial leverage. We intend to continue to apply this process using the same or similar public companies until a sufficient amount of historical information regarding the volatility of our own share price becomes available, or unless circumstances change such that the identified companies are no longer similar to us, in which case, more suitable companies whose share prices are publicly available would be used in the calculation.
- *Risk-Free Interest Rate.* We base the risk-free interest rate used in the Black-Scholes option pricing model on the implied yield available on U.S. Treasury zero-coupon issues with a remaining term equivalent to that of the options for each expected term.

- *Dividend Yield.* The expected dividend assumption is based on our current expectations about our anticipated dividend policy. As we have no history of paying any dividends, we use an expected dividend yield of zero.

We account for forfeitures as they occur.

Common Stock Valuation

The fair value of the common stock underlying our stock options was determined by our board of directors, after considering contemporaneous third-party valuations and input from management. The valuations of our common stock were determined in accordance with the guidelines outlined in the American Institute of Certified Public Accountants Practice Aid, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation.* In the absence of a public trading market, our board of directors, with input from management, exercised significant judgment and considered numerous objective and subjective factors to determine the fair value of our common stock as of the date of each option grant, including the following factors:

- contemporaneous valuations performed at periodic intervals by unrelated third-party valuation firms;
- the prices, rights, preferences, and privileges of our convertible preferred stock relative to outside investors in arms-length transactions;
- the rights, preferences, and privileges of our convertible preferred stock relative to those of our common stock;
- our actual and expected operating and financial performance as well as capital resources;
- current business conditions and projections;
- our hiring of key personnel and the experience of our management;
- the risks inherent in the development and expansion of our platform and products;
- our stage of development and material risks related to our business;
- the likelihood of achieving a liquidity event, such as an initial public offering or a merger or acquisition of our business given prevailing market conditions;
- the illiquidity of stock-based awards involving securities in a private company;
- the market performance of comparable publicly traded companies; and
- secondary stock transactions, including secondary stock purchase transactions that were executed among certain of our employees and board members and an unrelated third party.

The valuations performed by unrelated third-party specialists were just one factor used by our board of directors to assist with the valuation of the common stock. In valuing our common stock, the equity value was determined using two different methods, which includes back-solving overall equity value to the price paid by recent financing transactions, and the market-based approach. The fair value of our equity was then allocated to various securities within our capital structure by applying an option pricing method. The market-based approach estimates value based on a comparison of the subject company to comparable public companies in a similar line of business. From the comparable companies, a representative market value multiple is determined and then applied to the subject company's financial results to estimate the value of the subject company.

The resulting equity value was then allocated to each class of stock using an Option Pricing Model (OPM). The OPM treats common stock and convertible preferred stock as call options on an enterprise value, with exercise prices based on the liquidation preference of our convertible preferred stock. The common stock is modeled as a call option with a claim on the enterprise at an exercise price equal to the remaining value immediately after our convertible preferred stock is liquidated. The OPM is appropriate to use when the range of possible future outcomes is difficult to predict and thus creates highly speculative forecasts. After the equity value is determined and allocated to the various classes of shares, a discount for lack of marketability (DLOM), is applied to arrive at the fair value of common stock. A DLOM is applied based on the theory that as an owner of a private company stock, the stockholder has limited opportunities to sell this stock, and any such sale would involve significant transaction costs, thereby reducing overall fair market value.

Our assessments of the fair value of common stock for grant dates between the dates of the valuations were based in part on the currently available financial and operational information and the common stock value provided in the most recent valuation as compared to the timing of each grant. For financial reporting purposes, we considered the amount of time between the valuation date and the grant date to determine whether to use the latest common stock valuation. This determination included an evaluation of whether the subsequent valuation indicated that any significant change in valuation had occurred between the previous valuation and the grant date.

Following this offering, it will not be necessary to determine the fair value of our Class A common stock using these valuation approaches as shares of our Class A common stock will be traded in the public market.

Based on the assumed initial public offering price per share of $, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, the aggregate intrinsic value of our outstanding stock options as of was $ million, with $ million related to vested stock options.

Internal-Use Software Development Costs

We capitalize certain costs related to the development of our platform and other software applications for internal use. In accordance with authoritative guidance, we begin to capitalize our costs to develop software when preliminary development efforts are successfully completed, management has authorized and committed project funding, and it is probable that the project will be completed and the software will be used as intended. We stop capitalizing these costs when the software is substantially complete and ready for its intended use, including the completion of all significant testing. These costs are amortized on a straight-line basis over the estimated useful life of the related asset, generally estimated to be three years. We also capitalize costs related to specific enhancements when it is probable the expenditure will result in additional functionality and expense costs incurred for maintenance and minor enhancements. Costs incurred prior to meeting these criteria together with costs incurred for training and maintenance are expensed as incurred and recorded within research and development expenses in our consolidated statement of operations. We exercise judgment in determining the point at which various projects may be capitalized, in assessing the ongoing value of the capitalized costs and in determining the estimated useful lives over which the costs are amortized. To the extent that we change the manner in which we develop and test new features and functionalities related to our platform, assess the ongoing value of capitalized assets, or determine the estimated useful lives over which the costs are amortized, the amount of internal-use software development costs we capitalize and amortize could change in future periods.

Legal and Other Contingencies

From time to time, we have been and will continue to be subject to legal proceedings and claims. Periodically, we evaluate the status of each legal matter and assess our potential financial exposure. If the potential loss from any legal proceeding or litigation is considered probable and the amount can be reasonably estimated, we accrue a liability for the estimated loss. Significant judgment is required to determine the probability of a loss and whether the amount of the loss is reasonably estimable. The outcome of any proceeding is not determinable in advance. As a result, the assessment of a potential liability and the amount of accruals recorded are based only on the information available to us at the time. As additional information becomes available, we reassess the potential liability related to the legal proceeding or litigation, and may revise our estimates. Any revisions could have a material effect on our results of operations.

We conduct operations in many tax jurisdictions throughout the United States. In many of these jurisdictions, non-income-based taxes, such as sales and use and telecommunications taxes are assessed on our operations. We are subject to indirect taxes, and may be subject to certain other taxes, in some of these jurisdictions. Historically, we have not billed or collected these taxes and, in accordance with U.S. GAAP, we have recorded a provision for our tax exposure in these jurisdictions when it is both probable that a liability has been incurred and the amount of the exposure can be reasonably estimated. As a result, we have recorded a liability of $3.1 million as of December 31, 2018. These estimates are based on several key assumptions, including the taxability of our products, the jurisdictions in which we believe we have nexus and the sourcing of revenues to those jurisdictions. In the event these jurisdictions challenge our assumptions and analysis, our actual exposure could differ materially from our current estimates.

Recent Accounting Pronouncements

See “Note 2. Summary of Significant Accounting Policies” included in the Notes to the Consolidated Financial Statements.

JOBS Act Accounting Election

We are an emerging growth company, as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We have elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date we (1) are no longer an emerging growth company or (2) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

A Letter From Artur Bergman, Developer, Founder and CEO

A LETTER FROM ARTUR BERGMAN, DEVELOPER, FOUNDER AND CEO

Why I Built Fastly: Making The Edge Work For Developers

Fastly was built by developers, to empower developers.

I founded Fastly based on my experience leading engineering at Wikia, a global community knowledge-sharing platform. As a technical leader, it was my job to deliver an equally fast, reliable, and secure online experience for passionate communities around the world. Much like Wikipedia, Wikia is a platform where people constantly make rapid-fire, simultaneous updates to shared information all day, every day, across thousands of topics. I knew that slow and out-of-date content was costing us community members and decreasing engagement, which impacted revenue. Little did I know that companies offering real-time airline bookings, online ticket sales, e-commerce inventory, hotel availability, community reviews, and breaking news on the web also faced the same challenge of securely providing highly dynamic and time-sensitive content to people all over the world, instantly.

CDNs were supposed to address this problem, but I discovered that existing solutions weren’t actually equipped to enable the global, real-time experiences we needed to deliver for our community members. Even worse, the innovative solutions our developers wanted to implement using legacy CDNs were blocked by a frustrating lack of flexibility, visibility, and scalability. I realized that we needed something radically more modern in order to provide the community with equally fast, secure, and reliable experiences at massive scale—and so did other companies.

Our Edge Cloud Platform

When I asked the legacy CDN providers for a solution that could meet the needs of my massive, rapidly changing content base, I was told it was “impossible.” When I hear the word “impossible,” I see an opportunity. Great companies aren’t manufactured, but born out of necessity to provide immensely valuable solutions. Enter Fastly. Open source software and improvements in hardware inspired me to do something that had never been done before: empower developers to build innovative software and eliminate the pain of choosing between scale, security, and speed of delivery. No growing business can afford to de-prioritize even one of those elements.

Fastly was built to put the power back into developers’ hands. Using software, we developed an edge cloud platform designed to provide unprecedented, real-time control, and visibility, removing traditional barriers to innovation. To empower other developers to write and deploy code instantly at the edge, we made the platform extremely accessible, self-service, and API-first, which differentiates Fastly from traditional approaches offered by legacy CDNs. We pushed the boundaries of what’s possible, and the developer community jumped on board with us. Fastly brings the power of the cloud closer to the user, enabling highly dynamic, personalized digital experiences in real time, at global scale. We allow organizations to engage globally distributed end-users with equally delightful and secure experiences, so they stay better connected with the things they love.

As the consumption of digital content continues to grow globally, organizations rely on Fastly to scale digital experiences for users around the world. Today, our platform handles hundreds of billions of internet requests a day. We deliver a critical service that helps our customers better delight, serve, and protect their end-users. Our core values put our customers first, because when we help them thrive, everyone benefits. It brings me great joy to know we’ve built a solution our customers both use and truly love, which has led to our customers becoming long-term friends and partners.

Our Developer Roots

At Fastly, we are in the business of enabling developers to dream bigger. The impact of our work is immense. We’ve built a team of brilliant technical minds who think outside of the box to move the industry forward. Our engineering staff includes experts in every part of the stack that makes up the internet. We put a premium on deep technical expertise because of the critical nature and broad reach of the services we provide to our customers. It’s humbling and deeply exciting to work alongside and welcome world-class experts to our team every day.

Growing Values-First

We have built a new modern architecture for the software-defined future of the internet, but there’s more to Fastly than just technology.

We have chosen to grow with a focus on transparency, integrity, and inclusion. We are building a kind, ethical, and inclusive team that reflects our diverse customer base. The more diverse our workforce, the easier it is to attract diverse talent and build technology that provides true value for leading businesses and their end-users across the world.

We are a company of rational optimists who believe that actions speak louder than words, and anything is possible. We value privacy and do not exploit our customers’ end-user data. We also support a growing number of great nonprofit organizations and open source projects powered by our platform for free. We make the web more beautiful through our work.

You may be wondering what a more beautiful web looks like to us. Technology isn’t really about servers or serverless; it’s about people. We never forget that at the heart of our work is the goal to improve people’s daily lives. Fastly was founded on a strong culture of support and service, and we are committed to serving the very best of the internet.

The phrase “you’re only as good as the company you keep” has always been a guiding principle for me, both personally and professionally. It speaks to our hiring practices and the business ethics I’m committed to upholding as we continue to grow. Doing what’s right benefits our employees, our customers, and the internet. Just as we choose to work with individuals who are trustworthy, demonstrate integrity, and reflect our values, we choose to work with customers that we believe have integrity, are trustworthy, and do not promote violence or hate, nor will we work with customers who do so.

As a growing software company, we have the opportunity to make an immense, lasting positive impact on the world through technology. We will continue to push the edge of innovation, so we’ll always be ready to empower our customers’ biggest, boldest dreams. This is just the beginning.

I invite you to join us.

- Artur

Business

BUSINESS

Overview

Developers are reinventing the way we live, work, and play online. Yet they repeatedly encounter innovation barriers when delivering modern digital experiences. Expectations for digital experiences are at an all-time high; they must be fast, secure, and highly personalized. If they aren’t reliable, end-users simply take their business elsewhere. The challenge today is enabling developers to deliver a modern digital experience while simultaneously providing scale, security, and performance. We built our edge cloud platform to solve this problem.

The edge cloud is a new category of IaaS that enables developers to build, secure, and deliver digital experiences, at the edge of the internet. This service represents the convergence of the CDN with functionality that has been traditionally delivered by hardware-centric appliances such as ADC, WAF, Bot Detection, and DDoS solutions. It also includes the emergence of a new, but growing, edge computing market which aims to move compute power and logic

as close to the end-user as possible. The edge cloud uses the emerging cloud computing, serverless paradigm in which the cloud provider runs the server and dynamically manages the allocation of machine resources. When milliseconds matter, processing at the edge is an ideal way to handle highly dynamic and time-sensitive data. The edge cloud complements data center, central cloud, and hybrid solutions.

Our mission is to fuel the next modern digital experience by providing developers with a programmable and reliable edge cloud platform that they adopt as their own.

Organizations must keep up with complex and ever-evolving end-user requirements. We help them surpass their end-users' expectations by powering fast, secure, and scalable digital experiences. We built a powerful edge cloud platform, designed from the ground up to be programmable and support agile software development. We believe our platform gives our customers a significant competitive advantage, whether they were born into the digital age or are just embarking on their digital transformation journey. Our platform consists of three key components: a programmable edge, a software-defined modern network, and a philosophy of customer empowerment. Our programmable edge provides developers with real-time visibility and control, where they can write and deploy code to push application logic to the edge. It supports modern application delivery processes, freeing developers to innovate without constraints. Our software-defined modern network is built for the software-defined future. It is powerful, efficient, and flexible, designed to enable us to rapidly scale to meet the needs of the most demanding customers and never be a barrier to their growth. Our 45 terabit software-centric network is located in 60 uniquely designed POPs across the world as of March 31, 2019. Finally, being developers ourselves, we empower customers to build great things while supporting their efforts through frictionless tools and a deeply technical support team that facilitates ongoing collaboration.

We serve both established enterprises and technology-savvy organizations. Our customers represent a diverse set of organizations across many industries with one thing in common: they are competing by using the power of software to build differentiation at the edge. With our edge cloud platform, our customers are disrupting existing industries and creating new ones. For example, several of our customers have reinvented digital publishing by connecting readers through subscription models to indispensable content, helping people understand the world through deeply reported independent journalism. Our customers' software applications use our edge cloud platform to ensure concert goers can buy tickets to the live events they love, travelers can book flights seamlessly and embark on their next great adventure, and sports fans can stream events in real time, across all devices. The range of applications that developers build with our edge cloud platform continues to surpass our expectations.

So where do we go from here? Our vision is to create a trustworthy internet, where good thrives. We want all developers to have the ability to deliver the next transformative digital experience on a global scale. And because big ideas often start small, we love it when developers experiment and iterate on our edge cloud platform, coming up with exciting new ways to solve today's complex problems.

Our usage-based revenue grows as our customers' websites and applications deliver, process, and protect more traffic, as they adopt more features of our edge platform and as they more broadly adopt our platform across their organization. A meaningful indicator of the increased activity from our existing customers is our DBNER, which was 147.3% and 132.0% for the years ended December 31, 2017 and 2018, respectively.

We have achieved significant growth in recent periods. For the year ended December 31, 2017, our revenue was $104.9 million compared to $144.6 million for the year ended December 31, 2018, an increase of $39.7 million, or 37.8%. We incurred a net loss of $32.5 million and $30.9 million for the years ended December 31, 2017 and 2018, respectively.

Industry Background

Our industry is influenced by a number of different factors which fall under three macro-level trends:

1. End-user online behaviors are changing rapidly and expectations have reached an all-time high, driven by constant connectivity and new, dynamic technologies.
2. To keep up, enterprises need to reinvent themselves by embracing digital transformation and technologies such as edge and cloud computing.
3. Developers are key to this success and they are empowered to innovate for enterprises to gain competitive advantage.

Online Behaviors and Expectations Have Changed

Hyper-connected end-users are increasingly impatient. We live in a digital age defined by constant connectivity and instant gratification. Recent research from the Pew Research Center shows that 39% of Americans aged 18 to 29 now go online "almost constantly." These connected end-users have more choice, more access to information and less patience. Slower load times lead to fewer page views and lower customer satisfaction. According to a Google study, as page load times increase from one to five seconds, the probability of bounce increases 90%.

End-users expect instant, personalized, and dynamic experiences online. We believe personalized content results in increased sales and an increased likelihood of repeat purchases. The increasing popularity of the mobile application, gaming, and live-streaming markets has fueled explosive growth in dynamic content. Whether searching for a restaurant on their mobile application or streaming live sporting events on their tablet, end-users expect an instant, highly personalized, and interactive online experience.

Emerging technologies, such as the IoT and AR/VR, are only starting to take root, yet their transformative nature is readily apparent. IoT is creating compelling use cases around autonomous driving, predictive maintenance, and asset tracking. AR/VR promise to redefine how we interact with the world around us, from the gaming and entertainment industries to retail and manufacturing. These technologies will require companies to rapidly process vast amounts of data closer to the end-user, or device, for instant, accurate responses.

End-users easily part with personal data but expect privacy in return. Lured by the promise of the next truly delightful online experience, many end-users willingly part with personal data. However, they expect enterprises to put the right measures in place to guarantee the privacy of their data. Meanwhile, web and mobile applications are becoming an increasingly attractive target for attackers who use them as a backdoor into company networks. Web applications

were the number one attack vector used to conduct data breaches in 2018, according to research from Verizon. These breaches expose sensitive data, resulting in brand damage, loss of business, and customer churn.

Enterprises Need To Reinvent Themselves To Compete

To stay relevant, organizations must embrace digital transformation. Enterprises are under growing pressure to deliver the next transformative online experience or risk losing their customers to the competition. This requires them to embrace digital transformation. In a Forrester survey, 56% of organizations surveyed describe their digital transformation process as "currently underway." This process is about investing in new technologies, business models, and procedures to enhance the value delivered to end-users. This includes creating end-user experiences that delight; tapping into the flexibility and scalability of cloud computing; and enabling critical teams like DevOps to embrace a more agile development and delivery model.

Digital transformation is driving the growth of hybrid and multi-cloud deployments. A growing number of enterprises are tapping into the agility, flexibility, and scalability of the cloud to help support their digital transformation efforts. Some companies are opting for hybrid cloud deployments, which utilize both cloud and on-premise appliance-based solutions. Multi-cloud deployments are also becoming popular as a means of avoiding vendor lock-in and ensuring redundancy for mission critical websites and applications. IDC predicts that by 2021, over 90% of enterprises will use multiple cloud services and platforms.

Hybrid and multi-cloud environments pose a number of challenges when it comes to supporting cloud-based applications. Organizations can end up using multiple appliances and cloud provider solutions to support these applications. This creates costly, siloed environments with no centralized management view, making it challenging to operate. As a result, enterprises are starting to look for vendor agnostic cloud platforms that can provide functionality like load balancing, firewall, and bot detection across both data centers and clouds and between different cloud providers.

Enterprises are looking for cloud partners who can scale on demand. In this digital age, enterprises are expected to deliver exceptional online experiences that can handle sudden and unpredicted spikes in traffic. Nobody wants to be the online retailer whose website crashes during Black Friday sales or the digital streaming service that has an outage during a major sporting event. Organizations are looking for partners with broad global coverage who can scale on demand. With growing online threats, security must also scale. DDoS attacks have now grown as large as one terabit per second, so cloud partners must also have the network capacity to absorb these attacks, ensuring business continuity.

Savvy enterprises see edge computing as the next evolution of the cloud. Industry leaders looking for ways to deliver the next truly delightful application experience for their end-users are turning to edge computing for answers. In a world where milliseconds count, the central cloud no longer serves as the ideal place for all data processing. For content that is highly dynamic and time-sensitive, sending data back and forth to a central server simply takes too long. This challenge has given rise to a major new trend in internet infrastructure—edge computing. Gartner defines edge computing as "solutions that facilitate data processing at or near the source of data generation." Gartner estimates that by 2022, 75% of enterprise-generated data will be created and processed outside a traditional data center or cloud, at the network edge.

Developers Are Empowered and Powerful

Developers are the new decision makers. As enterprises embrace digital transformation, the future will be built in software, in the cloud, by developers. Developers are being empowered to make their own technology choices around which cloud platforms, services, programming languages, and frameworks are needed to create new and improved applications. Developers want to work with platforms that are fully programmable via flexible APIs, allowing them to solve their own unique business problems. They are adopting cloud native technologies like Kubernetes, Apache Kafka, and Docker to transform how software products and services are delivered.

Software differentiation is being built not bought. Enterprises rely on developers to build custom software to gain a competitive advantage. Cloud platforms have made it easier than ever for developers to build their own custom applications quickly and cost effectively. Freed from the constraints of a software vendor's release schedules, developers have agility to add new features or test new ideas as they emerge. Gartner predicts that by 2020, 75% of applications will be built, not bought.

Developers are adopting modern software delivery practices. Operational efficiency needs are driving the adoption of more agile application delivery practices. Developers are embracing serverless compute and CI/CD, and collaborating with IT Operations to build, package, integrate, test, and release code on an ongoing basis. This empowers developers to push new code to production multiple times a day to quickly test out new features, fix bugs, or enhance existing offerings.

Modern software delivery practices are also extending to security with the growing popularity of DevSecOps. With DevSecOps, security is baked into software development processes from the start, instead of being an afterthought. Automated security controls are introduced earlier in the application development lifecycle, minimizing vulnerabilities, and eliminating costly rework further down the line.

Developers are Expecting More from Cloud Providers

Today's developers seek the freedom to innovate and experiment on their own terms. As they select cloud partners to support their software delivery needs, they are demanding the same level of flexibility. They expect to be able to sign up online and experiment with a provider's offering in a frictionless, self-service manner. Developers want providers they can grow with, who charge based on product consumption. They also care about a provider's cultural fit, as they want to work with companies who act as an extension of their team. These expectations are raising the bar for cloud platform providers.

These Emerging Trends Pose Significant Challenges for Existing Solutions

Existing solutions for enterprises and developers, such as enterprise data centers, central cloud, small business-focused CDNs, or legacy CDNs, suffer from a number of technical limitations that make them particularly ill-equipped to address these new end-user, developer, and enterprise requirements.

Limitations of Legacy Vendors

Legacy CDN Solutions. Legacy CDNs were not designed to adequately address the rapid compute and performance requirements of today's data-rich applications, or the demands of agile developers who build them.

- **Lack of visibility and control**
  - Legacy CDNs are largely black box solutions. They do not adequately support key developer requirements such as API access, instant configuration changes, or real-time data insights, making them incompatible with agile development processes such as CI/CD and DevSecOps.
- **Outdated architecture adds cost and limits functionality**
  - Legacy CDNs were built back when hundreds of thousands of smaller servers in thousands of locations were needed in order to get closer to end-users. Today, the capital expenditures, real estate, and operating costs to sustain this type of business model leads to bloated and inefficient operations.
  - Legacy CDNs are ill-equipped to handle today's performance requirements. They lack built-in routing and load balancing for more advanced content routing.
  - Many of these CDNs' offerings are a result of multiple acquisitions that have not been fully integrated into their core network. Features like compliance and security run on separate networks which can negatively impact performance.
- **Costly and inflexible sales support**
  - Legacy CDNs are heavily focused on professional services and inflexible enterprise sales structures. While this approach may work for some organizations, the rise of software developers is rapidly changing this dynamic. Organizations now demand more flexible support options, including better documentation and the ability to contact a partner to help them troubleshoot in real time.
- **Technology sub-optimal for live streaming and OTT video**
  - Legacy CDNs are ill-equipped to protect expensive encoding infrastructures from massive traffic spikes which cause delays in delivering live feeds.

Enterprise Data Centers. Many enterprises still manage their own physical hardware in either colocation facilities or data centers. These architectures present a number of key challenges.

- **High total cost of ownership**
  - Hardware-based solutions require organizations to purchase expensive computing hardware and hire dedicated staff to install, configure, and maintain it. They must overprovision servers to ensure redundancy, but these machines remain largely unused except during traffic spikes. This is less cost-effective than software-driven usage-based models whereby companies can scale based on the real-time needs of their applications.
- **Agile challenges**
  - As DevOps teams seek to embrace agile development processes like CI/CD and DevSecOps, many legacy hardware-based solutions lack key features needed to support these efforts, including full API access and instant scalability.
- **Failure to handle attacks at scale**
  - As attacks grow in size and frequency, security-only appliances are strained. Hardware-based WAFs lack the compute power needed to keep up with the growing volume of application layer attacks. Similarly, hardware-based DDoS solutions lack the bandwidth to handle today's massive attacks.

Central Cloud. Enterprise workloads continue to move to the central cloud, primarily to take advantage of the growing popularity of IaaS offerings. According to Logic Monitor, 83% of enterprise workloads will be in the cloud by 2020. Yet running modern applications in the central cloud poses challenges when it comes to latency, the ability to pre-scale, and cost efficiency.

- **Latency issues**
  - The central cloud was designed around a model of a few very large data centers, located outside of major metropolitan areas, with sufficient power to store and process massive volumes of data. As cloud computing is done further away from the end-user, the central cloud is not designed to handle the low latency requirements of today's highly dynamic applications.
- **Inability to pre-scale**
  - The central cloud was built to support a multitude of languages, operating systems, and database environments for different customer applications. This has led to a bloated compute environment, that takes several seconds or even minutes to scale resources on demand.
- **Vendor lock-in**

- Dominant central cloud vendors are eager to lock customers into proprietary software ecosystems that can have adverse effects on pricing leverage. Vendor lock-in and the high prices that result from a lack of competition are significant challenges to cost efficiency.

- Business model that is challenged by the move to the edge

- As the edge cloud grows in popularity, it threatens to disrupt the basic business model of the central cloud. Central cloud revenue is based on the monetization of units of compute power, storage, and bandwidth. As more data is processed at the edge, less compute power will be needed in the central cloud. Similarly egress costs will be lower, since less traffic will need to transit back and forth from the central cloud to the end-user. Like central cloud spend and other non-discretionary budget lines for businesses with online applications, the edge cloud spend is part of cost of goods sold.

Small business-focused CDNs. Existing small business-focused CDNs have an extremely difficult time providing the technology, support, and culture that is required to support today's enterprise buyer.

- Technology that is not enterprise ready

- Enterprises and their developers demand focused, high performance, and highly reliable technology stacks. Small business CDNs do not have the compute power, storage capacity, or software systems to build a reliable and scalable platform. As a result, they tend to focus on more basic innovation efforts rather than building the robust technology platform enterprises require.

- Support as a cost center

- These solutions see customer support as a cost center, instead of a service to ensure the needs of the customer are always being met. As a result, they often seek to minimize any interaction with the customer to keep costs low.

- Illegal content and immoral activities

- Some existing providers make their solutions available to sites that promote or benefit from counterfeiting, piracy, spyware, hate speech, terrorism, and other unethical activities. We believe that enterprises do not want to associate their brand with companies that make questionable choices.

A New Approach Is Needed

A new approach is needed to meet the demands of today's modern applications and the developers who build them. Enterprise data centers are too costly to maintain and cannot scale sufficiently. The central cloud provides much needed scalability and a more cost-effective model, but it introduces latency issues and vendor lock-in. While legacy CDNs can address latency, they are ill-equipped to deal with the rapid compute requirements needed to build and run modern applications. Legacy CDNs also lack the visibility and control that developers need to embrace the kinds of agile development processes that power continuous innovation.

These problems can be solved in the cloud, but in a different kind of cloud. It must be a cloud that is a lot closer to the end-user where the data is created, altered, and exchanged. It must be a cloud that can scale to meet the needs of today's most popular applications, such as applications that stream live video to millions of concurrent viewers or juggle the time-sensitive intricacies of flash sales or major news events. This new cloud must also firmly empower developers to lead the charge in their organizations' digital transformation efforts.

Our Solution: The Developer's Edge

We have built a powerful, serverless edge cloud platform, designed from the ground up to be programmable and support agile software development. We process, serve, and secure our customers' applications as close to their end-users as possible, at the edge of the internet for enhanced performance and protection. We call this platform the Developer's Edge and we believe it gives our customers a significant competitive advantage whether they are just embarking on their digital transformation journey or natively born into the new digital age.

Our edge cloud platform is based on three core tenets:

- Developers must be empowered to innovate;

- Platforms must innovate ahead of market demands while still being reliable, scalable, and secure; and

- Vendors must provide exceptional flexibility and support.

With this in mind, our platform, the Developer's Edge, consists of three key components: a programmable edge, a software-defined modern network, and a philosophy of customer empowerment.

Programmable Edge

Our programmable edge sits in an extremely privileged position, between our customers' applications and their end-users, placing our services closer to those users. It is designed to create a space for developers to innovate at their own pace, by providing:

- *Full programmability.* Our powerful platform allows developers to write and deploy their custom code to push application logic to the edge. We believe that logic like A/B testing, URL redirects, paywall authentication, and location/language customization can all be executed faster and more efficiently at the edge;

- *Reusable modules.* Our platform includes reusable modules based on commonly deployed custom code examples. We package and add these reusable modules to our platform, which do not require developer experience to implement.

- *Real-time visibility and control.* Our edge cloud platform is built with instant visibility and control as a core tenet. We stream log data from our network edge in real time so developers can instantly see the impact of new code in production, troubleshoot issues as they occur and rapidly identify suspicious traffic. We also empower developers to make and roll back their own configuration or code changes on the fly;

- *Agile development.* Developers can build Fastly into their technology stack to power CI/CD efforts. They can use our edge cloud platform to help push new code to production multiple times a day as they test new features, fix bugs, or enhance existing offerings. Fastly also supports DevSecOps efforts, allowing developers to introduce automated security controls early in the application development cycle, thus minimizing vulnerabilities and eliminating costly rework further down the line; and

- *Safety at the edge.* We built a serverless development platform at the edge, designed to allow us to run code in a safe and secure manner, while maintaining the performance and scalability needed for modern applications. This frees developers to build custom applications that solve unique problems closer to the edge and test them in real time without impacting production traffic.

Edge Use Cases. Below are some examples of use cases our customers have solved for using Fastly's programmable edge:

- *API acceleration.* Accelerate and secure critical API responses at the edge for delightful application experiences, such as instant hotel lookup based on location and real-time inventory updates between retail stores and their online storefronts;

- *IoT.* Process and secure data from connected devices at the edge for instant results for time-sensitive applications;

- *Cloud migration.* Seamlessly migrate from data center to cloud, hybrid or multi-cloud environments, enabling the customer to take advantage of the functionality and cost savings of one or more cloud providers; and

- *Enabling blockchain.* Cache and accelerate individual transactions on the blockchain in real time.

Software-Defined Modern Network

Our edge cloud platform is designed to take advantage of the modern internet. Our philosophy has been to differentiate through software by building one powerful software-centric network composed of unique and proprietary components. Our approach is designed to give us the flexibility to innovate and build so we will never be a barrier to our customers' growth, and consists of the following key elements:

- *Software-centric approach at global scale*. From the start, we realized that single purpose hardware-based solutions that rely on custom designed chips are inflexible. Custom hardware, like routers, load balancers, and security appliances, do not have the flexibility to support the dynamic needs of the modern internet. We started with open source software like Varnish and Linux, then rewrote it to support the use cases of a multi-tenant, high-performance edge cloud. We created our own proprietary software defined networking stack with built-in routing and load balancing, a storage system for optimal storage usage and performance, a massive data pipeline to send

customer logs, a cache invalidation system that purges content around the world in an average of 150 milliseconds or less, and a proprietary control panel that allows our customers to update their edge application logic and configurations in seconds around the world. We architect the software to run on custom-designed servers built upon commodity components and network hardware so that we can control every aspect of the network, from request to response and drive as much utilization and scale as possible. Our software-centric approach is designed for better network efficiency and greater flexibility to scale as we add more services.

- *POP design.* We built Fastly for the internet of today—meaning fewer POPs, each with massive scale and located at the key interconnection points of the internet. Our POPs are connected directly to the core internet, each connecting directly to core Internet Service Provider (ISPs) and 68 Internet Exchange Points as of March 31, 2019 to offer high performance in long-tail content caching. We run smaller clusters of more powerful servers that provide superior performance for customers who expect updates to be pushed out to their global end-users nearly instantaneously. Legacy CDNs do not offer this benefit, as it is extremely difficult to update hundreds of thousands of servers around the world;

- *Server efficiency.* We have a highly efficient global server footprint because we combine advanced server and network hardware with our world class software at each of our POPs. As of March 31, 2019, we had 1,596 servers. Our servers are optimized to handle the complex workloads of compute at the edge by using high-end Central Processing Units and significant amount of Random Access Memory to process VCL. We use solid-state drives, for fast and constant lookup times, and modern 25 Gigabit Ethernet for robust bandwidth. This, combined with our algorithms and custom software, gives us the flexibility to scale while dramatically reducing operating burden; and

- *One network.* We have built a single powerful, compliant network to support customers' security and delivery needs:

- All of our security solutions benefit from the same level of visibility and control as our core delivery offerings. Customers can use our real-time data feeds to see threats as they emerge, make rule changes on the fly, and update policies around the globe in seconds;

- Our single network is designed to provide the massive scale needed to defend against today's growing DDoS threats without sacrificing performance. The servers in our platform provide all of the features of our product suite, allowing rapid and predictable scaling;

- We help meet customers' Payment Card Industry (PCI), Health Insurance Portability and Accountability Act (HIPAA), and Service Organization Control (SOC) needs without impacting performance. Because of our flexible routing and server architecture, we do not need to send PCI traffic off to a separate sub-optimal network; and

- Our WAF product is built into the fabric of our edge cloud platform, allowing us to protect web-based applications with minimal latency.

Common Use Cases. Our powerful network along with our operational efficiency can easily handle use cases that are traditionally solved by CDNs. Some of these examples include:

- *Infrastructure-agnostic traffic distribution.* Support enterprise hybrid and multi-cloud strategies by intelligently routing traffic across different cloud providers, or between cloud and on-premise data centers, regardless of location;
- *Efficient traffic spike management.* Allow enterprises to accommodate traffic spikes by intelligently and rapidly distributing content requests across their network;
- *Live streaming at scale.* Deliver highly-reliable live streaming experiences with minimal interruptions, even when concurrently streaming to large global audiences;
- *Responsive mobile applications.* Serve rapidly-changing mobile content from the edge, enabling end-users to instantly access the very latest news updates, weather forecast, hotel availability, or store inventory from their mobile applications;
- *Protection against disruptive DDoS attacks.* Protect customers' networks against highly disruptive DDoS attacks by leveraging a high-bandwidth, globally distributed network to absorb attacks at the edge; and
- *Secure applications without impacting performance.* Enforce WAF and bot detection rules at the network edge to protect organizations' mission critical applications without impacting performance.

Customer Empowerment Philosophy

Fastly was built by developers, for developers. We believe in empowering our customers to build great things, while collaborating with them to promote their success. We have a unique understanding of what it takes to deliver a frictionless customer experience by providing:

- *Freedom to try.* Our free trial allows developers to sign up and start experimenting with our edge cloud platform in a frictionless, self-service manner;
- *Flexible support model.* Developers are free to program on our edge cloud platform, taking advantage of our rich documentation and expertise of our developer community. For enterprise customers who require more guidance, we provide a range of support packages and access to deep technical expertise from front-of-line support staff to technical account managers; and
- *Partner friendly.* Just as we expose the ability to program at the edge to our customer base, we extend that power and functionality to our partners as well. This allows our partners to build out applications that run at the edge, and provide a feature or service that is complementary to our platform. We enable these integrations with a focus on API-support and a large number of code libraries that allow our partners to integrate.

Strengths of Our Platform

Our edge cloud platform has many strengths including:

- *Programmability.* Our edge cloud platform is fully programmable. Developers can tap into our user interface to address simple use cases. More complex use cases can be addressed using our powerful edge programming language and APIs to write custom code at the edge or using reusable modules;
- *Real-time visibility and control.* Our edge cloud platform is built with real-time visibility and control as a core tenet. We allow developers to make instant configuration changes and see the impact of those changes nearly immediately. We stream log data from our software-centric network edge in real time so developers can rapidly identify and troubleshoot issues, and roll back code if needed;
- *Consistent and superior performance.* We accelerate web and mobile applications, allowing enterprises to provide delightful end-user experiences. Our modern platform design enables us to cache dynamic content for long periods of time and retrieve it quickly so web pages load faster;
- *Support for agile development processes.* The speed, flexibility, and control offered by our edge cloud platform empowers developers to embrace agile development practices. They can build our edge cloud platform into their technology stack to power CI/CD efforts. This frees them to innovate, pushing new code to production multiple times a day. We also support DevSecOps efforts. Developers can introduce automated security controls early in the application development cycle, improving overall security posture and avoiding costly rework later;
- *Easy to scale.* Our software-centric approach and software-defined modern network are designed to enable enterprises to scale on demand. As they grow their customer base and expand globally, we scale with the goal of delivering unhindered performance even during unpredictable peaks in traffic;
- *One network.* Using a single, compliant network, our edge cloud platform is able to support our enterprise customers' security and delivery needs in a highly efficient manner;
- *Scalable security.* Our network is designed to provide the massive scale needed to defend against DDoS attacks without sacrificing performance. Enterprises can use our real-time data feeds to gain insights into threats as they emerge and update security policies globally within seconds;
- *Large and growing developer community.* We have a unique approach to nurturing our developer community. Unlike many developer-focused products that have to build a community from scratch in order to aggregate millions of developers, our approach yields the same benefits but is significantly more scalable. First, our platform shares a configuration language with Varnish, a powerful open source caching software currently used by 3.4 million websites worldwide. Developers are familiar with this configuration language, which makes adopting our platform easier. Second, our edge cloud is the backend of choice for many of the largest PaaS vendors serving the developer community. These PaaS vendors, which aggregate millions of unique web properties under one brand, use Fastly as their edge cloud. For example, Brightcove, Shopify, Github, Drupal, Magento, WIX and Adobe Portfolio expose millions of developers to our plaftorm. These PaaS vendors continue to aggregate more and more web properties and provide unique exposure and upsell opportunities. Third, we provide support to some of the most important open source tools used by developers such as Python, Ruby, Jenkins, and the Linux Kernel Organization. Powering the tools that developers use provides us with significant exposure to the developer ecosystem;

- *Good neighborhood.* We choose to do business with customers who we believe uphold similar values to our own. We do not knowingly do business with websites which promote violence or hate. From innovative startups to larger, well-known enterprises, our customers are in good company when they entrust us with their traffic; and

- *Partner integrations.* We offer full-featured APIs for seamless integration into any technology stack. PaaS partners can build on top of our edge cloud platform to extend their offering to our customers, while logging and analytics partners can build hooks into our platform to consume our real-time logs.

Market Opportunity

We believe that our market opportunity is large and growing and predominately untapped. We offer a viable solution for many use cases, which have not historically been addressed by legacy technologies. On top of our edge computing capabilities, we offer content delivery, streaming, cloud security, and application delivery control.

When incorporating these additional offerings, we estimate a total market opportunity of approximately $18.0 billion in 2019, based on expected growth from 2017. We estimate this total market opportunity will grow to $35.8 billion by 2022, growing with an expected CAGR of 25.6%, based on the sum of the following markets, each of which we address:

- ***Edge computing.*** MarketsandMarkets estimates the edge computing market to be worth approximately $2.7 billion in 2019, growing with an expected CAGR of 35.4% to $6.7 billion by 2022. MarketsandMarkets defines edge computing as products that assist real-time applications in processing and analyzing data collected from various sensors and connected devices at the edge of the network. Our platform addresses this market by enabling our customers to execute previously packaged or customer specific applications as close to the end-user as possible instead of at their own data center or core cloud provider.

- ***Content delivery and streaming.*** According to MarketsandMarkets, the web performance optimization market, which gives enterprises the ability to deliver online content to users securely and reliably, will expand from approximately $3.0 billion in 2019 to $6.6 billion in 2022, growing with an expected CAGR of 29.5%. Over that same period, MarketsandMarkets predicts that the media delivery market, which focuses on delivering media content to end-users at a much faster pace, reducing the latency time, will expand from approximately $4.3 billion to $10.1 billion, growing with an expected CAGR of 32.3%. Our edge cloud platform addresses these markets by enabling our customers to deliver content to their customers at scale in a secure and highly-reliable manner.

- ***Cloud security.*** Our platform addresses the WAF, bot detection, and DDoS prevention markets by protecting customers' networks against highly disruptive DDoS attacks and enforcing WAF and bot detection rules at the edge. MarketsandMarkets expects that the market for WAF solutions will expand from $3.3 billion in 2019 to $5.5 billion in 2022, growing with an expected CAGR of 18.3%, and the market for bot detection will grow from $0.3 billion in 2019 to $0.8 billion in 2022, growing with an expected CAGR of 42.4%. According to IDC, the addressable market for DDoS prevention will grow from $1.5 billion in 2019 to $2.4 billion in 2022, growing with an expected CAGR of 17.8%.

- ***Application delivery controller.*** According to IDC, an Application Delivery Controller determines the type of user or device requesting content and type of content being requested to make traffic management decisions. IDC expects this market to expand from $2.9 billion in 2019 to $3.7 billion by 2022, growing with an expected CAGR of 8.1%. We address this market with our proprietary software defined networking stack with built-in routing and load balancing, allowing customers to manage traffic across multiple IaaS providers, data centers, and hybrid clouds.

Growth Strategy

Key elements of our growth strategy include the following:

- ***Invest in our technology platform.*** We intend to continue to invest in our large-scale, enterprise-grade edge cloud platform which is both developer-friendly and fully programmable. We will strengthen our investment in research and development so that we can add new and differentiated products on top of our edge cloud platform. Since the end of 2014, we have grown our research and development team by a factor of four, from 36 to 150 people as of December 31, 2018, deepening our talent across multiple functional groups;

- ***Expansion into additional vertical markets.*** Our platform offers a broad range of capabilities, and our customers have diverse needs. To best serve these needs we have successfully adopted a

vertical approach to our sales and marketing efforts. We will build upon our initial success in digital publishing, media and entertainment, technology, online retail, travel and hospitality, and financial services, while expanding into new markets over time;

- ***Further enable channel partners.*** Our edge cloud platform is the backend of choice for many of the largest PaaS vendors serving the developer community. These PaaS vendors aggregate millions of unique web properties under one brand, using Fastly as their edge cloud. We believe that more and more web applications will be built on convenient and powerful out-of-the-box solutions offered by large PaaS vendors. Many of our solution partners are PaaS providers who built us into their platform by default to offer faster, more secure and scalable experience. Current examples include Brightcove, Shopify, Drupal, Magento, WIX and Adobe Portfolio. As our partners expand their customer base, we will grow alongside them, providing us with exposure to millions of developers who will become familiar with us, and potentially become customers themselves;

- ***Grow our developer community and continue our open source commitment.*** Our edge cloud platform is built on Varnish, a powerful open source caching software currently used by 3.4 million websites worldwide. Developers are familiar with this technology, which makes adopting our platform easier. Developers are also familiar with the PaaS vendors we empower and the large number of open source tools we deliver and secure. This familiarity helps us in the sales process, and we will continue to invest in this ecosystem. We will continue to contribute to open source projects, by supporting their distribution with our services or through contributing code back to the projects. This creates more familiarity with us and will empower developers to build applications in multiple languages and run them faster and more securely at our edge;

- ***Invest in marketing.*** Our developer customers have been our best marketers. Historically, we have grown based on word-of-mouth and delivering a great product, and have invested relatively small amounts in marketing. In 2018, we spent a total of $50.1 million in sales and marketing. As we look towards our next stage of growth, we plan on significantly increasing our brand and digital marketing efforts, running campaigns that target both developers and business decision makers across different verticals;

- ***Expand existing customer relationships.*** Over time, our customers have expanded their use of our platform. For the years ended December 31, 2017 and 2018, our DBNER was 147.3% and 132.0%, respectively, highlighting the strength of our platform. Many of our largest customers have grown through a "land and expand" strategy. On average, our customers have increased their annual spend by more than 20% year over year since 2014, growing from an average last 12-months revenue of $35,000 to over $90,000 as of the fourth quarter of 2018. In more technically savvy organizations, developers have championed our solution, paving the way for us to engage with business decision makers. For more traditional organizations, we are often brought in to initially help facilitate a move to the cloud and from there we extend our product to support many other use cases. We plan to continually increase wallet-share over time for existing customers as we build out new products and features, and as customers continue to fully recognize the value of our platform;

- ***Further enable channel partners.*** We have built an ecosystem of reseller, referral, and solution partners. Many of our solution partners are PaaS providers who built us into their platform to offer faster, more secure and scalable hosting services. Current examples include Brightcove, Shopify, Drupal, Magento, and Adobe Portfolio. As these partners expand their customer base, we will grow alongside them;

- ***Grow our technology ecosystem.*** We operate between the "big 3" origin cloud platforms and a growing community of companies that provide big data, machine learning, and security solutions. In this sense, we act as the unifying layer for a growing number of cloud services. Current partnerships and integrations include Sumo Logic, AWS, Azure, and Google Cloud Platform. As customers consume more cloud and SaaS offerings, we can create additional value and grow with our partners;

- ***Continue our open source commitment.*** Our platform is built on Varnish, a powerful open source caching software currently used by 3.4 million websites worldwide. Developers are familiar with this technology, which makes adopting our platform easier. We will continue to work on open source projects, which will empower developers to build applications in multiple languages, and run them faster and more securely at our edge; and

- ***Extend our global footprint.*** As our customer base grows, we plan to aggressively scale our network accordingly. In 2018, 23% of our revenue was generated from customers headquartered outside of the United States. We are expanding our global corporate footprint to support these international customers. As of March 31, 2019, we had 60 POPs strategically located around the world, with more additions planned. We believe significant opportunity exists for further international growth.

Our Products

Our edge cloud is a globally distributed, programmable platform designed for highly performant and secure web and application delivery. Our platform supports modern software development processes. We call it the Developer's Edge, because it empowers developers to innovate without constraints, as they lead the charge for their organizations' digital transformation.

We operate a single, software-centric network. Our POPs reside between a customer's end-users and computing and data storage solutions, whether on-premise, in the cloud or a mixture of both. Our position on the network allows us to move functionality closer to end-users at the network edge for faster, more secure experiences. This includes edge delivery, edge security, edge applications like load balancing and image optimization, video on demand, and managed edge delivery.

Edge Delivery

Our edge delivery offerings include edge compute, full site delivery, and streaming for high value media.

Edge Compute. We enable developers to write their own custom logic to solve complex business problems at the network edge. We also expose pre-written blocks of code to help them do this, such as the following edge features:

- *Client Insights.* Allow developers to rapidly adjust the content they serve to end-users based on their location, device type, and language detection;

- *Edge Dictionaries.* Empower developers to make real-time decisions from every server in our network. They act as a distributed database at the edge, made up of key-value pairs. For example, Edge Dictionaries allow our customers to redirect end-users to a specific country site or update large referrer spam blacklists in real time; and

- *Edge Access Control Lists (ACLs).* Help mitigate evolving threats from attackers by letting developers make changes at scale. ACLs block bad IP addresses from visiting customer sites, and for added security, they can create their own whitelists.

Full Site Delivery

- *Dynamic Site Acceleration.* Speeds up requests and responses between cache nodes in our POPs and customers' origin servers, so their web and mobile content is served faster;

- *Origin Shield.* Allows us to designate a specific POP to serve as a shield for a customer's origin servers. When web content is refreshed, and multiple end-users request the new content simultaneously, it can lead to a deluge of requests hitting a customer's origin server. This can result in poor web or application performance. With Origin Shield, we collapse all these content requests into a single request and hold it in queue at the Origin Shield POP. That allows us to go back to the customer's origin server only once to retrieve the new content, then serve it to all end-users who requested it. This approach reduces costs for our customers, while improving performance for their end-users;

- *Instant Purge.* Lets customers clear the cached copy of their content in an average of 150 milliseconds or less. We allow customers to send a command to our platform that invalidates an old version of their content throughout our global edge infrastructure. This causes a new version of content be retrieved from the application server the next time it is requested. This feature enables our customers to serve highly dynamic content at the edge more quickly and allows for delightful application experiences. Rapidly changing content like shopping cart items, flight search results, sports scores, or current weather conditions in any given location can all be served faster from the network edge;

- *Surrogate Keys.* Allow customers to fine-tune purging by tagging related objects across their site with a key name and description, then purging by that key. They can purge their entire site of a given object or objects at once, without impacting performance. For example, they could purge any images and content related to discontinued sale items, discounted products, or outdated news across their site all in one go; and

- *Real-time Logging and Stats.* Provide metrics and full visibility into end-user requests in real time from the network edge. Log traffic is encrypted using Transport Layer Security (TLS) and logs can be streamed to most major logging endpoint solutions.

Streaming

- *Live Streaming.* Our platform is designed to concurrently deliver millions of near real-time, high-quality live streams to our customers' viewers. Our edge cloud supports the delivery of all major HTTP video streaming formats, and we partner with multiple online video platform vendors to improve the flexibility and scale of live streaming workflows, while also reducing total cost of ownership; and

- *Media Shield.* Large streaming customers often route traffic across multiple CDNs for redundancy. Our Media Shield solution supports these efforts, while reducing total cost of ownership and improving visibility and performance. It does so by collapsing requests for the same video streaming content across all CDNs into one single request to the customer's origin server. This reduces requests to origin and allows us to serve streaming content faster.

Edge Security

- *DDoS.* Our high-bandwidth, globally distributed network is built to absorb DDoS attacks without impacting performance. Customers can respond to attacks in real time, filtering malicious requests at the network edge, before they reach their origin.

- *WAF.* Our WAF is designed to protect applications from malicious attacks that would otherwise compromise web servers. It is integrated into our edge cloud platform, minimizing the impact on performance, since we only inspect requests going to a customer's origin. Customers get real-time access to security events and notifications from the edge and can make instant changes to their WAF rules via our API.

- *TLS.* As part of our standard product, our platform terminates HTTPS connections at our network edge, offloading encrypted traffic from customer's web servers for better performance. We provide a number of different certificate hosting options.

- *Platform TLS.* Our Platform TLS offering is designed to allow customers with multiple web properties to manage TLS certificates at scale, while enabling a fast, secure experience for their end-users. It supports delivery and management of hundreds of thousands of certificates, supported by our worldwide TLS termination and acceleration solution.

- *Compliance.* We speed up the caching and delivery of sensitive content at the edge, helping customers meet data compliance and privacy regulations such as HIPAA and GDPR, in addition to industry standards such as PCI Data Security Standard and SOC. Our Assurance Services offering includes support for additional documentation and audit procedures for customers with these needs.

Edge Applications

- *Load Balancer.* Our Layer 7 load balancer manages HTTP/HTTPS requests to a customer's origin using granular content-aware routing decisions. We allow customers to manage traffic across multiple IaaS providers, data centers, and hybrid clouds. We also provide improved performance and cost savings over ADCs, especially during a spike or surge in traffic.

- *Image Optimizer.* We offer a real-time image manipulation and delivery service and store transformations at the edge. When an image is requested, we resize it, adjust quality, crop/trim, change orientations, convert formats, and more, all on demand. Transforming images at the edge eliminates latency and reduces traffic to a customer's origin servers, allowing them to save on infrastructure and egress costs.

Video on Demand

- Our edge cloud platform is designed to cache and rapidly deliver both frequently and infrequently requested on-demand videos. We significantly reduce the load on a customer's origin servers while accelerating time to first frame. Our on-the-fly-packaging feature facilitates immediate playback, enhancing viewer experiences across multiple devices and platforms.

Managed Edge Delivery

- Our managed delivery service provides customers with maximum flexibility and control. We deploy our edge cloud platform on dedicated POPs within a customer's private network, at locations of their choosing. This service can be used exclusively, or as part of a hybrid, multi-CDN strategy.

Partner Ecosystem

Our partner ecosystem consists of companies who build edge applications to integrate with our platform, logging and analytics providers, and PaaS providers. Our partners are all looking to extend the power of our edge cloud platform to their customers.

Edge Application Partners

Our edge cloud platform exposes blocks of code that allow trusted partners to develop real-time analysis and enforcement applications. Building out a massive edge presence is beyond the financial and technical capabilities of all but a handful of companies. By opening our platform to third parties, we allow these partners to focus on building new and innovative edge applications, without the capital outlay and complexity of doing it themselves. It opens up new markets and business models for them.

Logging and Analytics Partners

Logging and analytics partners integrate with our edge cloud platform to deliver enhanced functionality to our joint customers. Our logging feature provides insights into web and mobile requests and response, such as slow or missing URLs, most requested URLs, site performance by region, and much more. Our statistics provide insights into things like percentage of requests per second, request misses, errors, latency, traffic spikes, and global traffic profiles. Both logs and statistics can be streamed in real time to our logging and analytics partners. This empowers our joint customers to monitor performance, troubleshoot issues as they occur, and view this data alongside other metrics in consolidated dashboards. Logging and analytics partners include the following:

- *Google.* A tight integration with Google Cloud Platform allows real-time logs to be streamed to any Google Cloud Platform big data service, including Google Cloud Storage, BigQuery, and Bigtable;
- *Microsoft.* Our integration with Microsoft Azure allows real-time logs to be streamed to both Azure Blob Storage and Kusto;
- *Datadog.* Datadog uses our API to pull in real-time stats and analytics for display in their dashboard;
- *Looker.* Looker combines log data with other data sources in BigQuery, such as Google Analytics, Google Ads data, or security and firewall data. Customers can then run multiple queries against these data sets and present findings in Looker dashboards;
- *Sumo Logic.* Sumo Logic integrates with our platform to offer more granular logging data for customers with large-scale analytics. Customers gain real-time insights into slow URLs, missing or most requested URLs, site performance by region, and more; and
- *Logentries.* Logentries provides a one-click integration with our platform, making it easy for customers to quickly set up real-time logs.

PaaS Partners

PaaS partners integrate with our edge cloud platform to make it easier for their developers to scale and secure websites.

- *Heroku.* Heroku empowers companies to build, deliver, monitor, and scale applications. Our Heroku add-on lets developers seamlessly integrate their Heroku hosted applications with our edge cloud platform through the click of a button;
- *Magento.* Magento, an Adobe company, provides a commerce platform that enables merchants to integrate digital and physical shopping experiences. Our Magento extension lets developers manage their entire content caching strategy from the Magento control panel while maintaining fast, reliable performance; and
- *Drupal and Wordpress.* Drupal and Wordpress are CMS partners. They provide self-hosted solutions for customers to create and manage all the content on their websites. Our Drupal and Wordpress extensions allow developers to easily configure and manage their content caching strategy from within these CMS dashboards.

Customers

We focus on customers with a sizable or growing online footprint who need to deliver rapid, personalized, and secure web and mobile experiences in order to stay competitive. These customers typically have various levels of cloud adoption. Some have fully embraced the central cloud through either hybrid or multi-cloud deployments and are building cloud-native applications. Others are making their first foray into the cloud and are adopting our platform to help with integration. Given our strong developer heritage, our platform also appeals to smaller, highly innovative companies looking to disrupt their respective industries through agile software development. As of December 31, 2018, we had 1,582 customers in more than 60 countries around the world, including 227 enterprise customers.

Our customers operate in a variety of different industries including digital publishing, media and entertainment, technology, online retail, travel and hospitality, and financial services. We define a customer as a single organization that purchases our products. A single customer may have multiple paid business accounts for separate divisions, segments, or subsidiaries.

A representative list of our customers as of December 31, 2018 is set forth below by industry:

	Ecommerce	
Financial	Shopify	
CashStar	Magento	**Travel**
KickStarter	Nordstrom Rack	Kayak
ConsenSys	Wayfair	Alaska Airlines
WealthFront	Ticketmaster	Priceline

High Tech	**Digital Publishing**	**Streaming**
Microsoft	Gannett	Hulu
Brightcove	Reddit	Sling TV
Slack	Imgur	Spotify
New Relic	New York Times	Philo

Case Studies

The following case studies are examples of how some of our customers have selected, deployed, and benefited from our platform.

The New York Times

The New York Times is a popular U.S. newspaper with worldwide influence and readership. Founded in 1851, the paper has won 125 Pulitzer prizes, and is ranked 2nd in the country in terms of circulation.

Situation. In preparation for the 2016 U.S. presidential election, The New York Times wanted to bring on board a CDN to help support the anticipated increase in website traffic. Their website had experienced outages during the 2012 election night, which The New York Times did not want to see repeated.

Fastly worked with the Chief Technology Officer's office to consolidate traffic from four different data centers and integrate Fastly's platform into The New York Times' IT stack, successfully turning on production traffic just two weeks before the election date.

Solution. Full Site Delivery, DDoS, Image Optimizer, WAF, TLS, Fastly Support Fastly allowed The New York Times to seamlessly scale on demand, handling up to 20 to 30 million requests per minute. Using our platform, their traffic increased up to 8,371% from the previous week as readers rushed to engage with the final election results.

- The New York Times was able to reduce costs by $25,000 per month by minimizing traffic to its origin servers using Fastly's full site delivery capabilities.
- Fastly provided The New York Times with an effective caching strategy. During election night their origin performance actually improved, showing more predictability and stability despite the huge peak in traffic.
- The New York Times also improved its security posture by taking advantage of Fastly's DDoS protection and other security services.

"I'm a huge fan of Fastly. On election night, we had 100,000 requests per second, and Fastly performed flawlessly – we had no problems at all." Nick Rockwell, Chief Technology Officer, The New York Times.

New Relic

New Relic is a software company that provides real-time insights to software-driven businesses to allow them to securely monitor, manage, and operate their production software in diverse environments. New Relic's cloud platform makes every aspect of modern software and infrastructure observable, so companies can find and fix problems faster, build high-performing DevOps teams, and speed up transformation projects.

Situation. With thousands of businesses relying on New Relic's platform, the company needed the ability to roll out updates and enhancements instantly. New Relic uses agile development processes to deploy new software many times each day and they needed a CDN provider who could support these requirements.

Solution. Full Site Delivery, TLS certificates, Fastly Support New Relic turned to Fastly for access to a powerful set of tools that would facilitate real-time changes.

- Fastly's developer-centric capabilities allowed New Relic to easily create new services, make configuration changes on the fly, and automatically push validated code to production without human intervention. This supported New Relic's agile development process, freeing them to deploy new software multiple times a day.
- Fastly provided New Relic with live traffic stats and logs to augment their own host and application monitoring data and provide full observability for all changes.
- Fastly's TLS features allowed New Relic to quickly address potential vulnerabilities and offload expensive mobile device handshake management while maintaining a secure end-to-end pipeline for their data.
- Fastly's intuitive API and agile engineering processes supported New Relic's engineering culture of innovation by providing their employees with the tools and environment to do their best work.

"We work with Fastly because it's a company whose values are significantly similar to ours – great engineering, great culture, always innovating, and totally focused on delivering high-quality products." Nic Benders, Chief Architect & VP of Engineering, New Relic.

Ticketmaster

Ticketmaster is the global leader in event ticket sales, operating in 20 markets worldwide and selling over 500 million tickets annually to concerts, sporting events, theater, and more. Following their merger with Live Nation, Ticketmaster became a dominant player in the live entertainment business.

Situation. Ticketmaster wanted to improve the overall online experience for fans while addressing bot activity, which was slowing page loads, disrupting sale events, and frustrating fans.

Solution. Full Site Delivery, TLS, Enterprise Support

- Ticketmaster turned to Fastly to help provide a more consistent and secure digital experience for fans while developing a comprehensive solution to address bot traffic.
- Ticketmaster used Fastly as an edge enforcement layer to block bot traffic at the network edge. When their bot detection program identified potential bot traffic, Fastly served these requests an error page, blocking them from accessing Ticketmaster's servers.
- To protect their site from traffic surges during popular event sales, Ticketmaster created a virtual waiting room. By integrating Fastly into this waiting room, they could ensure fans were served on a first-come basis and that requests were authenticated before being placed in queue to prevent bots from being served.
- Fastly's ability to clear cache in milliseconds allowed Ticketmaster to serve rapidly changing content from the network edge. They were able to put components of their seat map behind Fastly, and update it in near real-time to ensure that fans got the most up-to-date information on ticket availability.

"When tickets go on sale, we can see thousands of requests per second. At the same time, our inventory is changing every second. Fastly gives us the ability to reconcile these challenges and respond to customers in real-time by serving highly dynamic content from the edge." Gary Wong, Senior Manager, Fan Experience Engineering, Ticketmaster.

Alaska Airlines

Headquartered in Seattle, Washington, Alaska Airlines is the fifth largest airline in the U.S. With over 44 million customers a year, they fly to over 115 destinations across the U.S, Canada, Mexico, and Costa Rica.

Situation. Alaska Airlines wanted to take advantage of the cost savings and flexibility of the cloud by moving their content management (CMS) to a Microsoft Azure instance. Their CMS housed key static content such as images, Javascript, APIs, blog posts, etc. They needed a way to move all this content to the cloud without negatively impacting their customers' online experience.

Solution. Full Site Delivery, Enterprise Support, WAF Fastly helped Alaska Airlines gradually migrate their CMS to the cloud while maintaining website performance and availability.

- Fastly helped ensure a consistent customer experience by rerouting content requests back to Alaska Airline's on-premise origin server if the content was not available in their new cloud instance.
- Alaska Airlines used Fastly's powerful edge programming language to safely test out new features without risking disruption to production traffic. Fastly allowed them to control what percentage of users were directed to a test server to experience a new feature, dialing this up over time until they were confident the feature was ready for release.
- Alaska Airlines added Fastly's WAF to block suspicious IP addresses at the edge in near real-time, protecting their web and mobile applications from online threats.

"Fastly helped us migrate part of our website to the cloud in a low-risk, programmatic manner, providing automated failover to our on-premise servers as needed, to maintain a seamless customer experience." Bryan Rowe, Director of Engineering, Alaska Airlines.

Spotify

Spotify is a digital music streaming service, providing users with access to millions of songs, podcasts, and videos from artists all over the world.

Situation. To continue enhancing user experience, Spotify wanted to consistently deliver instant song playback for all their listeners globally. In particular, they wanted a way to stream their most popular music content faster and more cost effectively in regions where local POPs were not available.

Solution. Managed Edge Delivery, Full Site Delivery, Image Optimizer Spotify partnered with Fastly to design a managed CDN offering that could meet their needs. By combining Fastly's full-site delivery and managed delivery offerings, Spotify was able to maintain control over how their content catalog was delivered, while ensuring a quality experience for all their listeners.

- Spotify got dedicated cache space on Fastly's network, facilitating quick startup times for streaming their most popular music content in new regions.
- During high traffic events, the flexibility of Fastly's platform allowed Spotify to direct overflow traffic from their managed delivery offering to Fastly's public CDN or one of the other public CDNs they were using.
- With Fastly's image optimization solution, Spotify enhanced users' experiences by rapidly creating and delivering customized album art for individual playlists.
- Spotify used Fastly's flexible edge cloud platform to write logic at the edge to speed up A/B testing for a new network optimization algorithm.

GitHub

GitHub is a platform that allows developers to host and review code, manage projects, and build software alongside 31 million other users. GitHub hosts the largest open source community in the world and has a sizeable developer following. In October 2018, GitHub was acquired by Microsoft.

Situation. GitHub chose Fastly as a CDN provider to take advantage of Fastly's advanced functionality and large edge network capacity in order to serve an increasingly large customer base without overloading origin servers.

GitHub needed to deliver a highly performant, secure experience to an increasingly large and rapidly growing customer base. They were looking for a CDN provider who could provide the kind of robust networking capacity to absorb large scale DDoS attacks at the edge, while allowing them to continuously monitor traffic for potential attacks.

Solution. Full Site delivery, DDoS, Platform TLS, Fastly Support Fastly's edge cloud platform provided GitHub with robust DDoS protection coupled with real-time visibility and control. GitHub was able to migrate their traffic to Fastly overnight, using our highly configurable self-service platform.

- Fastly's ability to absorb DDoS attacks without impacting performance allowed GitHub to filter malicious requests at the network edge, protecting their origin servers. Fastly's support for rapid configuration changes enabled GitHub to quickly block known attackers.
- Fastly's real-time stats were fed into GitHub's Graphite monitoring tool for instant visibility into what was going on during the attack.
- GitHub has since expanded their use of Fastly to support GitHub Pages, a static site hosting service for developers. Using Fastly's Platform TLS, GitHub was able to extend their mass hosting services by offering Pages customers custom domains with free TLS. Having this traffic flow through Fastly also provided these customers with a faster, more reliable experience.

"Fastly's Platform TLS empowers us to offer scalable HTTPS for all our customer's GitHub Pages while reducing the manual effort associated with managing these certificates." Scott Sanders, Director of Data Center Engineering, GitHub.

Our Culture and Employees

Our Values

Technology has the potential to make a radically positive impact on the world, and we aspire to improve human lives through our work. We were founded on strong ethical principles, and have intentionally grown values-first, scaling our workforce, services, customer portfolio, and investment partners purposefully. We are only as good as the company we keep, and this guides our hiring practices as well as the ethics we are committed to upholding as we scale. We believe that as a result of our values, we have been able to attract great people. We want to serve the very best of the internet. We choose to work with customers that we believe have integrity, are trustworthy, and do not promote violence or hate. Our eight core values define who we are and how we choose to grow, hire, train, work, communicate, make decisions, support each other, and serve our customers.

Fastly's Eight Values

Hiring Strategy

We are dedicated to building a diverse workforce and leadership team that reflects our values and the unique needs of our global customer base. We strive to be a company full of kind, honest, passionate, and high-integrity people. We believe in investing in our people and providing talented individuals with a strong growth path. Our U.S. support engineers are often hired from code schools, and many code school graduates transition from support into other organizations within the company, championing the customer voice and infusing our teams with a strong, service-focused mindset. Our engineering staff recruits world-class experts in every part of the technology stack that makes up the internet, which inspires great developers to join us. We intend to build a diverse workforce and inclusive culture that empowers and supports our employees and customers.

Employees

As of December 31, 2018, we had a total of 449 employees worldwide, including 70 employees located outside of the United States. Our remote-friendly culture allows us to recruit and retain skilled professionals wherever we find them, so our employees are spread across multiple cities in 15 different countries. Approximately 42% of our employees were based in our headquarters in San Francisco, California as of December 31, 2018.

Organization

Sales & Marketing

Our go-to-market model initially focused on reaching and serving the needs of developers. We reach developers through working groups, community events, conferences, and word-of-mouth. Our platform was built to empower developers to innovate at their own pace, so our platform is accessible, transparent, and self-service.

Our self-serve pricing matrix is publicly available and allows for customers to receive automatic tiered discounts as their usage of our products increases. If their use of our product grows significantly, some organizations choose to enter into negotiated contracts with us. These contracts typically include specific pricing and a minimum monthly commitment. As developers have expanded their usage of our platform, our relationships have evolved to include business leaders within their organizations.

Our sales and marketing organizations work together closely to cultivate customer relationships with developers and business leaders at enterprises and technology-savvy organizations to drive revenue growth. We have vertically-based sales teams that continue to enhance our value-based selling methodology. Our land and expand sales strategy for enterprise customers has successfully demonstrated our platform's capabilities, and our customer support enables broad adoption of our technology within an organization. We intend to continue to pursue growth in these segments of the market as we refine our value-based messaging and educate customers on how we help them solve critical business challenges.

We also offer a trial to all customers who sign up, which includes a free balance for testing and experimentation. We do this in order to strengthen our relationship and reputation within the developer community by providing these developers with the ability to familiarize themselves with our platform without first becoming a paying customer. Once signed up, developers can easily access our programmable interface, extensive self-service documentation, and customer support team. Our low-friction trial experience allows developers to validate that our edge platform works for them at no cost or risk.

Research & Development

Our research and development team members are responsible for the design, development, and reliability of all aspects of our edge cloud platform. Continuous improvement and innovation are core to our DNA, and these efforts are baked directly into our service lifecycle. Scale, performance, security, and reliability are core functional requirements of everything we build into our platform to serve our customers.

Our philosophy of customer empowerment guides our research processes. Our product managers regularly engage with customers and the developer, DevOps and site reliability engineering communities, as well as our internal stakeholders and subject matter experts, in order to understand customer needs. Our engineering team is comprised of experts with deep experience, who intimately understand customers' technical challenges and build solutions accordingly.

Throughout the strategic, design, and build phases of our product lifecycle, our development organization works closely with our product, infrastructure, operations, and compliance teams to design, develop, test, and launch any given solution. We strive for a balance of rapid iteration without compromise on the core functional requirements that our customers expect: scale, performance, security, and reliability.

As of December 31, 2018, we had 150 employees in our research and development group. Our research and development expenses were $34.6 million for the year ended December 31, 2018. Approximately 40% of our research and development group were based in our headquarters in San Francisco, California as of December 31, 2018.

Infrastructure

Our infrastructure team is responsible for the design, deployment, and maintenance of the servers and network hardware that form the foundation of our mission critical environment in 60 POPs around the globe as of March 31, 2019. We invest in research into global internet geography to identify optimal colocation site selection, network partner identification, and network-to-network interconnection opportunities. These activities allow us to connect in close proximity to core internet backbones and ISPs, thereby enhancing network performance. We carefully evaluate and test hardware from leading server, network, and component manufacturers to ensure they comply with our workload performance, system efficiency, and mean time-to-repair standards. In our process, we evaluate commodity server and network platforms to avoid vendor lock-in, while optimizing the mix of components in an effort to improve efficiency and optimize our capital expenditures. We intend to grow the number of data center colocation sites as traffic on our network grows and as demands for new markets justify investment.

Security & Compliance

We uphold transparency and trustworthiness as company values. Our compliance and security teams, as well as other departments across the company, continually iterate on our security program to better meet growing customer needs, updated regulatory requirements, and the evolving security threat landscape. To help validate the controls that safeguard our platform and the data moving through it, we have expanded our portfolio of security and compliance-related assessments and certifications over time.

Customer Support

We have designed our products and platform to be self-service and require minimal customer support. Customers are automatically covered by our standard support plan, free of charge, as soon as they sign up with us. They can file a ticket with the support team, access documentation including online FAQs, API references, and configuration guidelines. Our support approach is unique as we have built it with developers in mind. Our first-line support employee typically has an engineering background and is highly technical.

We also provide several options for premier, hands-on support from a team of highly-technical senior support engineers and technical account managers. They act as a single point of contact for our support, product and engineering teams. Our support model is global, with 24/7 coverage and support offices located throughout the United States, the United Kingdom, and Japan.

Our industry leading enterprise support offering has a Customer Satisfaction score of over 95% as of December 31, 2018 and Net Promoter Score of 64 as of December 31, 2018.

Partnerships & Strategic Relationships

We believe that building a strong partner ecosystem helps amplify our reach and time-to-market, while providing our customers with enhanced value from our joint offerings. By investing in these partnerships, we improve customer satisfaction and retention rates. Our partners and strategic alliances include:

- *Integration Partners.* Our customers leverage a variety of tools and workflows to be successful. We want to enable our platform to be interoperable with the wide range of technical tools that developers adopt, from highly technical tools to one-click integrations and from standardized products to cutting-edge technologies. Leveraging our API first approach, we have built and continue to invest in partnerships that track against modern application development processes. This includes Big Data and logging platforms, CI/CD pipeline tools, and observability workflows where we help drive increased consumption and customer engagement for our partners;
- *Solutions Partners.* For those customers who want all-in-one solutions or who are small or medium sized businesses, we enable solution vendors to build us into their offering. Whether they are a SaaS, PaaS, or IaaS vendor, we can help them offer faster, more secure, and scalable hosting services. Our edge security, acceleration, and delivery capabilities enable our partners to provide more secure and performant solutions to their customers in combination with their products;
- *Referral and Reseller Partners.* Systems integrators create customized solutions for customers. Value-added resellers, direct market resellers, and managed service providers offer our product catalog in addition to a suite of other products and services. These channel partners expand our sales reach and capabilities, provide an open ecosystem, and accelerate adoption of our platform while providing their customers with customized solutions or valuable additional services. Full site delivery, edge compute, and security offerings are an increasingly valuable suite of services for our partners to offer; and
- *Central Cloud Partners.* Our customers continue to adopt central cloud services with increasing velocity. To ensure they can fully leverage the services of both our platform and those of the central clouds, we frequently develop relationships and joint solutions with public, private, and hybrid cloud providers and other enterprise platforms. These relationships span multiple product segments across multi-cloud, core compute, storage, Big Data, machine learning, and security products. As the industry gradually moves towards multi-cloud workloads, our partners increasingly engage with us to ensure optimal delivery of services and products for customers.

Facilities

Our corporate headquarters is located in San Francisco, California and consists of approximately 71,343 square feet of space under a lease that expires on July 31, 2027. We also maintain offices in Portland, Denver, New York, London, and Tokyo. We lease all of our facilities and do not own any real property. We expect to add facilities as we grow our employee base and expand geographically. We believe that our facilities are sufficient to meet our needs for the immediate future, and that, should it be needed, suitable additional space will be available to accommodate expansion of our operations.

Competition

Our platform spans several markets from cloud computing and cloud security to CDNs. We segment the competitive landscape into four key categories:

- Legacy CDNs like Akamai, Limelight, EdgeCast (part of Verizon Digital Media), Level3, and Imperva (for security);
- Small business focused CDNs like InStart, Cloudflare, StackPath, and Section.io;
- Cloud providers who are starting to offer compute functionality at the edge like Amazon's CloudFront, AWS Lambda, and Google Cloud Platform; and
- Traditional data center and appliance vendors like F5, Citrix, A10 Networks, Cisco, Imperva, Radware, and Arbor, as well as networks that offer a range of on-premise solutions for load balancing, WAF, and DDoS.

The principle competitive factors in our market include:

- Platform scalability and performance;
- Global network coverage;
- Platform reliability and security;
- Ease of integration and programmability;
- Credibility with developers;
- Ability to support modern application development processes;
- Brand awareness, reputation, and trust;
- Strength of our sales and marketing efforts;
- Quality of customer support; and
- Price and network cost savings.

We believe we generally compete favorably with our competitors on the basis of these factors. Our edge cloud platform integrates many of the point products offered by our competitors which is a key differentiator. However, many of our competitors have substantially greater financial and technical resources in addition to larger sales and marketing budgets, broader market distribution, and more mature intellectual property portfolios.

Intellectual Property

We rely on a combination of patent, copyright, trademark, and trade secret laws in the United States and other jurisdictions, as well as license agreements and other contractual protections, to protect our proprietary technology. We also rely on a number of registered and unregistered trademarks to protect our brand.

As of December 31, 2018, in the United States, we had 29 issued patents, which expire between September 2033 and October 2036, 45 patent applications pending for examination, as well as seven pending provisional applications. As of such date, we also had six issued patents and 36 patent applications pending for examination in foreign jurisdictions and 25 Patent Cooperation Treaty patent applications pending for examination, all of which are related to U.S. patents and patent applications. In addition, as of December 31, 2018, we had six registered trademarks in the United States.

In addition, we seek to protect our intellectual property rights by requiring our employees and independent contractors involved in development of intellectual property on our behalf to enter into agreements acknowledging that all works or other intellectual property generated or conceived by them on our behalf are our property, and assigning to us any rights, including intellectual property rights, that they may claim or otherwise have in those works or property, to the extent allowable under applicable law.

Despite our efforts to protect our technology and proprietary rights through intellectual property rights, licenses, and other contractual protections, unauthorized parties may still copy or otherwise obtain and use our software and other technology. In addition, we intend to continue to expand our international operations, and effective intellectual property, copyright, trademark, and trade secret protection may be unavailable or limited in foreign countries. Any significant impairment of our intellectual property rights could harm our business or our ability to compete. Further, companies in the communications and technology industries own large numbers of patents, copyrights, and trademarks and frequently threaten litigation, or file suit based on allegations of infringement or other violations of intellectual property rights. We are currently subject to, and expect to face in the future, allegations that we have infringed the intellectual property rights of third parties. From time to time, we also receive demands for indemnification from our customers under the terms of our contracts with them for infringement of a third-party's intellectual property rights.

Legal Proceedings

From time to time, we have been and will continue to be subject to legal proceedings and claims. We are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, results of operations, financial condition, or cash flows. We have received, and may in the future continue to receive, claims from third parties asserting, among other things, infringement of their

intellectual property rights. Future litigation may be necessary to defend ourselves, our partners, and our customers by determining the scope, enforceability, and validity of third-party proprietary rights, or to establish our proprietary rights. The results of any current or future litigation cannot be predicted with certainty, and regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources, and other factors.

Management

MANAGEMENT

Executive Officers and Directors

The following table sets forth information concerning our executive officers and directors as of March 31, 2019:

Name	Age	Position(s)
Executive Officers		
Artur Bergman	39	Chief Executive Officer, Co-Founder and Director
Adriel Lares	46	Chief Financial Officer
Paul Luongo	47	General Counsel and Senior Vice President, Trust
Joshua Bixby	41	President
Wolfgang Maasberg	46	Executive Vice President of Sales
Non-Employee Directors		
Sunil Dhaliwal[(1)]	43	Director
David Hornik[(2)(3)]	51	Director
Christopher Paisley[(1)(3)]	66	Director
Gil Penchina[(2)(3)]	49	Director
Kelly Wright[(1)(2)]	48	Director

(1) Member of the audit committee

(2) Member of the compensation committee

(3) Member of the nominating and corporate governance committee

Executive Officers

Artur Bergman has served as our Chief Executive Officer and as a member of our board of directors since founding Fastly in March 2011. From September 2007 to June 2011, Mr. Bergman served as Manager, Vice President, then Chief Technology Officer of Wikia, Inc., a global community knowledge-sharing platform. From November 2005 to March 2007, Mr. Bergman served as Engineering Manager for SixApart, a social networking service. From the second half of 2003 to August 2005, Mr. Bergman served as Engineering Manager of Fotango, Ltd., a subsidiary of Canon Europe. We believe that Mr. Bergman is qualified to serve as a member of our board of directors because of his industry knowledge and his experience as our founder, as well as his leadership experience and deep technical expertise.

Adriel Lares has served as our Chief Financial Officer since May 2016. From July 2015 to November 2015, Mr. Lares served as an advisor to Lookout, Inc., a mobile security firm. From February 2012 to July 2015, Mr. Lares served as Chief Financial Officer of Lookout, Inc. From September 2010 to February 2012, Mr. Lares served as Business Unit Manager of 3PAR Inc., a data storage and information storage software company and a division of Hewlett Packard's Storage Unit. From January 2005 to September 2010, Mr. Lares served as Chief Financial Officer at 3PAR Inc. From March 2004 to January 2005, Mr. Lares served as the Treasurer of 3PAR Inc, and from March 2001 to March 2004, he served as the Director of Finance at 3PAR Inc. Mr. Lares is also a co-founder of Memento Mori, a Napa-based winery. Mr. Lares earned his B.A. in Economics from Stanford University.

Paul Luongo has served as our General Counsel and Senior Vice President, Trust since January 2019, our General Counsel and Senior Vice President from August 2017 to December 2018, and joined Fastly as General Counsel and Vice President in January 2014. From May 2007 to January 2014, Mr. Luongo served in various legal capacities at Salesforce.com, a cloud-based software company, and ultimately as a Vice President and Assistant General Counsel at Salesforce.com. From July 2004 to April 2007, Mr. Luongo served in various legal capacities at Intel Corporation, a semiconductor and technology company, and ultimately as a Senior Attorney. Mr. Luongo began his legal career as an associate at Cooley LLP, an international law firm, in May 2000. Mr. Luongo has a B.A. in American History from the University of Pennsylvania, an M.P.P. from the University of Michigan School of Public Policy, and a J.D. from the University of Michigan Law School.

Joshua Bixby has served as our President since May 2017, our Senior Vice President, Product and Marketing from February 2017 to April 2017, our Senior Vice President, Marketing from April 2016 to February 2017, our Senior Vice President, Sales and Marketing from January 2016 to April 2016, and joined Fastly full time as Vice President, Marketing in December 2015. From August 2013 to November 2015, Mr. Bixby served as a part-time advisor to us. From February 2013 to August 2013, Mr. Bixby served as Vice President of Acceleration at Radware Ltd., a cybersecurity and application delivery solutions company. Mr. Bixby served as President and co-founder of Strangeloop Networks, a web application acceleration solutions company, from June 2006 until its acquisition by Radware in February 2013. From October 2002 to April 2006, Mr. Bixby was a co-founder, President and Chief Executive Officer of IronPoint Technology, Inc., a content management software solutions company. Mr. Bixby is the founder of Stanley Park Ventures, an early stage foundry based in Vancouver, British Columbia. Mr. Bixby earned his B.S. in Management and Business Economics from the University of Toronto.

Wolfgang Maasberg has served as our Executive Vice President of Sales since March 2019. From April 2016 to March 2019, Mr. Maasberg served as Senior Vice President of Global Sales and Field Operations. From November 2014 to March 2016, Mr. Maasberg served as Group Vice President Sales, Oracle Marketing Cloud for Oracle Corporation, a database software and technology company. From June 2013 to October 2014, Mr. Maasberg was Senior Vice President of Global Sales and Field Operations for Turn, an advertising technology company. Mr. Maasberg previously served as President and Chief Executive Officer of Lyris Technologies, Inc., an email and marketing automation company, and in various senior sales leadership positions at several companies, including Adobe, Omniture (acquired by Adobe) and Coremetrics (acquired by IBM). Mr. Maasberg started his career in technology at Dell Computer Corp in 1997.

Non-Employee Directors

Sunil Dhaliwal has served as a member of our board of directors since March 2011. Mr. Dhaliwal is a general partner of Amplify Partners, a venture capital firm. Prior to founding Amplify Partners, Mr. Dhaliwal served as a General Partner of Battery Ventures, a venture capital and private equity firm, where he worked from 1998 to 2012. Mr. Dhaliwal previously worked in investment banking at Alex. Brown & Sons, Inc. from 1996 to 1998. He currently serves on the board of directors of several privately held technology companies. Mr. Dhaliwal holds a B.S. in Finance and International Business from Georgetown University. We believe that Mr. Dhaliwal is qualified to serve as a member of our board of directors because of his extensive experience with technology companies in our industry, his service on private company boards, and the historical knowledge and continuity he brings to our board of directors.

David M. Hornik has served as a member of our board of directors since February 2013. Since 2000, Mr. Hornik has been a partner at August Capital, a venture capital firm. From August 2004 to September 2017, Mr. Hornik served as a member of the board of directors of Splunk, Inc, a software and data solutions company. Prior to joining August Capital, Mr. Hornik was an intellectual property and corporate attorney at the law firms of Venture Law Group and Perkins Coie LLP, and a litigator at the law firm of Cravath, Swaine & Moore LLP. Mr. Hornik holds an A.B. from Stanford University, an M.Phil from Cambridge University and a J.D. from Harvard Law School. We believe that Mr. Hornik is qualified to serve as a member of our board of directors because of his extensive experience with technology companies in our industry, his service on public and private company boards, and the historical knowledge and continuity he brings to our board of directors.

Christopher B. Paisley has served as a member of our board of directors since July 2018. Since January 2001, Mr. Paisley has served as the Dean's Executive Professor of Accounting at the Leavey School of Business at Santa Clara University. Mr. Paisley also serves as lead independent director of Equinix, Inc., a provider of network colocation, interconnection, and managed services, as a member of the board of Fortinet, Inc., a cybersecurity software company, a member of the board of directors of Fitbit, Inc., a connected health and fitness company, and a member of the board of directors of Ambarella, Inc., a developer of low-power, high-definition video compression and image processing semiconductors. Mr. Paisley previously served as a director of Bridge Bank from August 2011 until June 2015, a director of Control4, a home automation company, from May 2006 until August 2015, and a director of YuMe, Inc., a provider of digital video brand advertising solutions, from November 2012 until its acquisition by RhythmOne plc in February 2018. Mr. Paisley holds a B.A. in business economics from the University of California at Santa Barbara and an M.B.A. from the Anderson School at the University of California at Los Angeles. We believe that Mr. Paisley's substantial experience in the technology industry qualifies him to serve on our board of directors.

Gil Penchina has served as a member of our board of directors since March 2011. Since August 2016, Mr. Penchina has been a Managing Director at Ridge Ventures, a venture capital firm. Prior to joining Ridge Ventures, he previously served as the Chief Executive Officer of Wikia, Inc. from June 2006 to October 2011. Prior to June 2006, Mr. Penchina served as Vice President, General Manager, International at eBay, Inc. He currently serves on the board of directors of several privately held technology companies. Since February 2018, Mr. Penchina has served on the board of directors of Argo Blockchain PLC, a crypto-mining company. Mr. Penchina holds an B.S. in Engineering from the University of Massachusetts and an M.B.A. from the Kellogg School of Management at Northwestern University. We believe that Mr. Penchina is qualified to serve as a member of our board of directors because of his experience with technology companies, his service on private company boards, and the historical knowledge and continuity he brings to our board of directors.

Kelly Wright has served as a member of our board of directors since June 2018. From February 2005 to December 2016, Ms. Wright served as the Executive Vice President, Sales of Tableau Software, a software company. Prior to 2005, Ms. Wright served as Vice President of Sales at AtHoc, Inc., a software company. She holds an B.A. in Political Science from Stanford University and an M.B.A. from The Wharton School at the University of Pennsylvania. We believe that Ms. Wright is qualified to serve as a member of our board of directors because of her experience growing sales organizations at various technology companies.

Family Relationships

There are no family relationships among any of our executive officers or directors.

Board Composition

Our board of directors currently consists of six members. Each director is currently elected to the board of directors for a one-year term, to serve until the election and qualification of a successor director at our annual meeting of stockholders, or until the director's earlier removal, resignation, or death.

Certain of our directors currently serve on the board of directors pursuant to the voting provisions of a voting agreement between us and several of our stockholders. Under the terms of this voting agreement, the stockholders who are party to the voting agreement have agreed to vote their respective shares so as to elect: (1) one director to be designated by holders of our Series A preferred stock, who is currently Mr. Dhaliwal; (2) one director to be designated by August Capital VI, who is currently Mr. Hornik; (3) one director to be our current Chief Executive Officer, who is currently Mr. Bergman; (4) one director to be designated by the holders of our common stock, who is currently Mr. Penchina; and (5) one director who is an industry representative to be elected by the holders of our common stock and preferred stock, who is currently Ms. Wright. This agreement will terminate upon the completion of this offering, after which there will be no further contractual obligations regarding the election of our directors. There is no contractual arrangement by which Mr. Paisley was appointed to our board of directors.

In accordance with our amended and restated certificate of incorporation, which will become effective in connection with the completion of this offering, our board of directors will be divided into three classes with staggered three-year terms. At each annual meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Our directors will be divided among the three classes as follows:

- Class I, which will consist of and whose term will expire at our first annual meeting of stockholders to be held after the completion of this offering;
- Class II, which will consist of and whose term will expire at our second annual meeting of stockholders to be held after the completion of this offering; and
- Class III, which will consist of and whose term will expire at our third annual meeting of stockholders to be held after the completion of this offering.

Our amended and restated bylaws, which will become effective in connection with the completion of this offering, will provide that the authorized number of directors may be changed only by resolution approved by a majority of our board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control.

Director Independence

Our board of directors has undertaken a review of the independence of the directors and considered whether any director has a material relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. Based upon information requested from and provided by each director concerning such director's background, employment and affiliations, including family relationships, our board of directors determined that Mr. Dhaliwal, Mr. Hornik, Mr. Paisley, Mr. Penchina, and Ms. Wright, representing five of our six directors following the completion of this offering, are "independent directors" as defined under the listing standards of the NYSE. In making these determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances that our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director and the transactions involving them described in "Certain Relationships and Related Party Transactions."

Board Committees

Our board of directors has established an audit committee, a compensation committee, and a nominating and corporate governance committee, each of which has the composition and responsibilities described below. From time to time, our board of directors may establish other committees to facilitate the management of our business.

Audit Committee

Our audit committee consists of three directors, Mr. Dhaliwal, Mr. Paisley, and Ms. Wright. Our board of directors has determined that each of our audit committee members satisfies the independence requirements for audit committee members under the listing standards of the NYSE and Rule 10A-3 of the Exchange Act. Each member of our audit committee meets the financial literacy requirements of the listing standards of the NYSE. Mr. Paisley is the chairperson of the audit committee and our board of directors has determined that Mr. Paisley is an audit committee "financial expert" as defined by Item 407(d) of Regulation S-K under the Securities Act. The principal duties and responsibilities of our audit committee include, among other things:

- selecting a qualified firm to serve as the independent registered public accounting firm to audit our financial statements;
- helping to ensure the independence and performance of the independent registered public accounting firm;
- discussing the scope and results of the audit with the independent registered public accounting firm, and reviewing, with management and the independent accountants, our interim and year-end operating results;
- developing procedures for employees to submit concerns anonymously about questionable accounting or audit matters;
- reviewing our policies on risk assessment and risk management;
- reviewing related party transactions;

- obtaining and reviewing a report by the independent registered public accounting firm at least annually, that describes its internal quality-control procedures, any material issues with such procedures, and any steps taken to deal with such issues when required by applicable law; and
- approving (or, as permitted, pre-approving) all audit and all permissible non-audit services, other than de minimis non-audit services, to be performed by the independent registered public accounting firm.

Our audit committee operates under a written charter that satisfies the applicable rules of the SEC and the listing standards of the NYSE .

Compensation Committee

Our compensation committee consists of three directors, Mr. Hornik, Mr. Penchina, and Ms. Wright, each of whom our board of directors has determined is a non-employee member of our board of directors as defined in Rule 16b-3 under the Exchange Act. Mr. Hornik is the chairperson of the compensation committee. The composition of our compensation committee meets the requirements for independence under current listing standards of the NYSE and current SEC rules and regulations. The principal duties and responsibilities of our compensation committee include, among other things:

- reviewing and approving, or recommending that our board of directors approve, the compensation of our executive officers, including evaluating the performance of our chief executive officer and, with his assistance, that of our other executive officers;
- reviewing and recommending to our board of directors the compensation of our directors;
- reviewing and approving, or recommending that our board of directors approve, the terms of compensatory arrangements with our executive officers;
- administering our equity and non-equity incentive plans;
- reviewing and approving, or recommending that our board of directors approve, incentive compensation and equity plans; and
- reviewing and establishing general policies relating to compensation and benefits of our employees and reviewing our overall compensation philosophy.

Our compensation committee operates under a written charter that satisfies the applicable rules of the SEC and the listing standards of the NYSE.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee consists of three directors, Mr. Hornik, Mr. Paisley, and Mr. Penchina. Mr. Penchina is the chairperson of the nominating and corporate governance committee. The composition of our nominating and corporate governance committee meets the requirements for independence under current listing standards of the NYSE and current SEC rules and regulations. The nominating and corporate governance committee's responsibilities include, among other things:

- identifying, evaluating, and selecting, or recommending that our board of directors approve, nominees for election to our board of directors and its committees;
- evaluating the performance of our board of directors and of individual directors;
- considering and making recommendations to our board of directors regarding the composition of our board of directors and its committees;
- reviewing developments in corporate governance practices;
- evaluating the adequacy of our corporate governance practices and reporting;
- developing and making recommendations to our board of directors regarding corporate governance guidelines and matters; and
- overseeing an annual evaluation of the board's performance.

Our nominating and corporate governance committee operates under a written charter that satisfies the applicable rules of the SEC and the listing standards of the .

Code of Business Conduct and Ethics

In connection with this offering, we intend to adopt a Code of Business Conduct and Ethics (the Code of Conduct) applicable to all of our employees, executive officers, and directors. Following the completion of this offering, the Code of Conduct will be available on our website at www.fastly.com. The nominating and corporate governance committee of our board of directors will be responsible for overseeing the Code of Conduct and must approve any waivers of the Code of Conduct for executive officers and directors. We expect that any amendments to the Code of Conduct, or any waivers of its requirements with respect to our executive officers and directors, will be disclosed on our website.

Compensation Committee Interlocks and Insider Participation

None of our executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee. None of the members of our compensation committee is an officer or employee of our company, nor have they ever been an officer or employee of our company.

Non-Employee Director Compensation

We provide equity-based compensation to certain of our independent directors who are not employees or affiliated with our investors for the time and effort necessary to serve as a member of our board of directors. In addition, all of our independent directors are entitled to reimbursement of direct expenses incurred in connection with attending meetings of the board or committees thereof.

We intend to adopt a director compensation policy, pursuant to which our non-employee directors will be eligible to receive compensation for service on our board of directors and committees of our board of directors.

2018 Director Compensation Table

The following table sets forth information regarding the compensation earned for service on our board of directors during the year ended December 31, 2018 by our non-employee directors. Artur Bergman, our Chief Executive Officer, is also a member of our board of directors, but did not receive any additional compensation for service as a director. Mr. Bergman's compensation as an executive officer is set forth below under "Executive Compensation—2018 Summary Compensation Table."

Name	Option Awards($)(1)	Total $
Sunil Dhaliwal	$—	$—
David Hornik	—	—
Christopher Paisley(2)	633,985	633,985
Gil Penchina	—	—
Kelly Wright(3)	633,985	633,985

(1) Amounts shown in this column do not reflect dollar amounts actually received by our non-employee directors. Instead, these amounts reflect the aggregate grant date fair value of each stock option granted in 2018, computed in accordance with the provisions of FASB ASC Topic 718. Methodology used in the calculation of these amounts are included in Note 10 to our consolidated financial statements included in this prospectus. As required by SEC rules, the amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. Our non-employee directors will only realize compensation to the extent the trading price of our Class A common stock is greater than the exercise price of such stock options.

(2) Mr. Paisley joined our board of directors in July 2018.

(3) Ms. Wright joined our board of directors in June 2018.

We currently reimburse our directors for their reasonable out-of-pocket expenses in connection with attending board of directors and committee meetings. From time to time, we have granted stock options to certain of our non-employee directors as compensation for their services. Mr. Paisley and Ms. Wright are our only non-employee directors who hold options to purchase Class B common stock. In July 2018, we granted Mr. Paisley an option to purchase 459,676 shares of Class B common stock with an exercise price of $2.22 per share, vesting monthly over four years with the right to early exercise. In July 2018, we granted Ms. Wright an option to purchase 459,676 shares of Class B common stock with an exercise price of $2.22 per share, vesting monthly over four years with the right to early exercise.

Executive Compensation

EXECUTIVE COMPENSATION Our named executive officers, consisting of our principal executive officer and the next two most highly compensated executive officers as of December 31, 2018, were:

- Artur Bergman, Chief Executive Officer, Co-Founder and Director;
- Joshua Bixby, President; and
- Paul Luongo, General Counsel and Senior Vice President, Trust.

2018 Summary Compensation Table

The following table sets forth all of the compensation awarded to, or earned by or paid to our named executive officers during 2018.

Name and Principal Position	Year	Salary	Option Awards(1)	All Other Compensation(2)	Total
Artur Bergman	2018	$360,000	$—	$54	$360,054
Chief Executive Officer					
Joshua Bixby	2018	425,000 (3)	749,480	—	1,174,480
President					
Paul Luongo	2018	400,000	374,740	54	774,794
General Counsel, Senior Vice President, Trust					

(1) Amounts shown in this column do not reflect dollar amounts actually received by our named executive officers. Instead, these amounts reflect the aggregate grant date fair value of each stock option granted in 2018, computed in accordance with the provisions of FASB ASC Topic 718. Assumptions used in the calculation of these amounts are included in Note 10 to our Consolidated Financial Statements included in this prospectus. Our named executive officers will only realize compensation to the extent the trading price of our Class A common stock is greater than the exercise price of such stock options.

(2) Amounts reported represent life insurance premiums paid by us on behalf of the named executive officer.

(3) Amounts reported represent payments to Mr. Bixby's trust in accordance with the terms of his consulting agreement. See "—Employment, Severance, and Change in Control Agreements."

Outstanding Equity Awards as of December 31, 2018

The following table presents information regarding outstanding equity awards held by our named executive officers as of December 31, 2018. All awards were granted under our 2011 Equity Incentive Plan. See "—Employment, Severance, and Change in Control Agreements" for a description of vesting acceleration applicable to stock options held by our named executive officers.

			Option Awards			
Name	Grant Date	VestingCommencementDate	Number of Securities Underlying Exercisable Options	Number of Securities Underlying Unexercisable Options	Option Exercise Price	Option Expiration Date
Artur Bergman	06/02/2015	03/03/2015	1,837,669 (1)(2)	114,855 (1)	$0.575	06/01/2025
Joshua Bixby	10/31/2013	10/28/2013	25,000 (3)	—	0.1556	10/30/2023
	03/03/2015	03/03/2015	200,000 (4)	—	0.575	03/02/2025
	07/12/2016	07/11/2016	500,000 (2)(5)	—	1.18	07/11/2026
	08/01/2017	07/01/2017	400,000 (2)(5)	—	1.57	07/31/2027
	12/20/2018	12/19/2018	400,000 (2)(6)	—	3.75	12/19/2028
Paul Luongo	03/03/2015	03/03/2015	300,000 (2)(7)	—	0.575	03/02/2025
	12/20/2018	12/19/2018	200,000 (2)(6)	—	3.75	12/19/2028

(1) $1/48^{th}$ of the total shares subject to this option will vest monthly measured from the vesting commencement date, subject to continuous service through each such date. As of December 31, 2018, 1,722,814 shares are vested.

(2) This option is early exercisable and to the extent any of such shares are unvested as of a given date, such purchased shares will remain subject to a right of repurchase by Fastly upon the termination of the service of the named executive officer.

(3) $1/8^{th}$ of the total shares subject to this option will vest three months after the vesting commencement date, subject to continuous service as of such date. The balance of the shares subject to this option will vest in a series of twenty-one successive equal monthly installments from the three-month anniversary of the vesting commencement date, subject to continuous service through each such date. As of December 31, 2018, 25,000 shares are vested.

(4) $1/24^{th}$ of the total shares subject to this option will vest monthly commencing on the vesting commencement date, subject to continuous service through each such date. As of December 31, 2018, 200,000 shares are vested.

(5) $1/48^{th}$ of the total shares subject to this option will vest monthly measured from the vesting commencement date, subject to continuous service through each such date. As of December 31, 2018, 302,083 and 141,666 shares are vested, respectively.

(6)	1/48th of the total shares subject to this option will vest monthly measured from the vesting commencement date, subject to continuous service through each such date. As of December 31, 2018, no shares are vested.
(7)	1/4th of the total shares subject to this option will vest one year after the vesting commencement date and the balance of the shares subject to this option will vest in a series of thirty-six successive equal monthly installments from the first anniversary of the vesting commencement date, subject to continuous service through each such date. As of December 31, 2018, 281,249 shares are vested.

Emerging Growth Company Status

We are an "emerging growth company," as defined in the JOBS Act. As an emerging growth company we will be exempt from certain requirements related to executive compensation, including, but not limited to, the requirements to hold a nonbinding advisory vote on executive compensation and to provide information relating to the ratio of total compensation of our Chief Executive Officer to the median of the annual total compensation of all of our employees, each as required by the Investor Protection and Securities Reform Act of 2010, which is part of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Pension Benefits

Our named executive officers did not participate in, or otherwise receive any benefits under, any pension or retirement plan sponsored by us during 2018.

Nonqualified Deferred Compensation

Our named executive officers did not participate in, or earn any benefits under, a non-qualified deferred compensation plan sponsored by us during 2018.

Employment, Severance, and Change in Control Agreements

We have employment agreements or consulting agreements with each of our executive officers other than Artur Bergman, who is our founder and serves as our Chief Executive Officer and Director. The agreements generally provide for at-will employment or service and set forth the executive officer's initial base salary, initial equity grant amount, eligibility for employee benefits, and in some cases severance benefits upon a qualifying termination of employment. In addition, each of our executive officers has executed our standard proprietary information and inventions agreement. The key terms of these agreements are described below.

Artur Bergman

We do not have a written employment agreement with Mr. Bergman. Mr. Bergman's annual base salary as of December 31, 2018 was $360,000. In June 2015, we granted Mr. Bergman an option to purchase 1,837,669 shares of Class B common stock with an exercise price of $0.575 per share vesting monthly over 48 months from March 2015.

Joshua Bixby

Mr. Bixby serves as our President under the terms of an Independent Contractor Services Agreement between us and Possibilities Trainings Group, dated October 2013. Possibilities Trainings Group is owned and controlled by trusts controlled by Mr. Bixby and members of his immediate family and all compensation paid for Mr. Bixby's services as our President is paid solely to Mr. Bixby. Under the terms of his consulting agreement we pay Mr. Bixby $425,000 per year. In October 2013, we granted Mr. Bixby an option to purchase 25,000 shares of Class B common stock with an exercise price of $0.1556 per share. 1/8th of the total shares subject to this option will vest three months after October 28, 2013, and the balance of the shares vest monthly thereafter over 21 months. In March 2014, we granted Mr. Bixby an option to purchase 292,130 shares of Class B common stock with an exercise price of $0.1556 per share vesting monthly over 24 months from March 2014. In March 2015, we granted Mr. Bixby an option to purchase 200,000 shares of Class B common stock with an exercise price of $0.575 per share vesting monthly over 24 months from March 2015. In July 2016, we granted Mr. Bixby an option to purchase 500,000 shares of Class B common stock with an exercise price of $1.18 per share vesting monthly over 48 months from July 2016. In August 2017, we granted Mr. Bixby an option to purchase 400,000 shares of Class B common stock with an exercise price of $1.57 per share vesting monthly over 48 months from August 2017. In December 2018, we granted Mr. Bixby an option to purchase 400,000 shares of Class B common stock with an exercise price of $3.75 per share vesting monthly over 48 months from December 2018.

In February 2019, we entered into a change of control and retention agreement with Mr. Bixby. If Mr. Bixby's services are terminated without cause or he terminates his services for good reason, on or within three months prior to or 18 months following a change in control, all unvested shares of stock subject to his outstanding equity awards shall immediately become fully vested. Mr. Bixby must sign a release of claims agreement as a pre-condition of receiving these termination benefits.

Adriel Lares

In April 2016, we entered into an offer letter agreement with Adriel Lares, our Chief Financial Officer. Mr. Lares' annual base salary as of December 31, 2018 was $425,000. Under the terms of his offer letter, we granted Mr. Lares an option to purchase 1,456,497 shares of Class B common stock with an exercise price of $1.18 per share. 25% of the total shares subject to this option will vest on the 12-month anniversary of May 16, 2016, and 1/36th of the balance of the shares vest monthly thereafter.

In September 2016, we entered into a change of control and retention agreement with Mr. Lares. If Mr. Lares' employment is terminated without cause or he terminates his employment for good reason, on or within three months prior to or 18 months following a change in control, all unvested shares subject to his outstanding equity awards shall vest in full as of his termination date. In addition, if Mr. Lares' employment is terminated without cause or he terminates his employment for good reason, he will be eligible to receive a lump sum payment equal to six months of his base salary and continuation of his benefits for six months. Mr. Lares must sign a release of claims agreement as a pre-condition of receiving these termination benefits.

Paul Luongo

In November 2013, we entered into an offer letter agreement with Paul Luongo, our General Counsel and Senior Vice President, Trust. Mr. Luongo's annual base salary as of December 31, 2018 was $400,000. Under the terms of his offer letter, we granted Mr. Luongo an option to purchase 584,260 shares of Class B common stock with an exercise price of $0.1556 per share. 25% of the total shares subject to this option vested on the 12-month anniversary of January 6, 2014, and 1/36th of the balance of the shares vested monthly thereafter. In March 2015, we granted Mr. Luongo an option to purchase 300,000 shares of Class B common stock with an exercise price of $0.575 per share, vesting monthly over 48 months from March 2015. In December 2018, we granted Mr. Luongo an option to purchase 200,000 shares of Class B common stock with an exercise price of $3.75 per share, vesting monthly over 48 months from December 2018.

In February 2014, we entered into a change of control and retention agreement with Mr. Luongo. If Mr. Luongo's employment is terminated without cause or he terminates his employment for good reason, on or within three months prior to or 18 months following a change in control, all unvested shares subject to his outstanding equity awards shall vest in full as of his termination date. Mr. Luongo must sign a release of claims agreement as a pre-condition of receiving these termination benefits.

Wolfgang Maasberg

In March 2016, we entered into an offer letter agreement with Wolfgang Maasberg, our Executive Vice President of Sales. Mr. Maasberg's annual base salary as of December 31, 2018 was $325,000. Under the terms of his offer letter, we granted Mr. Maasberg an option to purchase 1,165,197 shares of Class B common stock with an exercise price of $1.18 per share. 25% of the total shares subject to this option will vest on the 12-month anniversary of April 11, 2016, and 1/36th of the balance of the shares vest monthly thereafter. Mr. Maasberg is entitled to earn a sales commission based on his and our performance against annual targets with quarterly objectives, with a target commission of $325,000.

If Mr. Maasberg's employment is terminated without cause or he terminates his employment for good reason, on or within three months prior to or 18 months following a change in control, all outstanding shares subject to his outstanding equity awards shall vest in full as of his termination date. In addition, if Mr. Maasberg's employment is terminated without cause or he terminates his employment for good reason, he will be eligible to receive a lump sum payment equal to six months of his base salary and continuation of his benefits for six months. Mr. Maasberg must sign a release of claims agreement as a pre-condition of receiving these termination benefits.

Employee Benefit Plans

We believe that our ability to grant equity-based awards is a valuable and necessary compensation tool that aligns the long-term financial interests of our employees, consultants and directors with the financial interests of our stockholders. In addition, we believe that our ability to grant options and other equity-based awards helps us to attract, retain, and motivate employees, consultants, and directors and encourages them to devote their best efforts to our business and financial success. The principal features of our equity incentive plans and our 401(k) plan are summarized below. These summaries are qualified in their entirety by reference to the actual text of the plans, which, other than the 401(k) plan, are filed as exhibits to the registration statement of which this prospectus is a part.

2019 Equity Incentive Plan

We expect that our board of directors will adopt and our stockholders will approve prior to the closing of this offering our 2019 Equity Incentive Plan (2019 Plan). We do not expect to utilize our 2019 Plan until after the completion of this offering, at which point no further grants will be made under our 2011 Plan, as described below under "2011 Plan." No awards have been granted and no shares of our Class A common stock have been issued under our 2019 Plan.

Stock Awards. The 2019 Plan provides for the grant of incentive stock options within the meaning of Section 422 of the Code, nonstatutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance-based stock awards, and other forms of equity compensation, which are collectively referred to as stock awards. Additionally, the 2019 Plan provides for the grant of performance cash awards. Incentive stock options may be granted only to employees. All other awards may be granted to employees, including officers, and to non-employee directors and consultants.

Share Reserve. Initially, the aggregate number of shares of our Class A common stock that may be issued pursuant to stock awards under the 2019 Plan is the sum of (i) shares of our Class A common stock plus (ii) the number of shares of our Class B common stock reserved, and remaining available for issuance, under our 2011 Plan at the time our 2019 Plan became effective, except each such share of our Class B common stock will be issuable under the 2019 Plan as one share of our Class A common stock and (iii) the number of shares subject to stock options or other stock awards granted under our 2011 Plan that would have otherwise returned to our 2011 Plan (such as upon the expiration or termination of a stock award prior to vesting), except each such share of our Class B common stock will be issuable under the 2019 Plan as one share of our Class A common stock. The number of shares of our Class A common stock reserved for issuance under our 2019 Plan will automatically increase on January 1 of each year, beginning on January 1, 2020 and continuing through and including January 1, 2029, by % of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our board of directors. The maximum number of shares that may be issued upon the exercise of incentive stock options under our 2019 Plan is shares of our Class A common stock.

If a stock award granted under the 2019 Plan expires or otherwise terminates without being exercised in full, or is settled in cash, the shares of our Class A common stock not acquired pursuant to the stock award again will become available for subsequent issuance under the 2019 Plan. In addition, the following types of shares under the 2019 Plan may become available for the grant of new stock awards under the 2019 Plan: (1) shares that are forfeited to or repurchased by us prior to becoming fully vested; (2) shares withheld to satisfy income or employment withholding taxes; or (3) shares used to pay the exercise or purchase price of a stock award. Shares issued under the 2019 Plan may be previously unissued shares or reacquired shares bought by us on the open market.

The maximum number of shares of common stock subject to stock awards granted under the 2019 Plan or otherwise during any one calendar year to any non-employee director, taken together with any cash fees paid by us to such non-employee director during such calendar year for service on the board of directors, will not exceed $ in total value (calculating the value of any such stock awards based on the grant date fair value of such stock awards for financial reporting purposes), or, with respect to the calendar year in which a non-employee director is first appointed or elected to our board of directors, $.

Administration. Our board of directors, or a duly authorized committee thereof, has the authority to administer the 2019 Plan. Our board of directors may also delegate to one or more of our officers the authority to (1) designate employees (other than other officers) to be recipients of certain stock awards, (2) determine the number of shares of Class A common stock to be subject to such stock awards, and (3) specify the other terms and conditions, including the strike price or purchase price and vesting schedule, applicable to such awards. Subject to the terms of the 2019 Plan, our board of directors or the authorized committee, referred to as the plan administrator, determines recipients, dates of grant, the numbers and types of stock awards to be granted, and the terms and conditions of the stock awards, including the period of exercisability and vesting schedule applicable to a stock award. Subject to the limitations set forth below, the plan administrator will also determine the exercise price, strike price, or purchase price of stock awards granted and the types of consideration to be paid for the stock award.

The plan administrator has the authority to modify outstanding awards under our 2019 Plan. Subject to the terms of our 2019 Plan, the plan administrator has the authority, without stockholder approval, to reduce the exercise, purchase, or strike price of any outstanding stock award, cancel any outstanding stock award in exchange for new stock awards, cash, or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

Stock Options. Incentive and nonstatutory stock options are evidenced by stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for a stock option, within the terms and conditions of the 2019 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our Class A common stock on the date of grant. Options granted under the 2019 Plan vest at the rate specified by the plan administrator.

The plan administrator determines the term of stock options granted under the 2019 Plan, up to a maximum of ten years. Unless the terms of an option holder's stock option agreement provide otherwise, if an option holder's service relationship with us, or any of our affiliates, ceases for any reason other than disability, death, or cause, the option holder may generally exercise any vested options for a period of three months following the cessation of service. The option term will automatically be extended in the event that exercise of the option following such a termination of service is prohibited by applicable securities laws or our insider trading policy. If an option holder's service relationship with us or any of our affiliates ceases due to disability or death, or an option holder dies within a certain period following cessation of service, the option holder or a beneficiary may generally exercise any vested options for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, options generally terminate immediately. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of Class A common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include (1) cash, check, bank draft, or money order, (2) a broker-assisted cashless exercise, (3) the tender of shares of our Class A common stock previously owned by the option holder, (4) a net exercise of the option if it is a nonqualified stock option, and (5) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. An option holder may designate a beneficiary, however, who may exercise the option following the option holder's death.

Tax Limitations on Incentive Stock Options. The aggregate fair market value, determined at the time of grant, of our common stock with respect to incentive stock options that are exercisable for the first time by an option holder during any calendar year under all of our stock plans may not exceed $100,000. Options or portions thereof that exceed such limit will be treated as nonqualified stock options. No incentive stock option may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant and (2) the term of the incentive stock option does not exceed five years from the date of grant.

Restricted Stock Awards. Restricted stock awards are evidenced by restricted stock award agreements adopted by the plan administrator. Restricted stock awards may be granted in consideration for (1) cash, check, bank draft, or money order, (2) services rendered to us or our affiliates, or (3) any other form of legal consideration. Class A common stock acquired under a restricted stock award may, but need not, be subject to a share repurchase option in our favor in accordance with a vesting schedule as determined by the plan administrator. Rights to acquire shares under a restricted stock award may be transferred only upon such terms and conditions as set by the plan administrator. Except as otherwise provided in the applicable award agreement, restricted stock awards that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

Restricted Stock Unit Awards. Restricted stock unit awards are evidenced by restricted stock unit award agreements adopted by the plan administrator. Restricted stock unit awards may be granted in consideration for any form of legal consideration or for no consideration. A restricted stock unit award may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the plan administrator, or in any other form of consideration set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit award. Rights under a restricted stock unit award may be transferred only upon such terms and conditions as set by the plan administrator. Restricted stock unit awards may be subject to vesting as determined by the plan administrator. Except as otherwise provided in the applicable award agreement, restricted stock units that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

Stock Appreciation Rights. Stock appreciation rights are evidenced by stock appreciation grant agreements adopted by the plan administrator. The plan administrator determines the strike price for a stock appreciation right, which generally cannot be less than 100% of the fair market value of our Class A common stock on the date of grant. Upon the exercise of a stock appreciation right, we will pay the participant an amount in cash or stock equal to (1) the

excess of the per share fair market value of our Class A common stock on the date of exercise over the strike price, multiplied by (2) the number of shares of Class A common stock with respect to which the stock appreciation right is exercised. A stock appreciation right granted under the 2019 Plan vests at the rate specified in the stock appreciation right agreement as determined by the plan administrator.

The plan administrator determines the term of stock appreciation rights granted under the 2019 Plan, up to a maximum of ten years. Unless the terms of a participant's stock appreciation right agreement provide otherwise, if a participant's service relationship with us or any of our affiliates ceases for any reason other than cause, disability, or death, the participant may generally exercise any vested stock appreciation right for a period of three months following the cessation of service. The stock appreciation right term will be further extended in the event that exercise of the stock appreciation right following such a termination of service is prohibited by applicable securities laws. If a participant's service relationship with us, or any of our affiliates, ceases due to disability or death, or a participant dies within a certain period following cessation of service, the participant or a beneficiary may generally exercise any vested stock appreciation right for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, stock appreciation rights generally terminate immediately upon the occurrence of the event giving rise to the termination of the individual for cause. In no event may a stock appreciation right be exercised beyond the expiration of its term.

Unless the plan administrator provides otherwise, stock appreciation rights generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. A stock appreciation right holder may designate a beneficiary, however, who may exercise the stock appreciation right following the holder's death.

Performance Awards. The 2019 Plan permits the grant of performance-based stock and cash awards. The performance goals that may be selected include one or more of the following: (1) earnings (including earnings per share and net earnings); (2) earnings before interest, taxes and depreciation; (3) earnings before interest, taxes, depreciation and amortization; (4) earnings before interest, taxes, depreciation, amortization and legal settlements; (5) earnings before interest, taxes, depreciation, amortization, legal settlements and other income (expense); (6) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense) and stock-based compensation; (7) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense), stock-based compensation and changes in deferred revenue; (8) total stockholder return; (9) return on equity or average stockholder's equity; (10) return on assets, investment, or capital employed; (11) stock price; (12) margin (including gross margin); (13) income (before or after taxes); (14) operating income; (15) operating income after taxes; (16) pre-tax profit; (17) operating cash flow; (18) sales or revenue targets; (19) increases in revenue or product revenue; (20) expenses and cost reduction goals; (21) improvement in or attainment of working capital levels; (22) economic value added (or an equivalent metric); (23) market share; (24) cash flow; (25) cash flow per share; (26) share price performance; (27) debt reduction; (28) implementation or completion of projects or processes; (29) stockholders' equity; (30) capital expenditures; (31) debt levels; (32) operating profit or net operating profit; (33) workforce diversity; (34) growth of net income or operating income; (35) billings; (36) bookings; (37) employee retention; (38) user satisfaction; (39) the number of users, including unique users; (40) budget management; (41) partner satisfaction; (42) entry into or completion of strategic partnerships or transactions (including in-licensing and out-licensing of intellectual property); and (43) other measures of performance selected by our board of directors or a duly authorized committee thereof.

The performance goals may be based on company-wide performance or performance of one or more business units, divisions, affiliates, or business segments, and may be either absolute or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise in the award agreement at the time the award is granted or in such other document setting forth the performance goals at the time the goals are established, we will appropriately make adjustments in the method of calculating the attainment of performance goals as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of any items that are unusual in nature or occur infrequently as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of common stock of the Company by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under the Company's bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles; and (12) to exclude the effect of any other unusual, nonrecurring gain or loss or other extraordinary item. In addition, we retain the discretion to adjust or eliminate the compensation or economic benefit due upon attainment of the goals. The performance goals may differ from participant to participant and from award to award.

Other Stock Awards. The plan administrator may grant other awards based in whole or in part by reference to our Class A common stock. The plan administrator will set the number of shares under the stock award and all other terms and conditions of such awards.

Changes to Capital Structure. In the event that there is a specified type of change in our capital structure, such as a stock split or recapitalization, appropriate adjustments will be made to (1) the class and maximum number of shares reserved for issuance under the 2019 Plan, (2) the class and maximum number of shares by which the share reserve may increase automatically each year, (3) the class and number of shares that may be issued upon the exercise of incentive stock options, and (4) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

Corporate Transactions. In the event of certain specified significant corporate transactions, the plan administrator has the discretion to take any of the following actions with respect to stock awards:

- arrange for the assumption, continuation, or substitution of a stock award by a surviving or acquiring entity or parent company;
- arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring entity or parent company;

- accelerate the vesting of the stock award and provide for its termination prior to the effective time of the corporate transaction;
- arrange for the lapse of any reacquisition or repurchase right held by us;
- cancel or arrange for the cancellation of the stock award in exchange for such cash consideration, if any, as our board of directors may deem appropriate or for no consideration; or
- make a payment equal to the excess of (1) the value of the property the participant would have received upon exercise of the stock award over (2) the exercise price or strike price otherwise payable in connection with the stock award.

Our plan administrator is not obligated to treat all stock awards, even those that are of the same type, in the same manner.

Under the 2019 Plan, a corporate transaction is generally the consummation of (1) a sale or other disposition of all or substantially all of our consolidated assets, (2) a sale or other disposition of at least 50% of our outstanding securities, (3) a merger, consolidation or similar transaction following which we are not the surviving corporation, or (4) a merger, consolidation, or similar transaction following which we are the surviving corporation but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

Change in Control. The plan administrator may provide, in an individual award agreement or in any other written agreement between a participant and us that the stock award will be subject to additional acceleration of vesting and exercisability or settlement in the event of a change in control. Under the 2019 Plan, a change in control is generally (1) the acquisition by a person or entity of more than 50% of our combined voting power other than by merger, consolidation, or similar transaction, (2) a consummated merger, consolidation, or similar transaction immediately after which our stockholders cease to own more than 50% of the combined voting power of the surviving entity, (3) a consummated sale, lease, or exclusive license or other disposition of all or substantially all of our consolidated assets, and (4) certain dissolutions, liquidations, and changes in the board of directors.

Amendment and Termination. Our board of directors has the authority to amend, suspend, or terminate our 2019 Plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent and provided further that certain types of amendments will require the approval of our stockholders. No incentive stock options may be granted after the tenth anniversary of the date our board of directors adopts our 2019 Plan.

2011 Equity Incentive Plan

Our 2011 Equity Incentive Plan (2011 Plan) was adopted by our board of directors and approved by our stockholders in March 2011, and was most recently amended in January 2019. Our 2011 Plan permits the grant of incentive stock options within the meaning of Code Section 422 to our employees and to any of our parent or subsidiary corporation's employees, and nonstatutory stock options, stock appreciation rights, restricted stock awards, and restricted stock unit awards to our employees, directors, and consultants and employees and consultants of any affiliate of ours. Our 2011 Plan will be terminated prior to the completion of this offering, and thereafter we will not grant any additional stock awards under our 2011 Plan. However, our 2011 Plan will continue to govern the terms and conditions of the outstanding stock awards previously granted thereunder.

Share Reserve. As of December 31, 2018, options to purchase 24,357,214 shares of our Class B common stock were outstanding with a weighted-average exercise price of $1.48 per share, and 1,219,609 shares of our Class B common stock remained available for future stock awards under our 2011 Plan.

Administration. Our board of directors or a committee delegated by our board of directors administers our 2011 Plan. Subject to the terms of our 2011 Plan, the administrator has the power to, among other things, determine who will be granted stock awards, to determine the specific terms and conditions of each stock award (including the number of shares subject to the stock award and when the stock award will vest and, as applicable, become exercisable), to accelerate the time(s) at which a stock award may vest or be exercised, and to construe and interpret the 2011 Plan and stock awards granted thereunder.

Options. Options granted under our 2011 Plan are subject to terms and conditions generally similar to those described above with respect to options that may be granted under our 2019 Plan.

Capital Structure Changes. In the event of certain changes in our capital structure, such as a stock split or recapitalization, appropriate and proportionate adjustments will be made to the class and maximum number of shares reserved for issuance under our 2011 Plan; the class and maximum number of shares that may be issued upon the exercise of incentive stock options; and the class and number of shares and price per share, if applicable, of all outstanding stock awards.

Corporate Transaction. Our 2011 Plan provides that upon a "Corporate Transaction," as defined in our 2011 Plan, our board of directors generally may take one or more of the following actions as to some or all stock awards outstanding under our 2011 Plan: (1) arrange for outstanding stock awards to be assumed, continued or substituted by the surviving or acquiring corporation, (2) arrange for the assignment of any reacquisition or repurchase rights held by us in respect of common stock issued pursuant to the stock award to the surviving or acquiring corporation, (3) accelerate the vesting, in whole or in part, of the stock award to a date prior to the effective time of such Corporate Transaction, (4) arrange for the lapse of any reacquisition or repurchase rights held by us with respect to the stock award, (5) cancel or arrange for the cancellation of the stock award, to the extent not vested or not exercised prior to the effective time of the Corporate Transaction, in exchange for such cash consideration, if any, as our board of directors, in its sole discretion, may consider appropriate, or (6) make a payment, in such form as may be determined by our board of directors, equal to the excess, if any, of (A) the value of the property the participant would have received upon the exercise of the stock award, over (B) any exercise price payable by such holder in connection with such exercise.

Under the 2011 Plan, a corporate transaction is generally the consummation of (1) a sale or other disposition of all or substantially all of our consolidated assets, (2) a sale or other disposition of at least 90% of our outstanding securities, (3) a merger, consolidation, or similar transaction following which we are not the surviving corporation, or (4) a merger, consolidation, or similar transaction following which we are the surviving corporation but the shares of our Class B common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

Change in Control. The administrator may provide, in an individual award agreement or in any other written agreement between a participant and us that the stock award will be subject to additional acceleration of vesting and exercisability in the event of a change in control. Under the 2011 Plan, a change in control is generally (1) the acquisition by a person or entity of more than 50% of our combined voting power other than by merger, consolidation, or similar transaction, (2) a consummated merger, consolidation, or similar transaction immediately after which our stockholders do not own more than 50% of the combined voting power of the surviving entity or the parent of the surviving entity, and (3) a consummated sale, lease, or exclusive license or other disposition of all or substantially all of our consolidated assets.

Amendment and Termination. Our board of directors may amend, suspend, or terminate our 2011 Plan at any time, subject to stockholder approval where such approval is required by applicable law. Our board of directors also may amend any outstanding stock award. However, no amendment to our 2011 Plan or a stock award granted thereunder may impair a participant's rights under a stock award without his or her written consent. As discussed above, we will terminate our 2011 Plan prior to the completion of this offering and no new stock awards will be granted thereunder following such termination.

2019 Employee Stock Purchase Plan

We expect that our board of directors will adopt and our stockholders will approve prior to the closing of this offering our 2019 Employee Stock Purchase Plan (2019 ESPP).

Share Reserve. The maximum number of shares of our Class A common stock that may be issued under our 2019 ESPP is shares. Additionally, the number of shares of our Class A common stock reserved for issuance under our 2019 ESPP will automatically increase on January 1 of each year, beginning on January 1, 2020 and continuing through and including January 1, 2029, by the lesser of (1) % of the total number of shares of our Class A common stock outstanding on December 31 of the preceding calendar year, (2) shares of our Class A common stock, or (3) such lesser number of shares of Class A common stock as determined by our board of directors. Shares subject to purchase rights granted under our 2019 ESPP that terminate without having been exercised in full will not reduce the number of shares available for issuance under our 2019 ESPP.

Administration. Our board of directors, or a duly authorized committee thereof, will administer our 2019 ESPP. Our board of directors has delegated its authority to administer our 2019 ESPP to our compensation committee under the terms of the compensation committee's charter.

Limitations. Our employees, including executive officers, and the employees of any of our designated affiliates, will be eligible to participate in our 2019 ESPP, provided they may have to satisfy one or more of the following service requirements before participating in our 2019 ESPP, as determined by the administrator: (1) customary employment with us or one of our affiliates for more than 20 hours per week and five or more months per calendar year or (2) continuous employment with us or one of our affiliates for a minimum period of time, not to exceed two years, prior to the first date of an offering. An employee may not be granted rights to purchase stock under our 2019 ESPP (a) if such employee immediately after the grant would own stock possessing 5% or more of the total combined voting power or value of all classes of our stock or (b) to the extent that such rights would accrue at a rate that exceeds $25,000 worth of our stock for each calendar year that the rights remain outstanding.

Our 2019 ESPP is intended to qualify as an employee stock purchase plan under Section 423 of the Code. The administrator may specify offerings with a duration of not more than 27 months, and may specify one or more shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our Class A common stock will be purchased for the employees who are participating in the offering. The administrator, in its discretion, will determine the terms of offerings under our 2019 ESPP.

A participant may not transfer purchase rights under our 2019 ESPP other than by will, the laws of descent and distribution, or as otherwise provided under our 2019 ESPP.

Payroll Deductions. Our 2019 ESPP permits participants to purchase shares of our Class A common stock through payroll deductions up to % of their earnings. Unless otherwise determined by the administrator, the purchase price of the shares will be % of the lower of the fair market value of our Class A common stock on the first day of an offering or on the date of purchase. Participants may end their participation at any time during an offering and will be paid their accrued contributions that have not yet been used to purchase shares. Participation ends automatically upon termination of employment with us.

Corporate Transactions. In the event of certain specified significant corporate transactions, such as a merger or change in control, a successor corporation may assume, continue, or substitute each outstanding purchase right. If the successor corporation does not assume, continue, or substitute for the outstanding purchase rights, the offering in progress will be shortened and a new exercise date will be set. The participants' purchase rights will be exercised on the new exercise date and such purchase rights will terminate immediately thereafter.

Amendment and Termination. Our board of directors has the authority to amend, suspend, or terminate our 2019 ESPP, at any time and for any reason, provided certain types of amendments will require the approval of our stockholders. Our 2019 ESPP will remain in effect until terminated by our board of directors in accordance with the terms of our 2019 ESPP.

401(k) Plan

We maintain a tax-qualified retirement plan that provides eligible U.S. employees with an opportunity to save for retirement on a tax advantaged basis. Eligible employees are able to defer compensation up to certain limits imposed by the Code. We have the ability to make matching and discretionary contributions to the 401(k) plan but have not done so to date. Employee contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participants' directions. Employees are immediately and fully vested in their own contributions. The 401(k) plan is intended to be qualified under Section 401(a) of the Code, with the related trust intended to be tax exempt under Section 501(a) of the Code. As a tax-qualified retirement plan, contributions to the 401(k) plan are deductible by us when made, and contributions and earnings on those amounts are generally not taxable to a participating employee until withdrawn or distributed from the 401(k) plan.

Insurance Premiums

We pay premiums for medical insurance and dental insurance for all full-time employees, including our named executive officers. We also pay premiums for life insurance and long-term disability insurance benefits for all full-time employees, including our named executive officers. These benefits are available to all full-time employees, subject to applicable laws.

Limitations on Liability and Indemnification Matters

Upon the closing of this offering, our certificate of incorporation will contain provisions that limit the liability of our current and former directors for monetary damages to the fullest extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to the corporation or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions; or
- any transaction from which the director derived an improper personal benefit. Such limitation of liability does not apply to liabilities arising under federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission.

Our certificate of incorporation will authorize us to indemnify our directors, officers, employees, and other agents to the fullest extent permitted by Delaware law. Our bylaws will provide that we are required to indemnify our directors and executive officers to the fullest extent permitted by Delaware law and may indemnify our other employees and agents. Our bylaws will also provide that, upon satisfaction of certain conditions, we will advance expenses incurred by a director or executive officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any executive officer, director, employee, or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers, and other employees as determined by the board of directors. With certain exceptions, these agreements provide for indemnification for related expenses including, among other things, attorneys' fees, judgments, fines, and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these certificate of incorporation and bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and executive officers. We also maintain customary directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and executive officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and executive officers as required by these indemnification provisions.

At present, there is no pending litigation or proceeding involving any of our directors, executive officers, or employees for which indemnification has been sought and we are not aware of any threatened litigation that may result in claims for indemnification.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for directors, executive officers, or persons controlling us, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Rule 10b5-1 Sales Plans

Our directors and executive officers may adopt written plans that are intended to comply with Rule 10b5-1 under the Exchange Act, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our Class A and Class B common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or executive officer when entering into the plan, without further direction from them. The director or officer may amend a Rule 10b5-1 plan in some circumstances and may terminate a plan at any time. Our directors and executive officers also may buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material nonpublic information subject to compliance with the terms of our insider trading policy. Prior to the expiration of the period ending on, and including, the 180th day after the date of this prospectus, the sale of any shares under such plan would be subject to the lock-up agreement that the director or executive officer has entered into with the underwriters.

Certain Relationships and Related Party Transactions

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS The following is a summary of transactions since January 1, 2016 to which we have been a participant in which the amount involved exceeded or will exceed $120,000, and in which any of our then directors, executive officers, or holders of more than 5% of any class of our capital stock at the time of such transaction, or any members of their immediate family, had or will have a direct or indirect material interest, other than compensation arrangements which are described in "Executive Compensation" and "Management—Non-Employee Director Compensation."

Series E and Series F Preferred Stock Financing

In April and May 2017, we sold an aggregate of 13,218,064 shares of our Series E preferred stock at a price of $3.7827 per share for aggregate gross proceeds of approximately $50.0 million. Each share of Series E preferred stock will automatically convert into one share of our Class B common stock upon the completion of this offering. In June and July 2018, we sold an aggregate of 7,824,266 shares of our Series F preferred stock at a price of $5.1123

per share for aggregate gross proceeds of approximately $40.0 million. Each share of Series F preferred stock will automatically convert into one share of our Class B common stock upon the completion of this offering. The following table summarizes the participation in the foregoing transactions by our directors, executive officers and holders of more than 5% of any class of our capital stock as of the date of such transactions:

Related Party	Shares of Series E Preferred Stock	Shares of Series F Preferred Stock	Aggregate Purchase Price
Entities affiliated with Amplify Partners, L.P.[(1)]	590,530	244,508	$3,483,796
August Capital VI Special Opportunities, L.P.	793,084		2,999,999
Entities affiliated with ICONIQ Strategic Partners[(2)]	1,718,349		6,499,999
OATVIISPV2, LLC	99,135		374,998

(1) Includes shares of preferred stock issued to Amplify Partners, L.P. and AP Opportunity Fund LLC.

(2) Includes shares of preferred stock issued to ICONIQ Strategic Partners II, L.P. and ICONIQ Strategic Partners II-B, L.P.

Investor Rights, Voting, and Co-Sale Agreements

In connection with our preferred stock financings, we entered into investor rights, voting, and right of first refusal and co-sale agreements containing registration rights, information rights, voting rights, and rights of first refusal, among other things, with certain holders of our preferred stock and certain holders of our common stock, including entities affiliated with Amplify Partners, an entity affiliated with Mr. Dhaliwal and entities affiliated with August Capital, an entity affiliated with Mr. Hornik. These stockholder agreements will terminate upon the closing of this offering, except for the registration rights granted under our investor rights agreement, as more fully described in “Description of Capital Stock—Registration Rights.”

Offer Letter Agreements

We have entered into offer letter agreements with certain of our executive officers. For more information regarding these agreements with our named executive officers, see “Executive Compensation—Employment, Severance, and Change in Control Agreements.”

Stock Option Grants to Directors and Executive Officers

We have granted stock options to certain of our directors and executive officers. For more information regarding the stock options and stock awards granted to our directors and named executive officers, see “Executive Compensation” and “Management—Non-Employee Director Compensation.”

Indemnification Agreements

Our amended and restated certificate of incorporation will contain provisions limiting the liability of directors, and our amended and restated bylaws will provide that we will indemnify each of our directors and officers to the fullest extent permitted under Delaware law. Our amended and restated certificate of incorporation and bylaws will also provide our board of directors with discretion to indemnify our employees and other agents when determined appropriate by the board. In addition, we have entered into an indemnification agreement with each of our directors and executive officers, which requires us to indemnify them. For more information regarding these agreements, see the section titled “Executive Compensation—Limitations on Liability and Indemnification Matters.”

Related-Person Transaction Policy

We have adopted a policy that our executive officers, directors, holders of more than 5% of any class of our voting securities, and any member of the immediate family of and any entity affiliated with any of the foregoing persons, will not be permitted to enter into a related-party transaction with us without the prior consent of our audit committee, or other independent members of our board of directors in the event it is inappropriate for our audit committee to review such transaction due to a conflict of interest. Any request for us to enter into a transaction with an executive officer, director, principal stockholder, or any of their immediate family members or affiliates, in which the amount involved exceeds $120,000, must first be presented to our audit committee for review, consideration, and approval. In approving or rejecting any such proposal, our audit committee will consider the relevant facts and circumstances available and deemed relevant to our audit committee, including, but not limited to, whether the transaction will be on terms no less favorable than terms generally available to an unaffiliated third-party under the same or similar circumstances and the extent of the related-party’s interest in the transaction.

All of the transactions described in this section were entered into prior to the adoption of this policy. Although we have not had a written policy for the review and approval of transactions with related persons, our board of directors has historically reviewed and approved any transaction where a director or officer had a financial interest, including the transactions described above. Prior to approving such a transaction, the material facts as to a director’s or officer’s relationship or interest in the agreement or transaction were disclosed to our board of directors. Our board of directors took this information into account when evaluating the transaction and in determining whether such transaction was fair to us and in the best interest of all our stockholders.

Principal Stockholders

PRINCIPAL STOCKHOLDERS The following table sets forth the beneficial ownership of our common stock as of December 31, 2018, as adjusted to reflect the sale of common stock offered by us in this offering, for:

- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our Class A common stock or Class B common stock;

- each of our named executive officers;
- each of our directors; and
- all of our executive officers and directors as a group.

The percentage ownership information shown in the table prior to this offering is based upon 157,865,413 shares of Class B common stock outstanding as of December 31, 2018, after giving effect to the conversion of all outstanding shares of preferred stock into 107,260,454 shares of our Class B common stock. The percentage ownership information shown in the table after this offering is based upon shares outstanding, assuming the sale of shares of our Class A common stock by us in the offering and no exercise of the underwriters' option to purchase additional shares of Class A common stock.

We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. In addition, the rules include shares of Class B common stock issuable pursuant to the exercise of stock options or warrants that are either immediately exercisable or exercisable on or before March 1, 2019, which is 60 days after December 31, 2018. These shares are deemed to be outstanding and beneficially owned by the person holding those options or warrants for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws.

Except as otherwise noted below, the address for persons listed in the table is c/o Fastly, Inc., 475 Brannan Street, Suite 300, San Francisco, California, 94107.

	Beneficial Ownership Prior to the Offering					Beneficial Ownership After the Offering				
	Class A Common Stock		Class B Common Stock			Class A Common Stock		Class B Common Stock		
	Shares	%	Shares	%	% of TotalVotingPowerBeforetheOffering	Shares	%	Shares	%	% of Total Voting Power After theOfferin
Name and Address of Beneficial Owner										
5% or greater stockholders:										
Entities Affiliated with August Capital[1]	—	*	32,150,629	20.4	20.4	—	*	32,150,629		
Entities Affiliated with Iconiq Strategic Partners[2]	—	*	20,323,000	12.9	12.9	—	*	20,323,000		
Entities Affiliated with OATV[3]	—	*	17,056,987	10.8	10.8	—	*	17,056,987		
Entities Affiliated with Amplify Partners[4]	—	*	16,771,740	10.6	10.6	—	*	16,771,740		
Named executive officers and directors:										
Artur Bergman[5]	—	*	24,942,428	15.6	15.6	—	*	24,942,428		
Joshua Bixby[6]	—	*	1,817,130	1.1	1.1	—	*	1,817,130		
Paul Luongo[7]	—	*	1,084,260	*	*	—	*	1,084,260		
David Hornik[1]	—	*	32,150,629	20.4	20.4	—	*	32,150,629		
Sunil Dhaliwal[4]	—	*	16,771,740	10.6	10.6	—	*	16,771,740		
Christopher Paisley[8]	—	*	459,676	*	*	—	*	459,676		

Gil Penchina[9]	—	*	8,444,105	5.3	5.3	—	*	8,444,105
Kelly Wright[10]	—	*	459,676	*	*	—	*	459,676
All current executive officers and directors as a group (10 persons)[11]	—	*	88,751,338	56.0	56.0	—	*	88,751,338

* Represents beneficial ownership of less than 1%.

† Represents the voting power with respect to all shares of our Class A common stock and Class B common stock, voting as a single class. Each share of Class A common stock will be entitled to one vote per share and each share of Class B common stock will be entitled to ten votes per share. The Class A common stock and Class B common stock will vote together on all matters (including the election of directors) submitted to a vote of stockholders, except under limited circumstances described in the section titled "Description of Capital Stock—Class A and Class B Common Stock—Voting Rights."

(1) Consists of (i)17,496,790 shares of Class B common stock held by August Capital VI and (ii) 14,653,839 shares of Class B common stock held by August Capital VI Special Opportunities Fund, L.P. August Capital Management VI, L.L.C. is the general partner of August Capital VI, L.P. and August Capital VI Special Opportunities, L.P. Howard Hartenbaum, David M. Hornik, and W. Eric Carlborg are members of August Capital Management VI, L.L.C. These individuals may be deemed to have shared voting and investment power over the shares held by August Capital VI, L.P. and August Capital VI Special Opportunities, L.P. Mr. Hornik is a member of our board of directors. The address for the August Capital entities is 1475 Folsom Street, #200, San Francisco, CA 94103.

(2) Consists of (i) 9,312,340 shares of Class B common stock held by ICONIQ Strategic Partners II, L.P., (ii) 7,289,730 shares of Class B common stock held by ICONIQ Strategic Partners II-B, L.P., and (iii) 3,720,930 shares of Class B common stock held by ICONIQ Strategic Partners II Co-Invest, L.P., FT Series. ICONIQ Strategic Partners II GP, L.P. is the general partner of each of ICONIQ, Strategic Partners II-B, L.P. and ICONIQ Strategic Partners II Co-Invest, L.P., FT Series. ICONIQ Strategic Partners II TT GP, Ltd. is the general partner of ICONIQ Strategic Partners II GP, L.P. Divesh Makan and William Griffith are the sole equity holders and directors of ICONIQ Strategic Partners II TT GP, Ltd. and may be deemed to share voting and dispositive power over the shares noted above. The address for the ICONIQ entities is c/o ICONIQ Strategic Partners, 394 Pacific Avenue, 2nd Floor, San Francisco, CA 94111.

(3) Consists of (i) 15,812,674 shares of Class B common stock held by OATV II, L.P., (ii) 1,067,504 shares of Class B common stock held by OATVIISPV1, LLC and, (iii) 176,809 shares of Class B common stock held by OATVIISPV2, LLC. O'Reilly AlphaTech Ventures II, LLC is the General Partner of each of OATV II, L.P., OATVIISPV1, LLC and OATVIISPV2, LLC. Bryce Roberts and Mark Jacobsen are the Managing Directors of O'Reilly AlphaTech Ventures II, LLC. The address for the OATV entities is 775 E. Blithedale Avenue #568, Mill Valley, CA 94941.

(4) Consists of (i) 13,196,818 shares of Class B common stock held by Amplify Partners, L.P. and (ii) 3,574,922 shares of Class B common stock held by AP Opportunity Fund LLC. Amplify GP Partners, LLC is the sole general partner of Amplify Partners, L.P. and AP Opportunity Fund LLC. Sunil Dhaliwal, a member of our Board of Directors, is the managing member of Amplify GP Partners, LLC. The address for the Amplify entities is 800 Menlo Avenue, Suite 220, Menlo Park, CA 94025.

(5) Consists of (i) 22,418,181 shares of Class B common stock held by Mr. Bergman, (ii) 686,578 shares of Class B common stock held by The Bergman Remainder Trust u/a/d 6/30/15, and (iii) 1,837,669 shares of Class B common stock issuable upon the exercise of stock options granted to Mr. Bergman that are exercisable within 60 days of December 31, 2018.

(6) Consists of (i) 292,130 shares of Class B common stock and (ii) 1,525,000 shares of Class B common stock issuable upon the exercise of stock options granted to Mr. Bixby that are exercisable within 60 days of December 31, 2018, of which 793,752 of the shares would be unvested as of such date.

(7) Consists of (i) 584,260 shares of Class B common stock and (ii) 500,000 shares of Class B common stock issuable upon the exercise of stock options granted to Mr. Luongo that are exercisable within 60 days of December 31, 2018, 197,918 of which are unvested as of such date.

(8) Consists of (i) 250,000 shares of Class B common stock, all of which are subject to a right of repurchase, and (ii) 209,676 shares of Class B common stock issuable upon the exercise of stock options granted to Mr. Paisley that are exercisable within 60 days of December 31, 2018, all of which are unvested as of such date.

(9) Consists of (i) 7,944,105 shares of Class B common stock held directly by Mr. Penchina and (ii) 500,000 shares of Class B common stock held in trusts for the benefit of Mr. Penchina's children over which Mr. Penchina exercises voting and dispositive power.

(10) Consists of (i) 225,000 shares of Class B common stock, all of which are subject to a right of repurchase, and (ii) 234,676 shares of Class B common stock issuable upon the exercise of stock options granted to Ms. Wright that are exercisable within 60 days of December 31, 2018, all of which are unvested as of such date.

(11) Consists of (i) 81,822,623 shares of Class B common stock held by all current executive officers and directors as a group and (ii) 6,928,715 shares that all current executive officers and directors as a group have the right to acquire from us within 60 days of December 31, 2018 pursuant to the exercise of options, of which 2,231,028 of the shares would be unvested as of such date.

Description of Capital Stock

DESCRIPTION OF CAPITAL STOCK The following description of our capital stock, certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws, as each will be in effect upon the completion of this offering, and certain provisions of Delaware law are summaries. You should also refer to the amended and restated certificate of incorporation and the amended and restated bylaws, which are filed as exhibits

to the registration statement of which this prospectus is part. We refer in this section to our amended and restated certificate of incorporation and amended and restated bylaws that we intend to adopt in connection with this offering as our certificate of incorporation and bylaws, respectively.

General

Upon the completion of this offering, our amended and restated certificate of incorporation will provide for two classes of common stock: Class A common stock and Class B common stock. In addition, our amended and restated certificate of incorporation will authorize shares of undesignated preferred stock, the rights, preferences, and privileges of which may be designated from time to time by our board of directors.

Upon the closing of this offering, our authorized capital stock will consist of shares, all with a par value of $0.00002 per share, of which:

- shares are designated as Class A common stock;
- shares are designated as Class B common stock; and
- 10,000,000 shares are designated as preferred stock.

As of December 31, 2018, we had 50,604,959 shares of Class B common stock and 107,260,454 shares of preferred stock outstanding. After giving effect to the reclassification of all outstanding shares of our common stock to Class B common stock and the conversion of all outstanding shares of preferred stock into shares of Class B common stock immediately upon the closing of this offering there would have been 157,865,413 shares of Class B common stock outstanding on December 31, 2018, held by 245 stockholders of record. As of December 31, 2018 we had outstanding warrants to purchase 1,036,835 shares of preferred stock with a weighted-average exercise price of $3.28 per share. As of December 31, 2018, we also had outstanding options to acquire 24,357,214 shares of Class B common stock.

Class A and Class B Common Stock

Except with respect to voting, conversion, and transfer rights as described below and as otherwise expressly provided in our amended and restated certificate of incorporation or required by applicable law, shares of Class A common stock and Class B common stock will have the same rights and privileges and rank equally, share ratably, and be identical in all respects as to all matters.

Dividend and Distribution Rights

Subject to the prior rights of holders of all classes and series of stock at the time outstanding having prior rights as to dividends, the holders of Class A common stock and Class B common stock will be entitled to receive, when, as and if declared by the board of directors, out of any of our assets legally available therefor, such dividends as may be declared from time to time by the board of directors. Any dividends paid to the holders of Class A common stock and Class B common stock shall be paid pro rata, on an equal priority, pari passu basis, unless different treatment of the shares of each such class is approved by the affirmative vote of the holders of the majority of the outstanding shares of the applicable class of common stock treated adversely, voting separately as a class. We will not declare or pay any dividend or make any other distribution to the holders of Class A common stock or Class B common stock payable in our securities unless the same dividend or distribution with the same record date and payment date shall be declared and paid on all shares of common stock; provided, however, that (i) dividends or other distributions payable in shares of Class A common stock or rights to acquire shares of Class A common stock may be declared and paid to the holders of Class A common stock without the same dividend or distribution being declared and paid to the holders of the Class B common stock if, and only if, a dividend payable in shares of Class B common stock, or rights to acquire shares of Class B common stock, as applicable, are declared and paid to the holders of Class B common stock at the same rate and with the same record date and payment date; and (ii) dividends or other distributions payable in shares of Class B common stock or rights to acquire shares Class B common stock may be declared and paid to the holders of Class B common stock without the same dividend or distribution being declared and paid to the holders of the Class A common stock if, and only if, a dividend payable in shares of Class A common stock, or rights to acquire shares of Class A common stock, as applicable, are declared and paid to the holders of Class A common stock at the same rate and with the same record date and payment date.

Voting Rights

Holders of our Class A common stock and Class B common stock have identical rights, provided that, except as otherwise expressly provided in our amended and restated certificate of incorporation or required by applicable law, on any matter that is submitted to a vote of our stockholders, holders of our Class A common stock are entitled to one vote per share of Class A common stock and holders of our Class B common stock are entitled to 10 votes per share of Class B common stock. Holders of shares of Class A common stock and Class B common stock will vote together as a single class on all matters (including the election of directors) submitted to a vote of stockholders, except that there will be a separate vote of our Class A common stock in order for us to, directly or indirectly, effect an asset transfer, acquisition, or liquidation event (each as defined in our amended and restated certificate of incorporation) pursuant to which the Class A common stock would not receive equivalent consideration (as defined in our amended and restated certificate of incorporation) to the Class B common stock, and there will be a separate vote of our Class B common stock in order for us to, directly or indirectly, take action in the following circumstances:

- if we propose to amend, alter, or repeal any provision of our amended and restated certificate of incorporation or our amended and restated bylaws that modifies the voting, conversion, or other powers, preferences, or other special rights or privileges or restrictions of the Class B common stock; or
- if we effect an asset transfer, acquisition, or liquidation event (each as defined in our amended and restated certificate of incorporation) pursuant to which the Class B common stock would not receive equivalent consideration (as defined in our amended and restated certificate of incorporation) to the Class A common stock.

In addition, Delaware law would permit holders of Class A common stock to vote separately, as a single class, if an amendment of our amended and restated certificate of incorporation would adversely affect them by altering the powers, preferences, or special rights of the Class A common stock, but not the Class B common stock. As a result, in these limited instances, the holders of a majority of the Class A common stock could defeat any amendment to our amended and restated certificate of incorporation. For example, if a proposed amendment of our certificate of incorporation provided for the Class A common stock to rank junior to the Class B common stock with respect to (i) any dividend or distribution, (ii) the distribution of proceeds were we to be acquired, or (iii) any other right, Delaware law would require the vote of the Class A common stock. In this instance, the holders of a majority of Class A common stock could defeat that amendment to our amended and restated certificate of incorporation.

Upon the closing of this offering, under our amended and restated certificate of incorporation, we may not increase or decrease the authorized number of shares of Class A common stock or Class B common stock without the affirmative vote of the holders of a majority of the combined voting power of the outstanding shares of Class A common stock and Class B common stock, voting together as a single class. In addition, we may not issue any shares of Class B common stock, unless that issuance is approved by the affirmative vote of the holders of a majority of the outstanding shares of Class B common stock.

We have not provided for cumulative voting for the election of directors in our amended and restated certificate of incorporation.

No Preemptive or Similar Rights

Our common stock is not entitled to preemptive rights and is not subject to conversion, redemption, or sinking fund provisions. The rights, preferences, and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of any series of our preferred stock that we may designate and issue in the future.

Liquidation Rights

In the event of our liquidation, dissolution, or winding-up, upon the completion of the distributions required with respect to any series of preferred stock that may then be outstanding, or remaining assets legally available for distribution to stockholders shall be distributed on an equal priority, pro rata basis to the holders of Class A common stock and Class B common stock.

Subdivisions and Combinations

If we subdivide or combine in any manner outstanding shares of Class A common stock or Class B common stock, then the outstanding shares of all common stock will be subdivided or combined in the same proportion and manner.

Conversion

Each share of Class B common stock is convertible at any time immediately following the closing of this offering at the option of the holder into one share of Class A common stock. In addition, each share of Class B common stock will automatically convert into one share of Class A common stock upon any transfer, whether or not for value and whether voluntary or involuntary or by operation of law, except for certain transfers described in our amended and restated certificate of incorporation, including, without limitation, certain transfers for tax and estate planning purposes. All the outstanding shares of Class B common stock will convert automatically into Class A common stock on the earliest to occur of the following: (i) the election of the holders of a majority of the then outstanding shares of Class B common stock, (ii) nine months following the date when the number of outstanding shares of Class B common stock represents less than 10% of all outstanding shares of Class A and Class B common stock, and (iii) the date that is ten years from the date of this prospectus.

Preferred Stock

All currently outstanding shares of our preferred stock will be converted to Class B common stock immediately upon the closing of this offering.

Following the completion of this offering, our board of directors will have the authority, without further action by our stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences, and privileges of the shares of each wholly unissued series and any qualifications, limitations, or restrictions thereon, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring, or preventing a change in control and may adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock on the rights of holders of our common stock until our board of directors determines the specific rights attached to that preferred stock.

We have no present plans to issue any shares of preferred stock.

Options

As of December 31, 2018, options to purchase an aggregate of 24,357,214 shares of our Class B common stock were outstanding under our 2011 Plan at a weighted-average exercise price of $1.48 per share. For additional information regarding the terms of our 2011 Plan, see “Executive Compensation—Employee Benefit Plans—2011 Equity Incentive Plan.”

Warrants

As of December 31, 2018, we had warrants to purchase an aggregate of 227,250 shares of our Series B preferred stock outstanding with an exercise price of $0.51438 per share. Upon the closing of this offering, these warrants will become exercisable for 227,520 shares of our Class B common stock with an exercise price of $0.51438 per share.

As of December 31, 2018, we had warrants to purchase an aggregate of 105,688 shares of our Series C preferred stock outstanding with an exercise price of $0.575 per share. Upon the closing of this offering, these warrants will become exercisable for 105,688 shares of our Class B common stock with an exercise price of $0.575 per share.

As of December 31, 2018, we had warrants to purchase an aggregate of 95,116 shares of our Series D preferred stock outstanding with an exercise price of $1.18 per share. Upon the closing of this offering, these warrants will become exercisable for 95,116 shares of our Class B common stock with an exercise price of $1.18 per share.

As of December 31, 2018, we had warrants to purchase an aggregate of 608,781 shares of our Series F preferred stock outstanding with an exercise price of $5.1123 per share. Upon the closing of this offering, these warrants will become exercisable for 608,781 shares of our Class B common stock with an exercise price of $5.1123 per share.

Registration Rights

After the completion of this offering, certain holders of shares of our Class B common stock, including those shares of our Class B common stock that will be issued upon conversion of our preferred stock in connection with this offering, will be entitled to certain rights with respect to registration of such shares under the Securities Act pursuant to the terms of an investor rights agreement. These shares are collectively referred to herein as registrable securities.

The investor rights agreement provides the holders of registrable securities with demand, piggyback and S-3 registration rights as described more fully below. As of December 31, 2018, after giving effect to the conversion of all outstanding shares of preferred stock into shares of our Class B common stock in connection with the completion of this offering, there would have been an aggregate of 107,260,454 registrable securities that were entitled to these demand registration rights, an aggregate of 107,260,454 registrable securities that were entitled to these piggyback registration rights, and an aggregate of 107,260,454 registrable securities that were entitled to these S-3 registration rights. The number of registrable securities that were entitled to the piggyback registration rights and the S-3 registration rights as of December 31, 2018 does not include shares of Class B common stock issuable upon exercise of warrants, which were also entitled to such piggyback registration rights and the S-3 registration rights.

Demand Registration Rights

At any time beginning six months after the effective date of the registration statement of which this prospectus forms a part, the holders of at least 60% of the registrable securities then outstanding have the right to make up to two demands that we file a registration statement under the Securities Act covering at least 60% of the registrable securities then outstanding, subject to specified exceptions.

Piggyback Registration Rights

If we register any securities for public sale, the holders of our registrable securities then outstanding will each be entitled to notice of the registration and will have the right to include their shares in the registration statement.

The underwriters of any underwritten offering will have the right to limit the number of shares having registration rights to be included in the registration statement, but not below 30% of the total number of securities included in such registration.

Registration on Form S-3

If we are eligible to file a registration statement on Form S-3, the holders of our registrable securities have the right to demand that we file registration statements on Form S-3; provided, that the aggregate amount of securities to be sold under the registration statement is at least $1.0 million. We are not obligated to effect a demand for registration on Form S-3 by holders of our registrable securities more than twice during any 12-month period. The right to have such shares registered on Form S-3 is further subject to other specified conditions and limitations.

Expenses of Registration

We will pay all expenses relating to any demand, piggyback, or Form S-3 registration, other than underwriting discounts and commissions, subject to specified conditions and limitations.

Termination of Registration Rights

The registration rights will terminate three years following the completion of this offering and, with respect to any particular stockholder, when, after 12 months following the completion of this offering, such stockholder is able to sell all of its shares during a 90-day period pursuant to Rule 144 under the Securities Act or another similar exemption.

Anti-Takeover Provisions

Anti-Takeover Statute

We are subject to Section 203 of the Delaware General Corporation Law, which generally prohibits a publicly held Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;

- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, those shares owned (1) by persons who are directors and also officers and (2) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least $66^{2}/_{3}\%$ of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines a "business combination" to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;

- any sale, transfer, pledge, or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;

- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;

- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or

- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges, or other financial benefits by or through the corporation.

In general, Section 203 defines an "interested stockholder" as an entity or person who, together with the person's affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

Anti-Takeover Effects of Certain Provisions of our Certificate of Incorporation and Bylaws to be in Effect Upon the Completion of this Offering Our certificate of incorporation will provide for our board of directors to be divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, stockholders holding a majority of the shares of our common stock outstanding will be able to elect all of our directors. Our certificate of incorporation and bylaws will also provide that directors may be removed by the stockholders only for cause upon the vote of 66 $^{2/3}$% or more of our outstanding common stock. Furthermore, the authorized number of directors may be changed only by resolution of our board of directors, and vacancies and newly created directorships on our board of directors may, except as otherwise required by law or determined by our board, only be filled by a majority vote of the directors then serving on the board, even though less than a quorum.

Our certificate of incorporation and bylaws will also provide that all stockholder actions must be effected at a duly called meeting of stockholders and will eliminate the right of stockholders to act by written consent without a meeting. Our bylaws will also provide that only our chairman of the board, chief executive officer or our board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors may call a special meeting of stockholders.

Our bylaws will also provide that stockholders seeking to present proposals before our annual meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide timely advance notice in writing, and, subject to applicable law, will specify requirements as to the form and content of a stockholder's notice.

Our certificate of incorporation and bylaws will provide that the stockholders cannot amend many of the provisions described above except by a vote of $66^{2}/_{3}\%$ or more of our outstanding common stock.

The combination of these provisions will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to reduce our vulnerability to hostile takeovers and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts. We believe that the benefits of these provisions, including increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us, outweigh the disadvantages of discouraging takeover proposals, because negotiation of takeover proposals could result in an improvement of their terms.

Choice of Forum

Our certificate of incorporation to be in effect upon the completion of this offering will provide that the Court of Chancery of the State of Delaware will be the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty owed by any of our directors, officers, or employees to us or our stockholders; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our certificate of incorporation or our bylaws; or any action asserting

a claim against us that is governed by the internal affairs doctrine. The provisions would not apply to suits brought to enforce a duty or liability created by the Exchange Act. Our amended and restated certificate of incorporation to be in effect upon the completion of this offering will further provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, subject to and contingent upon a final adjudication in the State of Delaware of the enforceability of such exclusive forum provision. See "Risk Factors—Risks Related to This Offering and Ownership of Our Class A Common Stock—Our amended and restated certificate of incorporation that will be in effect at the closing of this offering will provide that the Court of Chancery of the State of Delaware and, to the extent enforceable, the federal district courts of the United States of America will be the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, or employees."

Transfer Agent and Registrar

The transfer agent and registrar for our Class A and Class B common stock is American Stock Transfer & Trust Company, LLC. The transfer agent's address is 6201 15th Avenue, Brooklyn, New York 11219 and the telephone number is (800) 937-5449.

Listing

We have applied to list our Class A common stock on the NYSE under the trading symbol "FSLY."

Shares Eligible For Future Sale

SHARES ELIGIBLE FOR FUTURE SALE Prior to this offering, no public market for our Class A common stock existed, and a liquid trading market for our Class A common stock may not develop or be sustained after this offering. Future sales of substantial amounts of our Class A common stock in the public market could adversely affect prevailing market prices of our Class A common stock from time to time and could impair our ability to raise equity capital in the future. Furthermore, because only a limited number of shares of our Class A common stock will be available for sale shortly after this offering due to certain contractual and legal restrictions on resale described below, sales of substantial amounts of our Class A common stock in the public market after such restrictions lapse, or the anticipation of such sales, could adversely affect the prevailing market price of our Class A common stock and our ability to raise equity capital in the future.

Based upon the number of shares outstanding as of December 31, 2018, upon the closing of this offering, we will have outstanding an aggregate of shares of Class A common stock and 157,865,413 shares of Class B common stock, assuming no exercise of the underwriters' option to purchase additional shares of Class A common stock and no exercise of outstanding options or warrants, after giving effect to the conversion of all outstanding shares of our preferred stock into 107,260,454 shares of Class B common stock immediately upon the closing of this offering. All of the shares sold in this offering will be freely tradable without restrictions or further registration under the Securities Act, unless held by our affiliates, as that term is defined under Rule 144 under the Securities Act, or subject to lock-up agreements. The remaining shares of Class B common stock outstanding upon the closing of this offering are restricted securities as defined in Rule 144. Restricted securities may be sold in the U.S. public market only if registered or if they qualify for an exemption from registration, including by reason of Rule 144 or Rule 701 under the Securities Act, which rules are summarized below. Subject to the lock-up arrangements described below and the provisions of Rule 144, these restricted securities will be available for sale in the public market after the date of this prospectus.

As of December 31, 2018, of the 24,357,214 shares of Class B common stock issuable upon exercise of options outstanding, approximately shares will be vested and eligible for sale 181 days after the date of this prospectus.

We may issue shares of Class A common stock from time to time as consideration for future acquisitions, investments, or other corporate purposes. In the event that any such acquisition, investment, or other transaction is significant, the number of shares of common stock that we may issue may in turn be significant. We may also grant registration rights covering those shares of Class A common stock issued in connection with any such acquisition and investment.

In addition, the shares of Class A common stock reserved for future issuance under our 2019 Plan will become eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules, the lock-up agreements, a registration statement under the Securities Act, or an exemption from registration, including Rule 144 and Rule 701.

Rule 144

In general, persons who have beneficially owned restricted shares of our common stock for at least six months, and any affiliate of us who owns either restricted or unrestricted shares of our common stock, are entitled to sell their securities without registration with the SEC under an exemption from registration provided by Rule 144 under the Securities Act.

Non-Affiliates

Any person who is not deemed to have been one of our affiliates at the time of, or at any time during the three months preceding, a sale may sell an unlimited number of restricted securities under Rule 144 if:

- the restricted securities have been held for at least six months, including the holding period of any prior owner other than one of our affiliates;
- we have been subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale; and
- we are current in our Exchange Act reporting at the time of sale.

Any person who is not deemed to have been an affiliate of ours at the time of, or at any time during the three months preceding, a sale and has held the restricted securities for at least one year, including the holding period of any prior owner other than one of our affiliates, will be entitled to sell an unlimited number of restricted securities without regard to the length of time we have been subject to Exchange Act periodic reporting or whether we are current in our Exchange Act reporting.

Affiliates

Persons seeking to sell restricted securities who are our affiliates at the time of, or any time during the three months preceding, a sale, would be subject to the restrictions described above. Sales of restricted or unrestricted shares of our common stock by affiliates are also subject to additional restrictions, by which such person would be required to comply with the manner of sale and notice provisions of Rule 144 and would be entitled to sell within any three-month period only that number of securities that does not exceed the greater of either of the following:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately shares immediately after the completion of this offering based on the number of shares outstanding as of December 31, 2018; or
- the average weekly trading volume of our common stock on the during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Rule 701

In general, under Rule 701 a person who purchased shares of our common stock pursuant to a written compensatory plan or contract and who is not deemed to have been one of our affiliates during the immediately preceding 90 days may sell these shares in reliance upon Rule 144, but without being required to comply with the notice, manner of sale or public information requirements or volume limitation provisions of Rule 144. Rule 701 also permits affiliates to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. All holders of Rule 701 shares, however, are required to wait until 90 days after the date of this prospectus before selling such shares pursuant to Rule 701. As of December 31, 2018, 23,742,923 shares of our outstanding Class B common stock had been issued in reliance on Rule 701 as a result of exercises, stock options and issuance of restricted stock. However, substantially all Rule 701 shares are subject to lock-up agreements as described below and in “Underwriting” and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

Form S-8 Registration Statements

As soon as practicable after the completion of this offering, we intend to file with the SEC one or more registration statements on Form S-8 under the Securities Act to register the shares of our common stock that are issuable pursuant to our equity incentive plans, including pursuant to outstanding options. See “Executive Compensation—Employee Benefit Plans” for a description of our equity incentive plans. These registration statements will become effective immediately upon filing. Shares covered by these registration statements will then be eligible for sale in the public markets, subject to vesting restrictions, any applicable lock-up agreements described below and Rule 144 limitations applicable to affiliates.

Lock-Up Agreements

In connection with this offering, we, our directors and officers, and certain other holders of our equity securities outstanding immediately prior to this offering have agreed, subject to certain exceptions, not to offer, sell, or transfer any common stock or securities convertible into or exchangeable for our common stock for 180 days after the date of this prospectus without the prior written consent of Merrill Lynch, Pierce, Fenner & Smith Incorporated, Citigroup Global Markets Inc., and Credit Suisse Securities (USA) LLC on behalf of the underwriters.

The agreements do not contain any pre-established conditions to the waiver by Merrill Lynch, Pierce, Fenner & Smith Incorporated, Citigroup Global Markets Inc., and Credit Suisse Securities (USA) LLC on behalf of the underwriters of any terms of the lock-up agreements. Any determination to release shares subject to the lock-up agreements would be based on a number of factors at the time of determination, including but not necessarily limited to the market price of the common stock, the liquidity of the trading market for the common stock, general market conditions, the number of shares proposed to be sold, contractual obligations to release certain shares subject to the lock-up agreements in the event any such shares are released, subject to certain specific limitations and thresholds, and the timing, purpose, and terms of the proposed sale.

In addition to the restrictions contained in the lock-up agreements described above, we have entered into agreements with certain of our security holders, including our investor rights agreement and agreements governing our equity awards, that contain market stand-off provisions imposing restrictions on the ability of such security holders to offer, sell, or transfer our equity securities for a period of 180 days following the date of this prospectus.

Registration Rights

Upon the completion of this offering, the holders of 107,260,454 shares of our Class B common stock, or their transferees, will be entitled to specified rights with respect to the registration of the offer and sale of Class A common stock issuable upon conversion of such shares of Class B common stock under the Securities Act. Such number does not include shares of Class B common stock issuable upon exercise of warrants, which were also entitled to specified rights with respect to the registration of the offer and sale of their shares under the Securities Act. Registration of the offer and sale of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. See “Description of Capital Stock—Registration Rights” for additional information.

Material U.S. Federal Income Tax Considerations for Non-U.S. Holders

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS The following is a general discussion of the material U.S. federal income tax consequences of the acquisition, ownership, and disposition of our Class A common stock by “Non-U.S. Holders” (as defined below). This discussion is for general information purposes only and does not consider all aspects of U.S. federal income taxation that may be relevant to particular Non-

U.S. Holders in light of their individual circumstances or to certain types of Non-U.S. Holders subject to special tax rules, including partnerships or other pass-through entities for U.S. federal income tax purposes, banks, financial institutions, or other financial services entities, broker-dealers, insurance companies, tax-exempt organizations, pension plans, real estate investment trusts, controlled foreign corporations, passive foreign investment companies, corporations that accumulate earnings to avoid U.S. federal income tax, persons who use or are required to use mark-to-market accounting, persons that hold more than 5% of our outstanding Class A common stock, directly or indirectly, during the applicable testing period, persons that are "qualified foreign pension funds" as defined in Section 897(1)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds, persons that hold our shares as part of a "straddle," a "hedge," a "conversion transaction," "synthetic security," integrated investment, or other risk reduction strategy, certain former citizens or permanent residents of the United States, persons who hold or receive shares of our Class A common stock pursuant to the exercise of an employee stock option or otherwise as compensation, or investors in pass-through entities (or entities that are treated as disregarded entities for U.S. federal income tax purposes). In addition, this discussion does not address the potential application of the gift or estate tax, alternative minimum tax, or any tax considerations that may apply to Non-U.S. Holders under state, local or non-U.S. tax laws, and any other U.S. federal tax laws.

This discussion is based on the Code and applicable Treasury regulations promulgated thereunder, or the Treasury Regulations, rulings, administrative pronouncements, and judicial decisions that are issued and available as of the date of this registration statement, all of which are subject to change or differing interpretations at any time with possible retroactive effect. We have not sought, and will not seek, any ruling from the Internal Revenue Service (IRS) with respect to the tax consequences discussed herein, and there can be no assurance that the IRS will not take a position contrary to the tax consequences discussed below or that any position taken by the IRS would not be sustained. This discussion is limited to a Non-U.S. Holder who will hold our Class A common stock as a capital asset within the meaning of the Code (generally, property held for investment). For purposes of this discussion, the term "Non-U.S. Holder" means a beneficial owner of our Class A common stock that is not a partnership (or entity or arrangement treated as a partnership for U.S. federal income tax purposes) and is not, for U.S. federal income tax purposes, any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation) created or organized in the United States or under the laws of the United States or of any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust if (1) a court within the United States can exercise primary supervision over the trust's administration and one or more U.S. persons have the authority to control all of the trust's substantial decisions or (2) the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

If a partnership (or entity or arrangement treated as a partnership for U.S. federal income tax purposes) is a beneficial owner of our Class A common stock, the tax treatment of such partnership and a partner in such partnership generally will depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding our shares, you should consult your tax advisor regarding the tax consequences of the purchase, ownership, and disposition of our Class A common stock.

THIS SUMMARY IS NOT INTENDED TO BE TAX ADVICE. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR TAX ADVISORS REGARDING THE PARTICULAR U.S. FEDERAL INCOME TAX CONSEQUENCES TO THEM OF ACQUIRING, OWNING, AND DISPOSING OF OUR CLASS A COMMON STOCK, AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL, OR FOREIGN TAX LAWS AND ANY OTHER U.S. FEDERAL TAX LAWS.

Distributions on Our Class A Common Stock

In general, subject to the discussion below under the headings "Information Reporting and Backup Withholding" and "Foreign Accounts," distributions, if any, paid on our Class A common stock to a Non-U.S. Holder (to the extent paid out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles) will constitute dividends and be subject to U.S. withholding tax at a rate equal to 30% of the gross amount of the dividend, or a lower rate prescribed by an applicable income tax treaty, unless the dividends are effectively connected with a trade or business carried on by the Non-U.S. Holder within the United States. Any distribution not constituting a dividend (because such distribution exceeds our current and accumulated earnings and profits) will be treated first as reducing the Non-U.S. Holder's basis in its shares of Class A common stock, but not below zero, and to the extent it exceeds the Non-U.S. Holder's basis, as capital gain from the sale or exchange of such stock (see "Gain on Sale, Exchange, or Other Taxable Disposition of Class A Common Stock" below).

A Non-U.S. Holder who claims the benefit of an applicable income tax treaty generally will be required to satisfy certain certification and other requirements prior to the distribution date. Such Non-U.S. Holders must generally provide us and/or our paying agent, as applicable, with a properly executed IRS Form W-8BEN or IRS Form W-8BEN-E (or other appropriate form) claiming an exemption from or reduction in withholding under an applicable income tax treaty. Such certificate must be provided before the payment of dividends and must be updated periodically. If tax is withheld in an amount in excess of the amount applicable under an income tax treaty, a refund of the excess amount may generally be obtained by a Non-U.S. Holder by timely filing an appropriate claim for refund with the IRS. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under an applicable income tax treaty.

Dividends that are effectively connected with a Non-U.S. Holder's conduct of a U.S. trade or business (and, if required by an applicable income tax treaty, attributable to a U.S. permanent establishment or fixed base of the Non-U.S. Holder) generally will not be subject to U.S. federal withholding tax if the Non-U.S. Holder files the required forms, including IRS Form W-8ECI with us and/or our paying agent, as applicable, but instead generally will be subject to U.S. federal income tax on a net income basis at regular graduated rates in the same manner as if the Non-U.S. Holder were a resident of the United States. A corporate Non-U.S. Holder that receives effectively connected dividends may be subject to an additional branch profits tax at a rate of 30%, or a lower rate prescribed by an applicable income tax treaty.

Gain on Sale, Exchange, or Other Disposition of Our Class A Common Stock

In general, subject to the discussion below under the headings "Information Reporting and Backup Withholding" and "Foreign Accounts," a non-U.S. holder will not be subject to U.S. federal income tax or withholding tax on any gain realized upon such holder's sale, exchange, or other disposition of shares of our Class A common stock unless:

(1) the gain is effectively connected with a trade or business carried on by the Non-U.S. Holder within the United States (and, if required by an applicable income tax treaty, attributable to a U.S. permanent establishment or fixed base of the Non-U.S. Holder); (2) the Non-U.S. Holder is an individual who is present in the United States for 183 days or more in the taxable year of disposition and certain other conditions are met; or (3) we are or have been a "United States real property holding corporation" for U.S. federal income tax purposes at any time during the shorter of the five-year period ending on the date of disposition or the period that the Non-U.S. Holder held the Class A common stock, and, in the case where shares of our Class A common stock are regularly traded on an established securities market, the Non-U.S. Holder owns, or is treated as owning, more than 5% of our Class A common stock at any time during the foregoing period.

Net gain realized by a Non-U.S. Holder described in clause (1) above generally will be subject to U.S. federal income tax in the same manner as if the Non-U.S. Holder were a resident of the United States. Any gains of a corporate Non-U.S. Holder described in clause (1) above may also be subject to an additional "branch profits tax" at a 30% rate, or such lower rate as may be specified by an applicable income tax treaty.

Gain realized by an individual Non-U.S. Holder described in clause (2) above will be subject to a flat 30% tax, which gain may be offset by U.S. source capital losses, even though the individual is not considered a resident of the United States.

For purposes of clause (3) above, a corporation is a United States real property holding corporation (USRPHC) if the fair market value of its United States real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus any assets used or held for use in a trade or business. Although there can be no assurance, we believe that we are not, and we do not anticipate that we will become, a USRPHC. Even if we became a USRPHC, a Non-U.S. Holder would not be subject to U.S. federal income tax on a sale, exchange, or other taxable disposition of our Class A common stock by reason of our status as an USRPHC so long as our Class A common stock is regularly traded on an established securities market (within the meaning of the applicable regulations) and such Non-U.S. Holder does not own and is not deemed to own (directly, indirectly, or constructively) more than 5% of our outstanding Class A common stock at any time during the shorter of the five year period ending on the date of disposition and such holder's holding period. However, no assurance can be provided that our Class A common stock will be regularly traded on an established securities market for purposes of the rules described above. If we are a USRPHC and our Class A common stock is not regularly traded on an established securities market, such Non-U.S. Holder's proceeds received on the disposition of shares will generally be subject to withholding at a rate of 15% and such Non-U.S. Holder will generally be taxed on any gain in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally will not apply. Prospective investors are encouraged to consult their own tax advisors regarding the possible consequences to them if we are, or were to become, a USRPHC.

Information Reporting and Backup Withholding

Generally, we must report annually to the IRS and to each Non-U.S. Holder the amount of dividends paid, the name and address of the recipient, and the amount, if any, of tax withheld. These information reporting requirements apply even if withholding was not required because the dividends were effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States or withholding was reduced by an applicable income tax treaty. Under applicable income tax treaties or other agreements, the IRS may make its reports available to the tax authorities in the Non-U.S. Holder's country of residence or country in which the Non-U.S. Holder was established.

Dividends paid to a Non-U.S. Holder that is not an exempt recipient generally will be subject to backup withholding, currently at a rate of 24%, unless the Non-U.S. Holder certifies to the payor as to its foreign status, which certification may generally be made on an applicable IRS Form W-8.

Proceeds from the sale or other disposition of common stock by a Non-U.S. Holder effected by or through a U.S. office of a broker will generally be subject to information reporting and backup withholding, currently at a rate of 24%, unless the Non-U.S. Holder certifies to the withholding agent under penalties of perjury as to, among other things, its name, address, and status as a Non-U.S. Holder or otherwise establishes an exemption. Payment of disposition proceeds effected outside the United States by or through a non-U.S. office of a non-U.S. broker generally will not be subject to information reporting or backup withholding if the payment is not received in the United States. Information reporting, but generally not backup withholding, will apply to such a payment if the broker has certain connections with the United States unless the broker has documentary evidence in its records that the beneficial owner thereof is a Non-U.S. Holder and specified conditions are met or an exemption is otherwise established.

Backup withholding is not an additional tax. Any amount withheld under the backup withholding rules from a payment to a Non-U.S. Holder that results in an overpayment of taxes generally will be refunded, or credited against the holder's U.S. federal income tax liability, if any, provided that the required information is timely furnished to the IRS.

Foreign Accounts

The Foreign Account Tax Compliance Act (FATCA) generally imposes a 30% withholding tax on dividends on, and, subject to the discussion of certain proposed Treasury Regulations below, gross proceeds from the sale or disposition of, our Class A common stock if paid to a foreign entity unless (1) if the foreign entity is a "foreign financial institution," the foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (2) if the foreign entity is not a "foreign financial institution," the foreign entity identifies certain U.S. holders of debt or equity interests in such foreign entity, or (3) the foreign entity is otherwise exempt from FATCA. The U.S. Treasury recently released proposed Treasury Regulations which, if finalized in their present form, would eliminate the federal withholding tax of 30% applicable to the gross proceeds of a sale or other disposition of our Class A common stock. In its preamble to such proposed Treasury Regulations, the U.S. Treasury stated that taxpayers may generally rely on the proposed regulations until final regulations are issued.

An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this section. Under certain circumstances, a Non-U.S. Holder may be eligible for refunds or credits of the tax. Non-U.S. Holders should consult their own tax advisors regarding the possible implications of FATCA on their investment in our Class A common stock.

Underwriting

UNDERWRITING Merrill Lynch, Pierce, Fenner & Smith Incorporated, Citigroup Global Markets Inc., and Credit Suisse Securities (USA) LLC are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of Class A common stock set forth opposite its name below.

Underwriter	Number ofShares
Merrill Lynch, Pierce, Fenner & Smith Incorporated	
Citigroup Global Markets Inc.	
Credit Suisse Securities (USA) LLC	
William Blair & Company, L.L.C.	
Raymond James & Associates, Inc.	
Robert W. Baird & Co. Incorporated	
Oppenheimer & Co. Inc.	
Stifel, Nicolaus & Company, Incorporated	
Craig-Hallum Capital Group LLC	
D.A. Davidson & Co.	
Total	

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel, or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus and to dealers at that price less a concession not in excess of $ per share. After the initial offering, the public offering price, concession, or any other term of the offering may be changed.

The following table shows the public offering price, underwriting discount, and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares.

	Per Share	Without Option	With Option
Public offering price		$$	$
Underwriting discount		$$	$
Proceeds, before expenses, to us		$$	$

The expenses of the offering, not including the underwriting discount, are estimated at $ and are payable by us. We have agreed to reimburse the underwriters for expenses relating to clearance of this offering with the Financial Industry Regulatory Authority up to $.

Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus, to purchase up to additional shares of our Class A common stock at the public offering price, less the underwriting discount. If the underwriters exercise this option, each will be obligated, subject to conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

No Sales of Similar Securities

We, our executive officers and directors and certain of our other existing security holders have agreed not to sell or transfer any common stock or securities convertible into, exchangeable for, exercisable for, or repayable with common stock, for the period ending 180 days after the date of this prospectus without first obtaining the written consent of Merrill Lynch, Pierce, Fenner & Smith Incorporated, Citigroup Global Markets Inc., and Credit Suisse Securities (USA) LLC. Specifically, we and these other persons have agreed, with certain limited exceptions, not to directly or indirectly:

- offer, pledge, sell, or contract to sell any common stock;
- sell any option or contract to purchase any common stock;
- purchase any option or contract to sell any common stock;
- grant any option, right, or warrant for the sale of any common stock;
- lend or otherwise dispose of or transfer any common stock;
- request or demand that we file or make a confidential submission of a registration statement related to the common stock; or
- enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of any common stock whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

The exceptions permit our executive officers and directors and other existing security holders, subject to certain restrictions, to:

- transfer the common stock (i) as a bona fide gift or for bona fide estate planning purposes, (ii) by will or intestate succession, (iii) to the person's immediate family or any trust for the direct or indirect benefit of the person or their immediate family, (iv) as a distribution to the person's limited partners, general partners, limited liability company members, stockholders, or other equity holders, or (v) to the person's affiliates;
- transfer the common stock to the underwriters pursuant to the initial public offering;
- transfer the common stock to us upon exercise of any option granted under our incentive plans or any warrant to purchase the our securities described in this prospectus, including the surrender of shares of common stock to us in "net" or "cashless" exercise of any option or warrant;
- transfer the common stock to us in connection with the our repurchase of shares of common stock pursuant to a repurchase right arising upon the termination of the person's employment with us;
- convert our preferred stock into shares of common stock;
- transfer the common stock pursuant to a transaction involving a Change of Control (as defined below) that has been approved by our board of directors;
- transfer the common stock pursuant to an order of a court of competent jurisdiction or in connection with a qualified domestic order or divorce settlement;
- establishing a trading plan pursuant to Rule 10b5-1 under the Exchange Act, provided that no sales of common stock are made under such plans during the restricted period; or
- sell shares of our common stock purchased in the initial public offering or on the open market following the initial public offering.

For purposes of the above, "Change of Control" shall mean the consummation of any bona fide third party tender offer, merger, consolidation, or other similar transaction the result of which is that any "person" (as defined in Section 13(d)(3) of the Exchange Act), or group of persons, becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 of the Exchange Act) of more than 50% of total voting power of our voting stock.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for or repayable with common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

Listing

We have applied for listing on the NYSE under the symbol "FSLY."

Before this offering, there has been no public market for our Class A common stock. The initial public offering price will be determined through negotiations between us and the representative. In addition to prevailing market conditions, the factors to be considered in determining the initial public offering price are:

- the valuation multiples of publicly traded companies that the representatives believe to be comparable to us;
- our financial information;

- the history of, and the prospects for, our company and the industry in which we compete;
- an assessment of our management, its past and present operations, and the prospects for, and timing of, our future revenues;
- the present state of our development; and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

The underwriters do not expect to sell more than 5% of the shares in the aggregate to accounts over which they exercise discretionary authority.

Price Stabilization, Short Positions, and Penalty Bids

Until the distribution of the shares is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our Class A common stock. However, the representatives may engage in transactions that stabilize the price of the Class A common stock, such as bids or purchases to peg, fix, or maintain that price.

In connection with the offering, the underwriters may purchase and sell our Class A common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales, and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. “Covered” short sales are sales made in an amount not greater than the underwriters’ option to purchase additional shares described above. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option granted to them. “Naked” short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our Class A common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of Class A common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Similar to other purchase transactions, the underwriters’ purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our Class A common stock or preventing or retarding a decline in the market price of our Class A common stock. As a result, the price of our Class A common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on the NYSE, in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our Class A common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Other Relationships

Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

The current business of Merrill Lynch, Pierce, Fenner & Smith Incorporated (MLPF&S) is being reorganized into two affiliated broker-dealers (i.e., MLPF&S and BofA Securities, Inc.) in which BofA Securities, Inc. will be the new legal entity for the institutional services that are now provided by MLPF&S. This transfer is expected to occur on or around May 13, 2018 (the Transfer Date). MLPF&S, an underwriter of our Class A common stock, will be assigning its rights and obligations as an underwriter to BofA Securities, Inc. in the event that the settlement date for our Class A common stock occurs on or after the Transfer Date.

European Economic Area

In relation to each member state of the EEA, no offer of ordinary shares which are the subject of the offering has been, or will be made to the public in that Member State, other than under the following exemptions under the Prospectus Directive:

(a)	to any legal entity which is a qualified investor as defined in the Prospectus Directive;
(b)	to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the representatives for any such offer; or
(c)	in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of ordinary shares referred to in (a) to (c) above shall result in a requirement for the Company or any representatives to publish a prospectus pursuant to Article 3 of the Prospectus Directive, or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

Each person located in a Member State to whom any offer of ordinary shares is made or who receives any communication in respect of an offer of ordinary shares, or who initially acquires any ordinary shares will be deemed to have represented, warranted, acknowledged, and agreed to and with each representative and the Company that (1) it is a "qualified investor" within the meaning of the law in that Member State implementing Article 2(1)(e) of the Prospectus Directive; and (2) in the case of any ordinary shares acquired by it as a financial intermediary as that term is used in Article 3(2) of the Prospectus Directive, the ordinary shares acquired by it in the offer have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Member State other than qualified investors, as that term is defined in the Prospectus Directive, or in circumstances in which the prior consent of the representatives have been given to the offer or resale; or where ordinary shares have been acquired by it on behalf of persons in any Member State other than qualified investors, the offer of those ordinary shares to it is not treated under the Prospectus Directive as having been made to such persons.

The Company, the representatives and their respective affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgments, and agreements.

This prospectus has been prepared on the basis that any offer of shares in any Member State will be made pursuant to an exemption under the Prospectus Directive from the requirement to publish a prospectus for offers of shares. Accordingly any person making or intending to make an offer in that Member State of shares which are the subject of the offering contemplated in this prospectus may only do so in circumstances in which no obligation arises for the Company or the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Directive in relation to such offer. Neither the Company nor the representatives have authorized, nor do they authorize, the making of any offer of shares in circumstances in which an obligation arises for the Company or the representatives to publish a prospectus for such offer.

For the purposes of this provision, the expression an "offer of ordinary shares to the public" in relation to any ordinary shares in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the ordinary shares to be offered so as to enable an investor to decide to purchase or subscribe the ordinary shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (as amended) and includes any relevant implementing measure in each Member State.

The above selling restriction is in addition to any other selling restrictions set out below.

Notice to Prospective Investors in the United Kingdom

In addition, in the UK, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Directive) (i) who have professional experience in matters relating to investments falling within Article 19 (5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (Order) and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). This document must not be acted on or relied on in the UK by persons who are not relevant persons. In the UK, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (SIX) or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, nor the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (CISA). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority (DFSA). This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not

approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The shares to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement, or other disclosure document has been lodged with the Australian Securities and Investments Commission (ASIC), in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement, or other disclosure document under the Corporations Act 2001 (Corporations Act), and does not purport to include the information required for a prospectus, product disclosure statement, or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons (Exempt Investors) who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional investors" (within the meaning of section 708(11) of the Corporations Act), or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation, or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives, and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Hong Kong

The securities have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation, or document relating to the securities has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Notice to Prospective Investors in Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations, and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, "Japanese Person" shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of Non-CIS Securities may not be circulated or distributed, nor may the Non-CIS Securities be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (SFA), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Non-CIS Securities are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a)	a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
(b)	a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Non-CIS Securities pursuant to an offer made under Section 275 of the SFA except:

(c)	to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
(d)	where no consideration is or will be given for the transfer;

(e)	where the transfer is by operation of law;
(f)	as specified in Section 276(7) of the SFA; or
(g)	as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Notice to Prospective Investors in Canada

The securities may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions, and Ongoing Registrant Obligations*. Any resale of the securities must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Legal Matters

LEGAL MATTERS The validity of the shares of Class A common stock being offered by this prospectus will be passed upon for us by Cooley LLP, Palo Alto, California. Davis Polk & Wardwell LLP, Menlo Park, California is representing the underwriters.

Experts

EXPERTS

The consolidated financial statements included in this prospectus have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report appearing herein. Such consolidated financial statements are included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

Where You Can Find Additional Information

WHERE YOU CAN FIND ADDITIONAL INFORMATION We have filed with the SEC a registration statement on Form S-1 under the Securities Act, with respect to the shares of Class A common stock being offered by this prospectus, which constitutes a part of the registration statement. This prospectus, which constitutes a part of the registration statement, does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the Class A common stock offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You can read our SEC filings, including the registration statement, over the internet at the SEC's website at www.sec.gov.

Upon the completion of this offering, we will be subject to the information reporting requirements of the Exchange Act, and we will file reports, proxy statements, and other information with the SEC. These reports, proxy statements, and other information will be available for inspection and copying at the website of the SEC referred to above. We also maintain a website at www.fastly.com, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. **However, the information contained in or accessible through our website is not part of this prospectus or the registration statement of which this prospectus forms a part, and investors should not rely on such information in making a decision to purchase our Class A common stock in this offering.**

FASTLY, INC.

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INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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Report of Independent Registered Public Accounting Firm

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM To the Stockholders and Board of Directors of Fastly, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Fastly, Inc. and subsidiaries (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of operations and comprehensive loss, consolidated statements of convertible preferred stock and stockholders' deficit, consolidated statements of cash flows, and related notes (collectively referred to as the "financial statements") for each of the two years in the period ended December 31, 2018. In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

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 Public Company Accounting Oversight Board (United States) (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 and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statement is free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

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.

/s/ Deloitte & Touche LLP San Francisco, California April 4, 2019 We have served as the Company's auditor since 2014.

Consolidated Balance Sheets

FASTLY, INC.

Consolidated Balance Sheets

	As of December 31,		(unaudited) Pro Forma December 31,2018
(in thousands, except share and per share amounts)	**2017**	**2018**	
Assets			
Current assets:			
Cash and cash equivalents	$31,309	$36,963	
Marketable securities	18,886	46,679	
Accounts receivable, net of allowance for doubtful accounts of $1,119 and $1,679 as of December 31, 2017 and 2018, respectively	19,094	24,729	
Prepaid expenses and other current assets	6,658	8,896	
Total current assets	75,947	117,267	
Property and equipment, net	36,973	42,354	
Goodwill	382	360	
Intangible assets, net	695	610	
Other assets	2,174	2,163	

Total assets	$116,171	$162,754	

Liabilities, Convertible Preferred Stock and Stockholders' Deficit

Current liabilities:			
Accounts payable	$4,095	$2,333	
Accrued expenses	11,529	15,535	
Current portion of long-term debt	1,758	11,370	
Other current liabilities	867	2,512	
Total current liabilities	18,249	31,750	
Long-term debt, less current portion	23,154	39,439	
Convertible preferred stock warrant liabilities	1,016	3,261	—
Other long-term liabilities	1,053	647	
Total liabilities	43,472	75,097	71,836
Commitments and contingencies (Note 8)			
Convertible preferred stock series Seed, A, B, C, D, E and F in aggregate, $0.00002 par value; 100,016,178 and 108,297,289 shares and authorized as of December 31, 2017 and 2018, respectively; 99,436,188 and 107,260,454 and issued and outstanding at December 31, 2017 and 2018, respectively; no shares authorized, issued or outstanding pro forma (unaudited); liquidation preference of $180,037, $220,037 and $0 as of December 31, 2017, December 31, 2018 and pro forma (unaudited), respectively	179,705	219,584	—
Stockholders' deficit:			
Common stock, $0.00002 par value; 190,000,000 and 195,000,000 shares authorized as of December 31, 2017 and 2018, respectively; 47,758,206 and 50,051,765 shares issued and outstanding at December 31, 2017 and 2018, respectively; 158,196,858 shares issued and outstanding pro forma (unaudited)	1	1	3
Additional paid-in capital	10,377	16,403	239,246
Treasury stock	(2,109)	(2,109)	(2,109)
Accumulated other comprehensive loss	(24)	(36)	(36)
Accumulated deficit	(115,251)	(146,186)	(146,186)
Total stockholders' deficit	(107,006)	(131,927)	$90,918
Total liabilities, convertible preferred stock and stockholders' deficit	$116,171	$162,754	

See Notes to Consolidated Financial Statements.

Consolidated Statements of Operations and Comprehensive Loss

FASTLY, INC.

Consolidated Statements of Operations and Comprehensive Loss

	Year Ended December 31,	
(in thousands except per share amounts)	**2017**	**2018**
Revenue	$104,900	$144,563
Cost of revenue	48,672	65,499
Gross profit	56,228	79,064
Operating expenses:		
Research and development	28,989	34,618
Sales and marketing	40,818	50,134
General and administrative	17,451	23,450
Total operating expenses	87,258	108,202
Loss from operations	(31,030)	(29,138)
Interest income	443	939
Interest expense	(1,116)	(1,810)

Other expense, net	(539)	(741)
Loss before income taxes	(32,242)	(30,750)
Income taxes	208	185
Net loss	$(32,450)	$(30,935)
Other comprehensive income (loss):		
Foreign currency translation adjustment	$32	$(1)
Loss on investments in available-for-sale-securities	$(7)	$(11)
Total other comprehensive income (loss)	$25	$(12)
Comprehensive loss	$(32,425)	$(30,947)
Net loss attributable to common stockholders	$(32,450)	$(30,935)
Net loss per share attributable to common stockholders, basic and diluted	$(0.69)	$(0.63)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	46,799,801	48,754,382
Proforma net loss per share attributable to common shareholders, basic and diluted (unaudited)		$(0.20)
Proforma weighted-average shares used in computing pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)		152,173,174

See Notes to Consolidated Financial Statements.

Consolidated Statements of Convertible Preferred Stock and Stockholders' Deficit

FASTLY, INC.

Consolidated Statement of Convertible Preferred Stock and Stockholders' Deficit

(in thousands, except share data)	Convertible Preferred Stock		Common Stock		AdditionalPaid-in Capital	Treasury Stock	Accumulated Other Comprehensive Loss	Accumulated Deficit	TotalStockholders' Deficit
	Shares	Amount	Shares	Amount					
Balance at January 1, 2017	86,218,124	$129,842	46,001,834	$1	$6,709	$(2,109)	$(49)	$(82,801)	$(78,249)
Exercise of stock options	–	–	824,350	–	611	–	–	–	611
Vesting of early exercised stock options	–	–	922,022	–	248	–	–	–	248
Stock-based compensation	–	–	–	–	2,793	–	–	–	2,793
Issuance of Series E Preferred Stock, net of issuance costs of $137	13,218,064	49,863							
Vesting of restricted stock units			10,000		16				16
Net loss	–	–	–	–	–	–	–	(32,450)	(32,450)
Other comprehensive income	–	–	–	–	–	–	25	–	$25
Balance at December 31, 2017	99,436,188	$179,705	47,758,206	$1	$10,377	$(2,109)	$(24)	$(115,251)	$(107,006)
Exercise of stock options	–	–	2,011,712	–	1,561	–	–	–	1,561
Vesting of early exercised stock options	–	–	239,474	–	337	–	–	–	337

Stock-based compensation	—	—	—	—	4,079	—	—	—	4,079
Issuance of Series F Preferred Stock, net of issuance costs of $121	7,824,266	39,879							
Repayment of stockholder note			42,373		50				50
Net loss	—	—	—	—	—	—	—	(30,935)	(30,935)
Other comprehensive loss	—	—	—	—	—	—	(12)	—	$(12)
Balance at December 31, 2018	107,260,454	$219,584	50,051,765	$1	$16,403	$(2,109)	$(36)	$(146,186)	$(131,927)

See Notes to Consolidated Financial Statements.

Consolidated Statements of Cash Flows

FASTLY, INC.

Consolidated Statements of Cash Flows

	Year Ended December 31,	
(in thousands)	**2017**	**2018**
Cash flows from operating activities:		
Net loss	$(32,450)	$(30,935)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	9,642	13,400
Amortization of deferred rent	265	(340)
Amortization of debt issuance costs	161	—
Stock-based compensation	2,809	4,079
Provision for doubtful accounts	1,024	599
Change in fair value of preferred stock warrant liabilities	176	606
Other non-operating activities	(18)	(354)
Interest paid on capital leases	(105)	(203)
Changes in operating assets and liabilities:		
Loss on disposal	113	—
Accounts receivable	(6,043)	(6,234)
Prepaid expenses and other current assets	(3,537)	(2,325)
Other assets	(94)	10
Accounts payable	1,109	(372)
Accrued expenses	1,009	3,902
Other liabilities	78	1,182
Net cash used in operating activities	(25,861)	(16,985)
Cash flows from investing activities:		
Purchase of marketable securities	(46,071)	(62,660)
Sale of marketable securities	43,539	35,210
Change in restricted cash	—	87
Purchases of property and equipment	(13,248)	(19,657)
Net cash used in investing activities	(15,780)	(47,020)

Cash flows from financing activities:		
Proceeds from borrowings under notes payable	12,774	29,154
Repayments of notes payable	(7,383)	(833)
Repayments of capital leases	(464)	(1,215)
Proceeds from Series E financing	50,000	—
Series E issuance costs	(137)	—
Proceeds from Series F financing	—	40,000
Series F issuance costs	—	(121)
Proceeds from exercise of vested stock options	611	1,561
Proceeds from early exercise of stock options	5	1,054
Proceeds from payment of stockholder note	—	50
Repurchase of early exercised shares	—	(13)
Net cash provided by financing activities	55,406	69,637
Effects of exchange rate changes on cash and cash equivalents	(32)	22
Net increase in cash and cash equivalents	13,733	5,654
Cash and cash equivalents at beginning of year	17,576	31,309
Cash and cash equivalents at end of year	$31,309	$36,963
Supplemental disclosure of cash flow information:		
Cash paid for interest	$996	$1,833
Cash paid for income taxes, net of refunds received	$166	$55
Property and equipment additions not yet paid in cash	$1,838	$133
Vesting of early-exercised stock options	$248	$337
Capital lease outstanding from current year addition	$4,324	$429
Warrant issued in connection with debt	$—	$1,639

See Notes to Consolidated Financial Statements.

Notes to Consolidated Financial Statements

FASTLY, INC.

Notes to Consolidated Financial Statements

1. Nature of Business

Fastly, Inc. (Company) has built an edge cloud platform that can process, serve and secure its customer's applications as close to their end users as possible. The Company's edge network spans 60 points-of-presence (POPs) around the world. The Company was incorporated in Delaware in 2011 and is headquartered in San Francisco, California.

2. Summary of Significant Accounting Policies

Basis of Presentation

The Company prepares its consolidated financial statements in accordance with generally accepted accounting principles in the United States (U.S. GAAP).

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

Unaudited Pro Forma Consolidated Balance Sheet Information

Immediately upon the closing of the initial public offering contemplated by the Company and following the Company's filing of its amended and restated certificate of incorporation to reclassify all outstanding common stock as Class B common stock and create the Class A common stock, all outstanding shares of convertible preferred stock will automatically convert into shares of Class B common stock. The unaudited pro forma consolidated balance sheet information at December 31, 2018, gives effect to the conversion of all outstanding shares of the Company's convertible preferred stock into 107,260,454

shares of Class B common stock and the reclassification of all outstanding shares of the Company's common stock into 50,051,765 shares of Class B common stock. It also gives effect to an automatic conversion of warrants to purchase 884,460 shares of convertible preferred stock into warrants to purchase the same number of shares of Class B common stock, which results in the reclassification of the warrant liability to additional paid-in capital.

Use of Estimates

The preparation of the Company's consolidated financial statements requires the Company to make estimates, judgments, and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses, and related disclosures. Actual results and outcomes could differ significantly from the Company's estimates, judgments, and assumptions. Significant estimates, judgments and assumptions used in these financial statements include, but are not limited to, those related to revenue, accounts receivable and related reserves, useful lives and realizability of long-lived assets, income tax reserves and accounting for stock-based compensation. Estimates are periodically reviewed in light of changes in circumstances, facts and experience. The effects of material revisions in estimates are reflected in the consolidated financial statements in the period of change and prospectively from the date of the change in estimate.

Cash, Cash Equivalents and Marketable Securities

The Company invests its excess cash primarily in short-term fixed income securities, including government and investment-grade debt securities and money market funds. The Company classifies all liquid investments with stated maturities of three months or less from date of purchase as cash equivalents. Marketable securities with original maturities greater than three months from purchase date and remaining maturities less than one year are classified as short-term marketable securities. Marketable securities with remaining maturities greater than one year as of the balance sheet date and which the Company intends to hold for greater than one year, are classified as long-term marketable securities. The fair market value of cash equivalents at December 31, 2017 and 2018 approximated their carrying value. Marketable securities are carried at fair market value, with unrealized gains and losses considered to be temporary in nature reported in accumulated other comprehensive loss. Cost of securities sold is based on specific identification. The Company determines the appropriate classification of its investments in marketable securities at the time of purchase and reevaluates such designation at each balance sheet date. The Company has classified and accounted for its marketable securities as available-for-sale. After considering the Company's capital preservation objectives, as well as its liquidity requirements, the Company may sell securities prior to their stated maturities. The Company carries its available-for-sale securities at fair value, and reports the unrealized gains and losses as a component of other comprehensive loss, except for unrealized losses determined to be other-than-temporary which are recorded as other expense, net. The Company determines any realized gains or losses on the sale of marketable securities on a specific identification method and records such gains and losses as a component of other expense, net. Interest earned on cash, cash equivalents, and marketable securities was approximately $443,000 and $939,000 during the years ended December 31, 2017 and 2018, respectively. These balances are recorded in interest income in the accompanying Consolidated Statement of Operations and Comprehensive Loss.

The Company evaluates the investments periodically for possible other-than-temporary impairment. A decline in fair value below the amortized costs of debt securities is considered an other-than-temporary impairment if the Company has the intent to sell the security or it is more likely than not that the Company will be required to sell the security before recovery of the entire amortized cost basis. In those instances, an impairment charge equal to the difference between the fair value and the amortized cost basis is recognized in other expense. Regardless of the Company's intent or requirement to sell a debt security, impairment is considered other-than-temporary if the Company does not expect to recover the entire amortized cost basis.

Restricted Cash

As of December 31, 2017, the Company had recorded a restricted cash balance of approximately $87,000 within prepaid expenses and other current assets on the accompanying Consolidated Balance Sheet. This restricted cash balance is a cash deposit to back letters of credit related to a property lease. There was no restricted cash as of December 31, 2018.

Accounts Receivable, net

Accounts receivable are recorded and carried at the original invoiced amount less an allowance for any potential uncollectible amounts. The Company records allowances based upon its assessment of various factors, such as: historical experience, credit quality of its customers, age of the accounts receivable balances, geographic related risks, economic conditions, and other factors that may affect a customer's ability to pay. Increases and decreases in the allowance for doubtful accounts are included as a component of General and administrative expense in the Consolidated Statements of Operations and Comprehensive Loss. The Company does not have any off-balance sheet credit exposure related to its customers.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to significant concentration of credit risk consist primarily of cash, cash equivalents, marketable securities, and accounts receivable. The primary focus of the Company's investment strategy is to preserve capital and meet liquidity requirements. The Company's investment policy addresses the level of credit exposure by limiting the concentration in any one corporate issuer or sector and establishing a minimum allowable credit rating. To manage the risk exposure, the Company invests cash equivalents and marketable securities in a variety of fixed income securities, including government and investment-grade debt securities and money market funds. The Company places its cash primarily in checking and money market accounts with reputable financial institutions. Deposits held with these financial institutions may exceed the amount of insurance provided on such deposits, if any.

Concentrations of credit risk with respect to accounts receivable are primarily limited to certain customers to which the Company makes substantial sales. The Company's customer base consists of a large number of geographically-dispersed customers diversified across several industries. To reduce risk, the Company routinely assesses the financial strength of its customers. Based on such assessments, the Company believes that its accounts receivable credit risk exposure is limited. No customer accounted for more than 10% of revenue for the years ended December 31, 2017 and 2018 or more than 10% of the total accounts receivable balance as of December 31, 2017 and 2018.

Fair Value of Financial Instruments

The Company's financial instruments consist of cash and cash equivalents, marketable securities, accounts receivable, accounts payable, accrued expenses, debt and convertible preferred stock warrant liabilities. Cash equivalents, marketable securities, and convertible preferred stock warrant liabilities are carried at fair value. Accounts receivable, accounts payable, and accrued expenses are stated at their carrying value, which approximates fair value due to the short time to the expected receipt or payment date. The carrying amount of the Company's debt approximates fair value as the stated interest rate approximates market rates currently available to the Company.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation and amortization are computed on a straight-line basis over the estimated useful lives of the assets. The estimated useful life of each asset category is as follows:

Computer and networking equipment	3-5 years
Leasehold improvements	Shorter of lease term or 5 years
Furniture and fixtures	3 years
Office equipment	3 years
Internal-use software	3 years

The Company periodically reviews the estimated useful lives of property and equipment and any changes to the estimated useful lives are recorded prospectively from the date of the change.

Upon retirement or sale, the cost of the assets disposed of and the related accumulated depreciation are removed from the accounts, and any resulting gain or loss is included in other expense, net in the Consolidated Statement of Operations and Comprehensive Loss. Repairs and maintenance costs are expensed as incurred.

Internal-Use Software Development Costs

Labor and related costs associated with internal-use software during the application development stage are capitalized. Capitalization of costs begins when the preliminary project stage is completed, management has committed to funding the project, and it is probable that the project will be completed and the software will be used to perform the function intended. Capitalization ceases at the point when the project is fully tested and substantially complete and is ready for its intended purpose. The capitalized amounts are included in property and equipment, net on the Consolidated Balance Sheet. The Company amortizes such costs over the estimated useful life of the software; completed internal-use software that is used on the Company's network is amortized to cost of revenue over its estimated useful life. Costs incurred during the planning, training, and post-implementation stages of the software development life-cycle are expensed as incurred.

Goodwill, Intangible Assets, and Long-lived Assets

Goodwill is the amount by which the cost of acquired net assets in a business combination exceeds the fair value of the net identifiable assets on the date of purchase and is carried at its historical cost. The Company tests goodwill for impairment on an annual basis or more frequently if events or changes in circumstances indicate that the asset might be impaired. The Company performs its annual impairment test of goodwill as of December 31 and whenever events or circumstances indicate that the asset might be impaired. The tests did not result in an impairment to goodwill during the years ended December 31, 2017 and 2018.

Intangible assets consist of internet protocol addresses and are amortized over their estimated useful lives based upon the estimated economic value derived from the related intangible asset.

Long-lived assets, including property and equipment and intangible assets, are reviewed for impairment whenever events or changes in circumstances, such as service discontinuance, technological obsolescence, significant decreases in the Company's market capitalization, facility closures, or work-force reductions indicate that the carrying amount of the long-lived asset or asset group may not be recoverable. When such events occur, the Company compares the carrying amount of the asset or asset group to the undiscounted expected future cash flows related to the asset or asset group. If this comparison indicates that an impairment is present, the amount of the impairment is calculated as the difference between the carrying amount and the fair value of the asset or asset group. The Company did not have any impairments during the years ended December 31, 2017 and 2018.

Deferred Rent and Lease Accounting

The Company leases most of its data center facilities and office space under non-cancelable operating lease agreements. Total rent payments, inclusive of rent increases, rent holidays, rent concessions, leasehold incentives, or any other unusual provisions or conditions, are expensed on a straight-line basis over the lease term. The difference between the straight-line expense and the cash payment is recorded as deferred rent.

Convertible Preferred Stock Warrant Liabilities

The Company's warrants to purchase convertible preferred stock are classified as a liability on the Consolidated Balance Sheet at fair value upon issuance because the warrants are exercisable for contingently redeemable preferred stock which is classified outside of stockholders' deficit. The warrants are subject to re-measurement to fair value at each balance sheet date, and any change in fair value is recognized in the Consolidated Statement of Operations and Comprehensive Loss as other expense, net. The Company will continue to adjust the liability for changes in fair value until the earlier of the exercise or expiration of the warrants, the conversion of the underlying shares of convertible preferred stock, the completion of a liquidation event, or the completion of an initial public offering (IPO). Upon the exercise, expiration, or the completion of a liquidation event, the related warrant liability will be reclassified to additional paid-in capital.

Revenue Recognition

The Company recognizes revenue in accordance with the authoritative guidance for revenue recognition, including guidance on revenue arrangements with multiple deliverables. Revenue is recognized only when the price is fixed or determinable, persuasive evidence of an arrangement exists, the service is performed, and collectability of the resulting receivable is reasonably assured.

The Company primarily derives revenue from the sale of services to customers executing contracts having terms of one year or longer. These contracts can commit the customer to a minimum of monthly level of usage and specify the rate at which the customer must pay for actual usage above the monthly minimum. For contracts with a monthly commitment, the Company recognizes the monthly minimum as revenue each month, provided that an enforceable contract has been executed, the service has been delivered to the customer, the fee for the service is fixed or determinable, and collection is reasonably assured. Should a customer's usage of the Company's services exceed the monthly minimum, the Company recognizes revenue for such excess in the period of additional usage. For customers without a monthly commitment, the Company recognizes revenue monthly based upon the customer's actual usage provided that an enforceable contract has been executed, the service has been delivered to the customer, the fee for the service is fixed or determinable, and collection is reasonably assured.

When more than one element is contained in a revenue arrangement, the Company first determines the fair value for each element in the arrangement based on vendor-specific objective evidence (VSOE) or third-party evidence (TPE) for each respective element. For arrangements in which the Company is unable to establish VSOE or TPE for each element, the Company uses the best estimate of selling price (BESP) to determine the fair value of the separate deliverables. The Company estimates BESP based upon management's knowledge of the industry, competitor pricing, and unit pricing. The Company allocates arrangement consideration across the multiple elements using the relative selling price method.

Elements typically included in the Company's multiple element arrangements consist of its edge cloud platform security solutions, support, and professional services. These elements have value to the customer on a stand-alone basis in that they are either sold separately by the Company or by another vendor. There is no right of return relative to these services.

At the inception of a customer contract, the Company makes an assessment as to that customer's ability to pay for the services provided. The Company bases its assessment on a combination of factors, including its collection experience with the customer, discussions with customer personnel, and other forms of payment assurance. Upon the completion of these steps, the Company recognizes revenue monthly in accordance with its revenue recognition policy. If the Company subsequently determines that collection from the customer is not reasonably assured, the Company records an allowance for doubtful accounts and bad debt expense for all of that customer's unpaid invoices. Changes in the Company's estimates and judgments about whether collection is reasonably assured would change the timing of revenue or amount of bad debt expense that the Company recognizes.

The Company also sells its services through a reseller channel. Assuming all other revenue recognition criteria are met, the Company recognizes revenue from the majority of its reseller arrangements on a net basis as either reseller customers are not aware that they are purchasing services from the Company, or if they are aware, the Company does not know the reseller's pricing to its end users and is therefore unable to estimate gross revenue to be recognized.

From time to time, the Company enters into arrangements to establish and run private POPs for customers. These arrangements generally include content delivery services as well as professional services and the provision of hardware. For accounting purposes, the Company has determined that the provisioning of hardware is an operating lease and recognizes the revenue from these leases monthly on a straight-line basis over the term of the relevant customer agreements, provided all other revenue recognition criteria are met.

Deferred revenue includes amounts billed to customers for which revenue has not been recognized and primarily consists of the unearned portion of edge cloud platform usage.

Cost of Revenue

Cost of revenue consists primarily of fees paid to network providers for bandwidth and to third-party network data centers for housing servers, also known as colocation costs. Cost of revenue also includes employee costs for network operation, build-out and support and services delivery, network storage costs, cost of managed services and software-as-a-service, depreciation of network equipment used to deliver the Company's services, and amortization of network-related internal-use software. The Company enters into contracts for bandwidth with third-party network providers with terms of typically one year. These contracts generally commit the Company to pay minimum monthly fees plus additional fees for bandwidth usage above the committed level. The Company enters into contracts for colocation services with third-party providers with terms of typically three years.

Research and Development Costs

Research and development costs consist primarily of payroll and related personnel costs for the design, development, deployment, testing, and enhancement of the Company's edge cloud platform. Costs incurred in the development of the Company's edge cloud platform are expensed as incurred, excluding those expenses which met the criteria for development of internal-use software.

Advertising Expense

The Company recognizes advertising expense as incurred. The Company recognized total advertising expense of approximately $713,000 and $537,000 for the years ended December 31, 2017 and 2018, respectively.

Accounting for Stock-Based Compensation

The Company accounts for stock-based compensation in accordance with the authoritative guidance on stock compensation. Under the fair value recognition provisions of this guidance, stock-based compensation is measured at the grant date based on the fair value of the award and is recognized as expense over the requisite service period, which is generally the vesting period of the respective award. The Company accounts for forfeitures as they occur.

Determining the fair value of stock-based awards at the grant date requires judgment. The Company uses the Black-Scholes option-pricing model to determine the fair value of stock options granted to its employees and directors. The determination of the grant date fair value of options using an option-pricing model is affected by the Company's estimated common stock fair value as well as assumptions regarding a number of other complex and subjective variables. These variables include the fair value of the Company's common stock, the expected stock price volatility over the expected term of the options, stock option exercise and cancellation behaviors, risk-free interest rates, and expected dividends:

These assumptions and estimates are as follows:

- *Fair Value of Common Stock.* Because the Company's common stock is not yet publicly traded, the Company must estimate the fair value of common stock, as discussed in "Common Stock Valuations" below.
- *Expected Term.* The expected term represents the period that the Company's stock-based awards are expected to be outstanding. The expected term assumptions were determined based on the vesting terms, exercise terms, and contractual lives of the options. The expected term was estimated using the simplified method allowed under Securities and Exchange Commission (SEC) guidance.
- *Volatility.* Since the Company does not have a trading history of its common stock, the expected volatility is determined based on the historical stock volatilities of its comparable companies. Comparable companies consist of public companies in the Company's industry, which are similar in size, stage of life cycle, and financial leverage. The Company intends to continue to apply this process using the same or similar public companies until a sufficient amount of historical information regarding the volatility of its share price becomes available, or unless circumstances change such that the identified companies are no longer similar to the Company, in which case, more suitable companies whose share prices are publicly available would be used in the calculation.
- *Risk-Free Interest Rate.* The risk-free interest rate used in the Black-Scholes option pricing model is the implied yield available on U.S. Treasury zero-coupon issues with a remaining term equivalent to that of the options for each expected term.
- *Dividend Yield.* The expected dividend assumption is based on the Company's current expectations of its anticipated dividend policy. The Company has no history of paying any dividends and therefore used an expected dividend yield of zero.

Foreign Currency Translation

Local currencies of foreign subsidiaries are the functional currencies for financial reporting purposes. The Company's non-U.S. subsidiaries have either the British pound or the Japanese yen as the functional currency. For operations outside the United States that have functional currencies other than the U.S. dollar, the assets and liabilities of the Company's subsidiaries are translated at the applicable exchange rate as of the balance sheet date, and revenue and expenses are translated at an average rate over the period. Resulting currency translation adjustments are recorded as a component of accumulated other comprehensive loss, a separate component of stockholders' deficit. Gains and losses on inter-company and other non-functional currency transactions are recorded in other expense, net.

Income Taxes

The Company accounts 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, the Company determines deferred tax assets and liabilities on the basis of the differences between the financial statement and tax bases of assets and liabilities by 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.

The Company recognizes deferred tax assets to the extent that it believes that these assets are more likely than not to be realized. In making such a determination, the Company considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations. If the Company determines that it would be able to realize its deferred tax assets in the future in excess of their net recorded amount, the Company would make an adjustment to the deferred tax asset valuation allowance, which would reduce the provision for income taxes.

The Company records uncertain tax positions in accordance with ASC 740 on the basis of a two-step process in which (1) it determines whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position and (2) for those tax positions that meet the more-likely-than-not recognition threshold, the Company recognizes the largest amount of tax benefit that is more than 50 percent likely to be realized upon ultimate settlement with the related tax authority.

The Company recognizes interest and penalties related to unrecognized tax benefits on the income tax expense line in the accompanying Consolidated Statement of Operations and Comprehensive Loss. Accrued interest and penalties are included in accrued expenses on the Consolidated Balance Sheet.

Comprehensive Loss

Comprehensive loss consists of two components: net loss and other comprehensive loss. Other comprehensive loss refers to gains and losses that are recorded as an element of stockholders' deficit and are excluded from net loss. The Company's other comprehensive loss is comprised of foreign currency translation adjustments and loss on investments in available-for-sale securities.

Net Loss Per Share Attributable to Common Stockholders

Basic and diluted net loss per share attributable to common stockholders is presented in conformity with the two-class method required for participating securities. The Company considers all series of its redeemable convertible preferred stock to be participating securities. Under the two-class method, the net loss attributable to common stockholders is not allocated to the redeemable convertible preferred stock as the holders of its redeemable convertible preferred stock do not have a contractual obligation to share in the Company's losses. Under the two-class method, net income is attributed to common stockholders and participating securities based on their participation rights. Under the two-class method, basic net loss per share attributable to common

stockholders is computed by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period. Diluted earnings per share attributable to common stockholders adjusts basic earnings per share for the potentially dilutive impact of stock options and redeemable convertible preferred stock. As the Company has reported losses for the all period presented, all potentially dilutive securities are antidilutive and accordingly, basic net loss per share equals diluted net loss per share.

Recent Accounting Pronouncements

Standards that are not yet adopted The Company qualifies as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 (JOBS Act) and therefore intends to take advantage of certain exemptions from various public company reporting requirements, including delaying adoption of new or revised accounting standards until those standards apply to private companies. The Company has elected to use this extended transition period under the JOBS Act. The effective dates shown below reflect the election to use the extended transition period.

In May 2014, FASB issued new guidance, *ASU 2014-09, Revenue from Contracts with Customers (Topic 606)*. This new guidance amends the guidance in former *ASC Topic 605, Revenue Recognition*, to provide a single, comprehensive revenue recognition model for all contracts with customers. ASC Topic 606 requires an entity to recognize revenue in a manner that depicts the transfer of promised goods or services to customers in amounts that reflect the consideration to which an entity expects to be entitled in exchange for those goods or services. The new standard also requires entities to enhance disclosures about the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The guidance is effective for financial statements issued for fiscal years beginning after December 15, 2018. The Company is in the process of completing its assessment of the impact of adopting this standard. The Company does not believe adoption will have a material impact on revenue, as currently reported. The Company believes the adoption of this standard will reduce the amount of commission expense previously recorded by $2.5 million to $5.0 million. The Company will adopt using the modified retrospective method.

In January 2016, FASB issued new guidance, *ASU 2016-01, Financial Instruments-Overall (Subtopic 825-10) Recognition and Measurement of Financial Assets and Financial Liabilities*, which addresses certain aspects of recognition, measurement, presentation, and disclosure of financial instruments, and requires equity securities to be measured at fair value with changes in fair value recognized through net income. The guidance is effective for financial statements issued for fiscal years beginning after December 15, 2018. The Company does not expect the adoption of this standard to have a material impact on its consolidated financial statements.

In August 2016, FASB issued new guidance, *ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*, which clarifies how entities should classify cash receipts and cash payments related to eight specific cash flow matters on the statement of cash flows, with the objective of reducing existing diversity in practice. The guidance is effective for financial statements issued for fiscal years beginning after December 15, 2018. The Company does not expect the adoption of this standard to have a material impact on its consolidated financial statements.

In November 2016, FASB issued new guidance, *ASU 2016-18, Statement of Cash Flows (Topic 230)*, which requires companies to include amounts generally described as restricted cash and restricted cash equivalents in cash and cash equivalents when reconciling beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The guidance is effective for financial statements issued for fiscal years beginning after December 15, 2018. The Company does not expect the adoption of this standard to have a material impact on its consolidated financial statements.

In January 2017, FASB issued new guidance, *ASU 2017-01, Business Combinations (Topic 805): Clarifying the Definition of a Business*, which changes the definition of a business to assist entities with evaluating whether transactions should be accounted for as transfers of assets or business combinations. The guidance is effective for financial statements issued for fiscal years beginning after December 15, 2018. The Company does not expect the adoption of this standard to have a material impact on its consolidated financial statements.

In February 2016, FASB issued new guidance, *ASU 2016-02, Leases (Topic 842)*, which establishes the principles to report transparent and economically neutral information about the assets and liabilities that arise from leases. Accordingly, this new standard introduces a lessee model that brings most leases on the balance sheet and also aligns certain of the underlying principles of the new lessor model with those in the new revenue recognition standard. The guidance is effective for financial statements issued for fiscal years beginning after December 15, 2019. The Company is currently evaluating the appropriate transition method and impact of this guidance on its consolidated financial statements and related disclosures.

In June 2016, FASB issued new guidance, *ASU 2016-13, Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments,* which introduces a new methodology for accounting for credit losses on financial instruments, including available-for-sale debt securities. The guidance establishes a new "expected loss model" that requires entities to estimate current expected credit losses on financial instruments by using all practical and relevant information. Any expected credit losses are to be reflected as allowances rather than reductions in the amortized cost of available-for-sale debt securities. The guidance is effective for financial statements issued for fiscal years beginning after December 15, 2020. The Company does not expect the adoption of this standard to have a material impact on its consolidated financial statements.

In January 2017, FASB issued new guidance, *ASU 2017-04, Intangibles-Goodwill and Other (Topic 350)**: Simplifying the Test for Goodwill Impairment,* which eliminates step two from the goodwill impairment test. Under this guidance, an entity should recognize an impairment charge for the amount by which the carrying amount of a reporting unit exceeds its fair value up to the amount of goodwill allocated to that reporting unit. The guidance is effective for financial statements issued for fiscal years beginning after December 15, 2020. The Company does not expect the adoption of this standard to have a material impact on its consolidated financial statements.

3. Investments and Fair Value Measurements

The Company's total cash, cash equivalents, and marketable securities consisted of the following (in thousands):

	December 31,

	2017	2018
Cash and cash equivalents:		
Cash	$2,935	$32,546
Money market funds	26,377	2,419
U.S. Treasury securities	—	1,998
Commercial paper	997	—
Asset-backed securities	1,000	—
Total cash and cash equivalents	$31,309	$36,963
Marketable securities:		
Corporate notes and bonds	$11,393	$12,852
Commercial paper	5,184	20,086
U.S. Treasury securities	—	5,932
Asset-backed securities	2,309	7,809
Total marketable securities	$18,886	$46,679

Available-for-Sale Investments. The following table summarizes unrealized gains and losses related to available-for-sale securities classified as marketable securities on the Company's Consolidated Balance Sheets as of December 31, 2017 and 2018 (in thousands):

	December 31, 2017			
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
Corporate notes and bonds	$11,404	$—	$(11)	$11,393
Commercial paper	5,184	—	—	5,184
Asset-backed securities	2,311	—	(2)	2,309
Total available-for-sale investments	$18,899	$—	$(13)	$18,886

	December 31, 2018			
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
Corporate notes and bonds	$12,867	$—	$(15)	$12,852
Commercial paper	20,086	—	—	20,086
U.S. Treasury securities	5,933	—	(1)	5,932
Asset-backed securities	7,817	—	(8)	7,809
Total available-for-sale investments	$46,703	$—	$(24)	$46,679

All securities classified as available-for-sale as of December 31, 2017 and 2018 have contractual maturities of one year or less. There were no securities in a continuous loss position for 12 months or longer as of December 31, 2017 and 2018. Investments are reviewed periodically to identify possible other-than-temporary impairments. No impairment loss has been recorded on the securities included in the tables above as the Company believes that the decrease in fair value of these securities is temporary and expects to recover at least up to the initial cost of investment for these securities.

Fair Value of Financial Instruments. For certain of the Company's financial instruments, including cash held in banks, accounts receivable, and accounts payable, the carrying amounts approximate fair value due to their short maturities, and are therefore excluded from the fair value tables below.

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. There is a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1—Observable inputs such as quoted prices in active markets for identical assets or liabilities;

Level 2—Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and Level 3—Unobservable inputs that are supported by little or no market activity, which require management judgment or estimation.

The Company measures its cash equivalents, marketable securities, and convertible preferred stock warrant liabilities at fair value. The Company classifies its cash equivalents and marketable securities within Level 1 or Level 2 because the Company values these investments using quoted market prices or alternative pricing sources and models utilizing market observable inputs. The fair value of the Company's Level 1 financial assets is based on quoted market prices of the identical underlying security. The fair value of the Company's Level 2 financial assets is based on inputs that are directly or indirectly observable in the market, including the readily-available pricing sources for the identical underlying security that may not be actively traded. The Company classifies its convertible preferred stock warrant liabilities as Level 3. The convertible preferred stock warrant liabilities were valued using the Black-Scholes option-pricing model to determine the expected payout to calculate the fair value.

Financial assets and liabilities measured and recorded at fair value on a recurring basis consisted of the following types of instruments:

	As of December 31, 2017			
	Level 1	Level 2	Level 3	Total
Cash equivalents:				
Money market funds	$26,377	$—	$—	$26,377
Commercial paper	—	998	—	998
Corporate notes and bonds	—		—	—
Asset-backed securities	—	1,000	—	1,000
Total cash equivalents	26,377	1,998	—	28,375
Marketable securities:				
U.S. Treasury securities	—		—	—
Corporate notes and bonds	—	11,393	—	11,393
Commercial paper	—	5,184	—	5,184
Asset-backed securities	—	2,309	—	2,309
Total marketable securities	—	18,886	—	18,886
Total financial assets	$26,377	$20,884	$—	$47,261
Convertible preferred stock warrant liabilities	$—	$—	$1,016	$1,016
Total financial liabilities	$—	$—	$1,016	$1,016

	As of December 31, 2018			
	Level 1	Level 2	Level 3	Total
Cash equivalents:				
Money market funds	$2,419	$—	$—	$2,419
U.S. Treasury securities	—	1,998	—	1,998
Corporate notes and bonds	—	—	—	—
Asset-backed securities	—	—	—	—
Total cash equivalents	2,419	1,998	—	4,417
Marketable securities:				
Corporate notes and bonds	—	12,852	—	12,852
Commercial paper	—	20,086	—	20,086
U.S. Treasury securities	—	5,932	—	5,932
Asset-backed securities	—	7,809	—	7,809
Total marketable securities	—	46,679	—	46,679
Total financial assets	$2,419	$48,677	$—	$51,096
Convertible preferred stock warrant liabilities	$—	$—	$3,261	$3,261
Total financial liabilities	$—	$—	$3,261	$3,261

The following table sets forth a summary of the changes in the fair value of the Company's Level 3 financial liabilities (in thousands):

	Years Ended December 31,

	2017	2018
Fair value, beginning of period	$840	$1,016
Issuance of convertible preferred stock warrants	—	1,639
Change in fair value of Level 3 financial liabilities	176	606
Ending balance	$1,016	$3,261

The gains and losses from re-measurement of Level 3 financial liabilities are recorded as part of other expense, net in the Consolidated Statement of Operations and Comprehensive Loss.

There were no transfers of assets and liabilities measured at fair value between Level 1 and Level 2, or between Level 2 and Level 3, during the years ended December 31, 2017 and 2018.

4. Balance Sheet Information

Allowance for Doubtful Accounts. The activity in the accounts receivable reserves was as follows (in thousands):

	Years Ended December 31,	
	2017	2018
Beginning balance	$263	$1,119
Additions to the reserves	1,024	599
Write-offs/adjustments	(168)	(39)
Ending balance	$1,119	$1,679

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

	As of December 31,	
	2017	2018
Computer and networking equipment	$50,303	$65,060
Leasehold improvements	2,456	3,259
Furniture and fixtures	465	539
Office equipment	404	513
Internal-use software	5,649	8,604
Property and equipment, gross	59,277	77,975
Accumulated depreciation and amortization	(22,304)	(35,621)
Property and equipment, net	$36,973	$42,354

Depreciation and amortization expense on property and equipment for the year ended December 31, 2017 and 2018 was approximately $9.6 million and $13.3 million, respectively. Included in these amounts was amortization expense for capitalized internal-use software costs of approximately $1.3 million and $1.8 million for the year ended December 31, 2017 and 2018, respectively. As of December 31, 2017 and 2018, the unamortized balance of capitalized internal-use software costs on the Company's Consolidated Balance Sheet was approximately $4.2 million and $5.4 million, respectively.

Accrued Expenses. Accrued expenses consisted of the following (in thousands):

	As of December 31,	
	2017	2018
Accrued compensation and related benefits	$4,787	$3,952
Sales and use tax payable	2,008	3,077
Other accrued liabilities	4,734	8,506
Total	$11,529	$15,535

Other Current Liabilities. Other current liabilities of the following (in thousands):

	As of December 31,

	2017	2018
Liability for early-exercised stock options (see Note 10)	$134	$597
Deferred revenue	515	1,622
Other current liabilities	218	293
Total	$867	$2,512

Other Long-Term Liabilities. Other liabilities consisted of the following (in thousands):

	As of December 31,	
	2017	2018
Deferred rent	$920	$272
Other long-term liabilities	133	375
Total	$1,053	$647

Accumulated Other Comprehensive Loss. The following table summarizes the changes in accumulated other comprehensive loss, which is reported as a component of stockholders' deficit (in thousands):

	Foreign CurrencyTranslation	Available-for-sale Investments	Accumulated OtherComprehensiveLoss
Balance at January 1, 2017	$(43)	$(6)	$(49)
Other comprehensive income (loss)	32	(7)	25
Balance at December 31, 2017	$(11)	$(13)	$(24)
Other comprehensive income (loss)	(1)	(11)	(12)
Balance at December 31, 2018	$(12)	$(24)	$(36)

There were no reclassifications out of accumulated other comprehensive loss in the years ended December 31, 2017 and 2018.

5. Goodwill and Intangible Assets

The changes in the carrying amount of goodwill were as follows (in thousands):

	Year Ended December 31,	
	2017	2018
Beginning balance	$348	$382
Foreign currency translation	34	(22)
Ending balance	$382	$360

Intangible assets that are subject to amortization consisted of the following (in thousands):

	December 31, 2017			December 31, 2018		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Internet protocol addresses	$852	$(157)	$695	$852	$(242)	$610

The annual expected amortization expense of intangible assets subject to amortization as of December 31, 2018 is as follows (in thousands):

2019	$85
2020	85
2021	85
2022	85
2023	85
Thereafter	185
Total	$610

The Company performs tests for impairment of long-lived assets whenever events or circumstances suggest that long-lived assets may be impaired.

Aggregate expense related to amortization of intangible assets for the years ended December 31, 2017 and 2018 was $82,000 and $85,000, respectively.

6. Debt

In July 2013, the Company entered into a Loan and Security Agreement (Facility) with a bank related to an equipment facility providing the Company with an equipment line for advances of up to $2.5 million which was amended in September 2013 to increase the equipment line for advances of up to an aggregate of $5.0 million (as amended, Prior Loan Agreement). The interest rate associated with the equipment line was equal to 1.5% above the prime rate. The maturity date for each equipment advance was its 36th payment date but no later than October 1, 2017.

In November 2014, the Company amended the Prior Loan Agreement with the bank to increase the equipment line for advances of up to an aggregate of $15.0 million which was then amended in August 2016 for advances of up to an aggregate of $17.5 million and allowed for reborrowing of amounts repaid under the equipment loan (as amended, Senior Loan Agreement). The Senior Loan Agreement was additionally amended in February 2017 and March 2017 which extended the draw period of the Senior Loan Agreement to January 2018. The interest rate associated with each advance under the Agreement is 1.75% above the floating prime rate (5.5% as of December 31, 2018). For each equipment advance, the Company is obligated to make 36 equal monthly payments of principal plus interest. The maturity date for each equipment advance is its 36th payment date but no later than January 13, 2021.

In August 2016, the Company entered into a new Mezzanine Loan and Security Agreement (Mezzanine Loan Agreement) with the bank and another third-party lender for advances of up to an aggregate of $12.5 million through June 2017. The minimum amount for each advance under the Mezzanine Loan Agreement was $2.5 million. Each advance under the Mezzanine Loan Agreement will accrue interest at a fixed per annum rate equal to 11.75%, payable monthly. All advances made under the Mezzanine Loan Agreement are due and payable in full on the maturity date of August 11, 2019. The Company has not received any advances under the Mezzanine Loan Agreement as of December 31, 2018.

In November 2017, the Company entered into a Second Amended and Restated Loan and Security Agreement (as amended, Senior Loan Agreement), which increased the additional equipment line for advances up to an aggregate of $30.0 million through November 2018. The interest rate associated with each advance under the Agreement is 1.75% above the floating prime rate (5.5% at December 31, 2018). The Company is obligated to make repayment for the first 12 months with interest only. Upon conclusion of the first year of the Senior Loan Agreement, the Company is obligated to make equal monthly payments of principal plus interest with repayment no later than November 1, 2021.

The Prior Loan Agreement, the Senior Loan Agreement, and the Mezzanine Loan Agreement are secured by a security interest on substantially all of the Company's assets, including the equipment purchased with the advances. The Prior Loan Agreement, the Senior Loan Agreement, and the Mezzanine Loan Agreement also contain customary events of default including, among other things, that during the existence of an event of default, interest on the obligations could be increased by 5%. The Company is required to comply with certain affirmative and negative covenants in the Senior Loan Agreement, including a requirement that it maintain a ratio of cash and cash equivalents plus net unbilled accounts receivable to current liabilities plus long-term debt minus the current portion of any deferred revenue (an Adjusted Quick Ratio) at all times of at least 1.15 to 1.0 as well as a requirement that the Company achieve trailing three-month revenues tested on a monthly basis in amounts not less than 80% of its board approved annual budget. The Company is also required to maintain at least $10.0 million in unrestricted cash with the lenders or their affiliates at all times.

In June 2017, the Company entered into a Capital Lease Agreement with an equipment provider for $5 million in network equipment, at an annual interest rate of 5.24% over a term of 4 years. The agreement provides for a bargain purchase price at the end of the term. The amortization of leased assets is included in depreciation and amortization expense.

In December 2018, the Company entered into a $30,000,000 credit facility (Credit Facility). As part of this agreement, the Second Amendment to Amended and Restated Loan was amended to allow for this additional indebtedness. The advances under the Credit Facility bear interest at a rate of prime plus 4.25%. The Company is obligated to make repayment of interest only until December 2021 at which time all outstanding principal is due. As of December 31, 2018, $20,000,000 has been drawn on this Credit Facility. All outstanding loans under the Credit Facility, if not paid earlier, will become due and payable on December 24, 2021. The Company is required to comply with certain affirmative and negative covenants in the Second Lien Credit Agreement, including a requirement that the Company achieve trailing three-month revenues tested on a monthly basis in amounts not less than 75% of its board approved annual budget.

The Company is in compliance with its covenants as of December 31, 2018.

The following table reflects the carrying values of the debt agreements as of December 31, 2017 and 2018 (in thousands):

	As of December 31,	
	2017	2018
Liability component:		
Principal amount	$24,912	$52,705
Less: debt issuance costs	—	(1,896)
Less: current portion of long-term debt	(1,758)	(11,370)
Long-term debt, less current portion	$23,154	$39,439

Contractual future repayments for the above as of December 31, 2018 were as follows (in thousands):

	Principal	Interest	Total
2019	$11,370	$3,799	$15,169
2020	11,443	3,138	14,581

2021	29,868	2,327	32,195
2022	24	—	24
Total	$52,705	$9,264	$61,969

Interest expense related to debt for the years ended December 31, 2017 and 2018 was $1.1 million and $1.9 million, respectively.

7. Convertible Preferred Stock Warrant Liabilities

The Company issued the following convertible preferred stock warrants in connection with debt agreements entered into on various dates as described in Note 6:

Warrants issued with loan agreements:	**Series B Preferred Stock**	**Series B Preferred Stock**	**Series C Preferred Stock**	**Series D Preferred Stock**	**Series F Preferred Stock**
Facility—dates through September 2013	62,005	—	—	—	—
Prior Loan Agreement—dates through November 2014	—	165,245	—	—	—
Term Loan Agreement—November 2014	—	—	105,688	—	—
Mezzanine Loan Agreement—August 2016	—	—	—	95,116	—
Credit Facility—December 2018	—	—	—	—	456,586
Number of shares underlying warrants	62,005	165,245	105,688	95,116	456,586
Fair value of warrant upon issuance	$21,000	$47,000	$135,000	$233,000	$1,639,000
Exercise Price	$0.514	$0.514	$0.575	$1.180	$5.1123
Fair value of stock	$0.493	$0.36 - $0.422	$1.577	$3.095	$5.55
Expected Term (in years)	10	10	10	10	10
Volatility	56.9%	56.9%	52.8%	53.0%	50%
Risk-free interest rate	2.74%	2.54% - 2.89%	2.30%	1.57%	2.8%
Dividend yield	— %	— %	— %	— %	— %
Year of expiration	2023	2023	2024	2026	2028

These warrants were recorded at fair value and are marked to market at each reporting period with changes recorded within Other expense, net on the Consolidated Statement of Operations and Comprehensive Loss and are classified and recorded as Convertible preferred stock warrant liabilities on the Consolidated Balance Sheet.

The fair value of the warrants as of December 31, 2017 was estimated using the following assumptions:

	Series B	**Series C**	**Series D**	**Total**
Fair value (in thousands)	$468	$274	$274	$1,016
Expected remaining term (in years)	6	7	9	
Risk-free interest rate	2.40%	2.40%	2.40%	
Expected volatility	41.0%	44.0%	46.0%	
Dividend yield	— %	— %	— %	

The fair value of the warrants as of December 31, 2018 was estimated using the following assumptions:

	Series B	**Series C**	**Series D**	**Series F**	**Total**
Fair value (in thousands)	$857	$407	$358	$1,639	$3,261
Expected remaining term (in years)	5	6	8	10	
Risk-free interest rate	2.62%	2.62%	2.62%	2.80%	
Expected volatility	50.0%	50.0%	50.0%	50%	
Dividend yield	— %	— %	— %	— %	

The above assumptions were determined as follows:

Expected Term. The remaining contractual term represents the time from the date of the valuation to the expiration of the warrant.

Risk-free Interest Rate. The risk-free interest rate is based on the U.S. Treasury yield for zero coupon U.S. Treasury notes with maturities approximately equal to the term of the warrant.

Volatility. The volatility is derived from historical volatilities of several unrelated publicly listed peer companies over a period approximately equal to the term of the warrant because the Company has limited information on the volatility of the preferred stock since there is currently no trading history. When making the selections of industry peer companies to be used in the volatility calculation, the Company considered the size, operational, and economic similarities to the Company's principle business operations.

Dividend Yield. The expected dividend assumption is based on the Company's current expectations about the Company's anticipated dividend policy.

8. Commitments and Contingencies

Operating Lease Commitments

The Company leases its facilities under non-cancelable operating leases. These operating leases expire at various dates through January 2021 and generally require the payment of real estate taxes, insurance, maintenance, and operating costs.

The minimum aggregate future obligations under non-cancelable leases as of December 31, 2018 were as follows (in thousands):

	Gross Lease Commitment	Sublease Income	Net Lease Commitment
2019	$6,293	$(1,195)	$5,097
2020	2,462	(305)	2,157
2021	233	—	233
2022	—	—	—
Total	$8,988	$(1,500)	$7,487

Rent expense for the years ended December 31, 2017 and 2018 was $5.0 million and $6.9 million respectively. During the years ended December 31, 2017 and 2018, the Company had sublease agreements with tenants of various properties vacated by the Company. The amount paid to the Company by these sublease tenants was approximately $1.1 million and $0.9 million during the years ended December 31, 2017 and 2018, respectively.

Purchase Commitments

As of December 31, 2018, the Company had long-term commitments for cost of revenue related agreements (i.e., bandwidth usage, colocation, peering, and other managed services with various networks, ISPs and other third-party vendors), and various non-cancelable software as a service (SaaS) agreements. Additionally, as of December 31, 2018, the Company had entered into purchase orders with various vendors. The minimum future commitments as of December 31, 2018 were as follows (in thousands):

	Cost of Revenue Commitments	SaaS Agreements	Total Purchase Commitments
2019	$42,257	$1,434	$43,691
2020	10,563	82	10,645
2021	1,802	—	1,802
2022	402	—	402
Total	$55,024	$1,516	$56,540

Legal Matters

The Company is party to various disputes that management considers routine and incidental to its business. Management does not expect the results of any of these routine actions to have a material effect on the Company's business, results of operations, financial condition, or cash flows.

Indemnification

The Company enters into standard indemnification agreements in the ordinary course of business. Pursuant to these agreements, the Company agrees to indemnify, hold harmless, and reimburse the indemnified party for losses suffered or incurred by the indemnified party, generally the Company's business partners or customers, in connection with its provision of its services. Generally, these obligations are limited to claims relating to infringement of a patent, copyright, or other intellectual property right, breach of the Company's security or data protection obligations, or the Company's negligence, willful misconduct, or violation of law. Subject to applicable statutes of limitation, the term of these indemnification agreements is generally for the duration of the agreement. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited; however, the Company carries insurance that covers certain third-party claims relating to its services and could limit the Company's exposure in that respect.

The Company has agreed to indemnify each of its officers and directors during his or her lifetime for certain events or occurrences that happen by reason of the fact that the officer or director is or was or has agreed to serve as an officer or director of the Company. The Company has director and officer insurance policies that may limit its exposure and may enable the Company to recover a portion of certain future amounts paid.

To date, the Company has not encountered material costs as a result of such indemnification obligations and has not accrued any related liabilities in its financial statements. In assessing whether to establish an accrual, the Company considers such factors as the degree of probability of an unfavorable outcome and the ability to make a reasonable estimate of the amount of loss.

9. Convertible Preferred Stock

In June and December 2018, the Company amended its Amended and Restated Certificate of Incorporation to (i) increase the shares of common stock authorized for issuance to 195,000,000 shares; (ii) increase the shares of preferred stock authorized for issuance to 108,297,289 shares; (iii) decrease the number of authorized shares of the Company's Series E Preferred Stock from 13,370,000 shares to 13,218,064 shares; (iv) designate 8,000,000 shares of Series F Preferred Stock; and (v) increase the gross proceeds of an initial public offering to not less than $120 million under the automatic conversion provision described below. In June and July 2018, the Company issued 7,824,266 shares of Series F Preferred Stock at a price of $5.1123 per share for gross proceeds of approximately $40 million.

The Company has seven outstanding series of Preferred Stock (Series Preferred) each with a par value of $0.00002 per share, which are convertible at the option of the holder. The Series Preferred has been classified as temporary equity on the Consolidated Balance Sheet. The Series Preferred is not redeemable; however, upon the event of a voluntary or involuntary liquidation, dissolution, change in control, or winding up of the Company, holders of the Series Preferred may have the right to receive their liquidation preference under the terms of the Series Preferred.

A summary of the Preferred Stock outstanding and other related information is as follows (in thousands, except share data):

	As of December 31, 2018			
	Shares Authorized	Shares Issued and Outstanding	Net Carrying Amount	Liquidation Preference
Series Seed Preferred Stock	16,098,730	16,098,730	$1,200	$1,200
Series A Preferred Stock	5,467,040	5,467,040	1,050	1,050
Series B Preferred Stock	22,117,670	21,890,420	11,260	11,260
Series C Preferred Stock	19,611,811	19,506,123	41,420	41,527
Series D Preferred Stock	23,350,927	23,255,811	74,912	75,000
Series E Preferred Stock	13,218,064	13,218,064	49,863	50,000
Series F Preferred Stock	8,433,047	7,824,266	39,879	40,000
Total	108,297,289	107,260,454	$219,584	$220,037

The rights, preferences, privileges, restrictions, and other matters relating to the Series Preferred are set forth in the Company's Amended and Restated Certificate of Incorporation dated June 28, 2018, as amended (Charter), and are summarized as follows:

Dividend Rights

Holders of shares of Series Preferred, in preference to the holders of Common Stock, are entitled to receive, when, as and if declared by the Board of Directors (Board), but only out of funds that are legally available therefor, cash dividends at the rate of eight percent (8%) of the applicable original issue price per annum on each outstanding share of Series Preferred. Such dividends shall be payable only when, as and if declared by the Board and shall be non-cumulative. As of December 31, 2018, no dividends have been declared or paid.

Voting Rights

The holders of shares of each Series Preferred have the right to one vote for each share of Common Stock issuable upon conversion of such shares. The holders of Series Preferred and Common Stock currently have the right to elect the Board as follows:

(a)	one director elected by the holders of the Series A Preferred Stock, voting as a separate class, as long as at least 1,750,000 shares of Series A Preferred Stock remain outstanding;
(b)	one director elected by the holders of the Series B Preferred Stock, voting as a separate class, as long as at least 6,250,000 shares of Series B Preferred Stock remain outstanding;
(c)	two directors elected by the holders of Common Stock, voting as a separate class; and
(d)	all remaining directors elected by the holders of the Common Stock and the Series Preferred, voting together as a single class on an as-if-converted to Common Stock basis.

Liquidation Rights

Upon any change in control, liquidation, dissolution, or winding up of the Company, whether voluntary or involuntary (Liquidation Event), before any distribution or payment shall be made to the holders of any Common Stock, the holders of Series Preferred shall be entitled to be paid out of the assets of the Company legally available for distribution for each share of Series Preferred held by them, an amount per share of Series Preferred equal to the applicable Original Issuance Price. If, upon any such Liquidation Event, the assets of the Company are insufficient to permit payment in full to all holders of Series Preferred, then such amount shall be distributed among the holders of Series Preferred ratably in proportion to the full amounts to which they would otherwise be respectively entitled.

Conversion Rights

The holders of the Company's Preferred Stock have the right at any time to convert each such share into shares of Common Stock at the original issue price for each share as set forth in the Charter.

Each share of Series Preferred shall automatically convert into shares of Common Stock upon (a) the consummation of an initial public offering of the Company's Common Stock which results in gross proceeds to the Company of not less than $120 million, or (b) upon receipt of a written request for such conversion from the requisite holders of the then outstanding Series Preferred, as set forth in the Charter, or on such other date as is specified in such written request. Any automatic conversion of the Series Preferred into Common Stock that is proposed in connection with a Liquidation Event requires the prior consent from the requisite holders of the outstanding Series Preferred, as set forth in the Charter.

Redemption

Any share or shares of Series Preferred redeemed, purchased, converted, or exchanged shall be cancelled and retired and shall not be reissued or transferred.

10. Common Stock

The Company's Amended and Restated Certificate of Incorporation, as amended and restated in June 2018 and amended in December 2018, authorizes the issuance of 195,000,000 shares of Common Stock with $0.00002 par value per share and 108,297,289 shares of preferred stock with $0.00002 par value per share. As of December 31, 2018, 50,051,765 shares of Common Stock were issued and outstanding.

Equity Plan

In March 2011, the Company's stockholders approved the Fastly, Inc. 2011 Equity Incentive Plan (2011 Plan). The 2011 Plan was amended in February 2013, May 2014, July 2015, December 2016, April 2017 and June 2018. The 2011 Plan allows for the issuance of incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock awards and restricted stock unit awards to employees, directors, and consultants of the Company. There were 43,378,820 shares of Common Stock reserved for issuance under the 2011 Plan as of December 31, 2018. Options granted under the 2011 Plan generally expire within 10 years from the date of grant and generally vest over four years, at the rate of 25% on the first anniversary of the date of grant and ratably on a monthly basis over the remaining 36-month period thereafter based on continued service and are exercisable for shares of the Company's Common Stock. As of December 31, 2018, there were 1,219,609 shares of Common Stock available for issuance pursuant to future grants under the 2011 Plan.

Stock Option Activity

The following table summarizes stock option activity during the years ended December 31, 2017 and 2018:

	Shares	Weighted-Average ExercisePrice	Weighted-AverageRemainingContractualTerm	Aggregate Intrinsic Value
	(in thousands)		(in years)	(in thousands)
Outstanding at January 1, 2017	16,935	$0.77	8.5	$7,480
Granted	6,017	1.45		
Exercised	(828)	0.74		
Cancelled/forfeited	(1,383)	0.94		
Outstanding at December 31, 2017	20,741	0.96	8.0	16,901
Granted	7,969	2.66		
Exercised	(2,529)	1.05		
Cancelled/forfeited	(1,760)	1.32		
Outstanding at December 31, 2018	24,421	1.48	7.8	64,590
Vested and exercisable at December 31, 2018	15,694	$1.06	7.0	$47,958

The total pre-tax intrinsic value of options exercised during the years ended December 31, 2017 and 2018 was $0.7 million and $3.0 million, respectively. The total grant date fair value of employee options vested for the years ended December 31, 2017 and 2018 was $2.9 million and $3.6 million, respectively. The weighted average grant-date fair value for options granted to employees during the years ended December 31, 2017 and 2018 was $0.78 and $1.39, respectively.

Early Exercise of Stock Options

Certain stock options granted by the Company are exercisable at the date of grant, with unvested shares subject to repurchase by the Company in the event of voluntary or involuntary termination of employment of the stockholder. Such exercises are recorded as a liability on the Consolidated Balance Sheet and reclassified into equity as the options vest. As of December 31, 2017 and 2018, a total of 275,666 shares and 489,317 shares of Common Stock were subject to repurchase by the Company at the lower of (i) the fair market value of such shares on the date of repurchase, or (ii) the original exercise price of such shares. The corresponding exercise value of approximately $266,000 and $972,000 as of December 31, 2017 and 2018, respectively, is recorded in other liabilities.

The activity of non-vested shares as a result of early exercise of options granted to employees and non-employees, is as follows (in thousands):

	Year Ended December 31,

	2017	2018
Beginning balance	1,194	276
Early exercise of options	4	475
Vested	(922)	(240)
Repurchased	—	(22)
Ending balance	276	489

Employee Stock Options Valuation

The Company estimates the fair value of stock options on the date of grant using the Black-Scholes option-pricing model. Each of the Black-Scholes inputs is subjective and generally requires significant judgments to determine. The Company estimates the fair value of stock option awards during the years ended December 31, 2017 and 2018 on the date of the grant using the Black-Scholes option pricing model with the following weighted-average assumptions:

	2017	2018
Fair value of common stock	$1.49 - $1.79	$1.93 - $4.08
Expected term (in years)	5.96	6.02
Risk-free interest rate	1.9% - 2.1%	2.62% - 3.0%
Expected volatility	41% - 45%	40.2% - 41.5%
Dividend yield	— %	— %

Fair Value of Common Stock. Given the absence of a public trading market, the Board considered numerous objective and subjective factors to determine the fair value of the Company's Common Stock at each meeting at which awards were approved. These factors included, but were not limited to (i) contemporaneous third-party valuations of Common Stock; (ii) the rights and preferences of Series Preferred relative to Common Stock; (iii) the lack of marketability of Common Stock; (iv) developments in the business; and (v) the likelihood of achieving a liquidity event, such as an IPO or sale of the Company, given prevailing market conditions.

Expected Term. The expected term represents the period that the Company's stock-based awards are expected to be outstanding. The Company estimates the expected term of stock options granted based on the simplified method.

Risk-free Interest Rate. The Company bases the risk-free interest rate used in the Black-Scholes option-pricing model on the implied yield available on U.S. Treasury zero-coupon issues with an equivalent expected term of the options for each option group.

Expected Volatility. The Company determines the price volatility factor based on the historical volatilities of several unrelated publicly listed peer companies as the Company did not have trading history for its Common Stock. When making the selections of industry peer companies to be used in the volatility calculation, the Company considered the size, operational, and economic similarities to the Company's principle business operations.

Dividend Yield. The expected dividend assumption is based on the Company's current expectations about its anticipated dividend policy.

Stock-based Compensation Expense

The following table summarizes the components of total stock-based compensation expense included in the Company's Consolidated Statement of Operations and Comprehensive Loss (in thousands):

	Year Ended December 31,	
	2017	2018
Stock-based compensation expense by caption:		
Cost of revenue	$190	$265
Research and development	1,040	1,332
Sales and marketing	493	1,023
General and administrative	1,086	1,459
Total	$ 2,809	$ 4,079

As of December 31, 2018 unrecognized stock-based compensation cost related to outstanding unvested stock options that are expected to vest was $12.9 million. This unrecognized stock-based compensation cost is expected to be recognized over a weighted-average period of approximately 3.1 years.

11. Net Loss Per Share Attributable to Common Stockholders

Basic and diluted net loss per share attributable to common stockholders is presented in conformity with the two-class method required for participating securities. The Company considers all series of the Series Preferred to be participating securities. Under the two-class method, the net loss attributable to common stockholders is not allocated to the Series Preferred as the holders of the Series Preferred do not have a contractual obligation to share in our losses. Basic net loss per share attributable to common stockholders is computed by dividing the net loss by the weighted-average number of shares of Common Stock outstanding during the period, less shares subject to repurchase. The diluted net loss per share attributable to common stockholders is

computed by giving effect to all potential dilutive Common Stock equivalents outstanding for the period. For purposes of this calculation, the Series Preferred, stock options, convertible preferred stock warrants, and early exercised stock options are considered to be potential common stock equivalents but have been excluded from the calculation of diluted net loss per share attributable to common stockholders as their effect is anti-dilutive.

The following table sets forth the computation of basic and diluted net loss per share attributable to common stockholders:

	Year Ended December 31,	
	2017	2018
	(in thousands, except share andper share data)	
Net loss	$(32,450)	$(30,935)
Net loss attributable to common stockholders	$(32,450)	$(30,935)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	46,799,801	48,754,382
Net loss per share attributable to common shareholders, basic and diluted	$(0.69)	$(0.63)

Since the Company was in a loss position for the period presented, basic net loss per share is the same as diluted net loss per share as the inclusion of all potential common shares outstanding would have been anti-dilutive. The potential shares of common stock that were excluded from the computation of diluted net loss per share attributable to common stockholders for the period presented because including them would have been antidilutive are as follows:

	Number ofShares
Convertible preferred stock	107,260,454
Convertible preferred stock warrants	1,036,835
Stock options	15,694,000
Early exercised stock options	489,317
Total	124,480,606

Unaudited Pro Forma Net Loss Per Share. We have presented the unaudited pro forma basic and diluted net loss per share which has been computed to give effect to the conversion of our Series Preferred into Common Stock (using the if-converted method) as though the conversion had occurred as of the beginning of the period. The unaudited pro forma net loss per share does not include shares being offered in the assumed IPO.

The following table sets forth the computation of our unaudited pro forma basic and diluted net loss per share:

	Year Ended December 31,	
	2017	2018
	(in thousands, except share andper share data)	
Numerator:		
Net loss attributable to common stockholders	$(32,450)	$(30,935)
Net loss	$(32,450)	$(30,935)
Denominator:		
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	46,799,801	48,754,382
Pro forma adjustment to reflect assumed conversion of Series Preferred Stock		103,419,352
Weighted-average shares used in computing pro forma net loss per share, basic and diluted		152,173,174
Pro forma net loss per share, basic and diluted		$(0.20)

12. Income Taxes

Loss before income taxes includes the following components (in thousands):

	Year Ended December 31,	
	2017	2018
United States	$(23,372)	$(20,644)
Foreign	(8,870)	(10,291)
Loss before income taxes	$(32,242)	$(30,935)

The expense for income taxes consists of the following (in thousands):

	Year Ended December 31,	
	2017	2018
Current tax provision (benefit):		
Federal	$—	$—
State	68	81
Foreign	140	104
Deferred tax provision (benefit):		
Federal	—	—
State	—	—
Foreign	—	—
Total tax expense	$208	$185

Reconciliation between the Company's effective tax rate on income from continuing operations and the U.S. federal statutory rate is as follows:

	Year Ended December 31,	
	2017	2018
Provision at federal statutory tax rate	34%	21%
State taxes, net of federal tax impact	(3)%	— %
Change in valuation allowance	13%	(11)%
Foreign tax rate differential	(10)%	(7)%
Federal statutory tax rate change	(32)%	— %
Other	(3)%	(4)%
Effective income tax rate	(1)%	(1)%

The Company's deferred tax assets and liabilities were as follows (in thousands):

	As of December 31,	
	2017	2018
Reserves and accruals	$1,562	$1,892
Stock-based compensation	545	686
Net operating losses	22,911	25,558
Other	1,072	1,780
Amortization	34	344
Deferred tax assets	26,124	30,260
Depreciation	(1,359)	(212)
State tax	(1,376)	(1,706)
Deferred tax liabilities	(2,735)	(1,918)
Valuation allowance	(23,389)	(28,342)
Net deferred tax (liabilities) assets	$—	$—

As of December 31, 2017 and 2018, the Company had net operating loss carryforwards for U.S. federal income tax purposes of approximately $80.9 million and $88.7 million and for state income tax purposes of approximately $69.8 million and $82.0 million, respectively. The federal net operating loss carryforwards, if not utilized, will begin to expire in 2031. The state net operating loss carryforward, if not utilized, will begin to expire on various dates starting in 2021.

Utilization of the net operating loss carryforwards may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986, as amended (IRC) and similar state provisions. The Company has not performed a detailed analysis to determine whether an ownership change under Section 382 of the IRC has occurred. The effect of an ownership change would be the imposition of an annual limitation on the use of net operating loss carryforwards attributable to periods before the change.

Based on available positive and negative evidence, it is more likely than not that the net deferred tax assets will not be fully realizable for the years ended December 31, 2017 and 2018. Accordingly, the Company applied a full valuation allowance against all net deferred taxes at December 31, 2017 and 2018. The net change in the total valuation allowance for the years ended December 31, 2017 and 2018 was a decrease of approximately $2.0 million and an increase of approximately $5.0 million, respectively.

As of December 31, 2018, there were no undistributed earnings of non-U.S. subsidiaries. No provision for U.S. income and foreign withholding taxes has been made for these permanently reinvested foreign earnings because it is management's intention to permanently reinvest such undistributed earnings outside the United States.

The Company's policy is to recognize interest and penalties associated with uncertain tax benefits as part of the income tax provision and include accrued interest and penalties with the related income tax liability on its consolidated balance sheet. To date, the Company has not recognized any interest and penalties in its consolidated statements of operations, nor has it accrued for or made payments for interest and penalties. The Company has no unrecognized tax benefits as of December 31, 2018.

Generally, in the U.S. federal and state taxing jurisdictions, tax periods in which certain loss and credit carryovers are generated remain open for audit until such time as the limitation period ends for the year in which such losses or credits are utilized.

On December 22, 2017, the Tax Act was enacted into law. The Tax Act enacted significant changes affecting the Company's fiscal year 2017, including, but not limited to, (1) reducing the U.S. federal corporate tax rate and (2) imposing a one-time transition tax on certain unrepatriated earnings of foreign subsidiaries that had not been previously taxed in the U.S.

The Tax Act also establishes new tax provisions affecting the Company's fiscal year 2018, including, but not limited to, (1) creating a new provision designed to tax global intangible low-tax income (GILTI); (2) generally eliminating U.S. federal taxes on dividends from foreign subsidiaries; (3) eliminating the corporate alternative minimum tax (AMT); (4) creating the base erosion anti-abuse tax (BEAT); (5) establishing a deduction for foreign derived intangible income (FDII); (6) repealing domestic production activity deduction; and (7) establishing new limitations on deductible interest expense and certain executive compensation.

ASC 740, *Income Taxes*, requires companies to recognize the effect of the tax law changes in the period of enactment. However, the SEC staff issued Staff Accounting Bulletin 118 (SAB 118) which allowed companies to record provisional amounts during a measurement period not extending beyond one year from the Tax Act enactment date. During the fourth quarter of the year ended December 31, 2018, the Company has completed the accounting for all the impacts of the Tax Act. There were no material changes from the provisional amounts recorded as of December 31, 2017.

Reduction of U.S. Federal Corporate Tax Rate: The Company measures deferred tax assets and liabilities using enacted tax rates that will apply in the years in which the temporary differences are expected to be recovered or paid. Accordingly, the Company's deferred tax assets and liabilities were re-measured to reflect the reduction in the U.S. corporate income tax rate from 35% to 21%, resulting in a provisional $10.4 million reduction to the Company's deferred tax assets and a corresponding provisional $10.4 million reduction to the Company's valuation allowance as of fiscal year 2017. The Company completed their accounting for re-measurement of its deferred tax assets and liabilities as of fiscal year 2018 and determined no further adjustment was required from the provisional adjustment recorded in fiscal year 2017.

Transition Tax on Foreign Earnings: The Company did not recognize any provisional income tax expense in fiscal year 2017 as it relates to the one-time transition tax on indefinitely reinvested earnings. The Company completed its computation of transition tax liability in 2018 and maintained that no transition tax liability was required to be accrued.

GILTI: The Tax Act subjects a U.S. corporation to tax on its GILTI. U.S. GAAP allows companies to make an accounting policy election to either (1) treat taxes due on future GILTI inclusions in the U.S. taxable income as a current-period expense when incurred (period cost method) or (2) factoring such amounts into a company's measurement of its deferred taxes (deferred method). During the fourth quarter of the year ended December 31, 2018, the Company's analysis of the new GILTI rules is complete and the Company has elected the period cost method. There was no financial statement impact in connection with the new GILTI provision.

13. Information About Revenue and Geographic Areas

The Company considers operating segments to be components of the Company in which separate financial information is available and is evaluated regularly by the Company's chief operating decision maker in deciding how to allocate resources and in assessing performance. The chief operating decision maker for the Company is the Chief Executive Officer. The Chief Executive Officer reviews financial information presented on a consolidated basis, accompanied by information about revenue customer size and industry vertical for purposes of allocating resources and evaluating financial performance.

The Company has one business activity, and there are no segment managers who are held accountable for operations, operating results, or plans for levels or components below the consolidated unit level. Accordingly, the Company has determined that it has a single reporting segment and operating unit structure.

Revenue

Revenue by geography is based on the billing address of the customer. The following table presents the Company's net revenue by geographic region:

	Year Ended December 31,	
	2017	2018
	(in thousands)	
United States	$82,700	$110,811
All other countries	22,200	33,752
Total revenue	$ 104,900	$ 144,563

Long-Lived Assets

The Company's long-lived assets by geographic region consisted of the following (in thousands):

	As of December 31,	
	2017	2018
United States	$27,066	$28,723
All other countries	9,907	13,631
	$36,973	$42,354

14. Employee Benefit Plan

The Company has established a savings plan (Plan) for its employees that is designed to be qualified under Section 401(k) of the Internal Revenue Code. Eligible employees are permitted to contribute to the Plan through payroll deductions within statutory and plan limits. The Company may make matching contributions to the Plan as determined each year by the Company. The Company did not make any matching contributions to the Plan for the years ended December 31, 2017 and 2018.

15. Related Party Transactions

Notes Receivable from Stockholder

In July 2016, a stockholder borrowed approximately $125,000 from the Company to exercise stock options for 106,250 shares of common stock pursuant to a promissory note from the stockholder. The note bears interest at a rate of 1.77%. For the purposes of the financial statements, the shares will not be reported as exercised, issued, or outstanding until the promissory note is repaid in full. This stockholder is not one of the Company's executive officers or directors. Approximately $125,000 and $75,000 is outstanding, as of December 31, 2017 and 2018, respectively.

16. Subsequent Events (unaudited)

Subsequent events were evaluated through the date the financial statements were issued April 4, 2019.

Subsequent to December 31, 2018, the Company granted stock options to purchase up to 3,905,125 shares of common stock with a weighted-average exercise price of $4.35 per share.

Behind the best of the web. ,. ..) r Through and including , 2019, (the 25th day after the date of this prospectus), all dealers that effect transactions in our Class A common stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Shares

Class A Common Stock

Prospectus

BofA Merrill Lynch

Citigroup

Credit Suisse

William Blair

Raymond James

Baird

Oppenheimer & Co.

Stifel

Craig-Hallum Capital Group

D.A. Davidson & Co.

, 2019

Part Ii

Information Not Required in Prospectus

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth all costs and expenses, other than underwriting discounts and commissions, payable by us in connection with the sale of the Class A common stock being registered. All amounts shown are estimates except for the SEC registration fee and the FINRA filing fee.

	Amount to be Paid
SEC registration fee	$12,120*
FINRA filing fee	15,500*
Exchange initial listing fee	*
Blue sky fees and expenses	*
Printing and engraving	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent and registrar fees	*
Miscellaneous fees and expenses	*
Total	*

* To be filed by amendment.

Item 14. Indemnification of Directors and Officers.

We are incorporated under the laws of the State of Delaware. Section 102 of the Delaware General Corporation Law permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his or her duty of loyalty, failed to act in good faith, engaged in intentional misconduct, or knowingly violated a law, authorized the payment of a dividend, or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit, or proceeding to which such person is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue, or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

As permitted by the Delaware General Corporation Law, our amended and restated certificate of incorporation and amended and restated bylaws in effect upon the completion of this offering provide that: (1) we are required to indemnify our directors to the fullest extent permitted by the Delaware General Corporation Law; (2) we may, in our discretion, indemnify our officers, employees, and agents as set forth in the Delaware General Corporation Law; (3) we are required, upon satisfaction of certain conditions, to advance all expenses incurred by our directors in connection with certain legal proceedings; (4) the rights conferred in the bylaws are not exclusive; and (5) we are authorized to enter into indemnification agreements with our directors, officers, employees, and agents.

Our policy is to enter into agreements with our directors that require us to indemnify them against expenses, judgments, fines, settlements, and other amounts that any such person becomes legally obligated to pay (including with respect to a derivative action) in connection with any proceeding, whether actual or threatened, to which such person may be made a party by reason of the fact that such person is or was a director of us or any of our affiliates, provided such person acted in good faith and in a manner such person reasonably believed to be in, or not opposed to, our best interests. These indemnification agreements also set forth certain procedures that will apply in the event of a claim for indemnification thereunder. At present, no litigation or proceeding is pending that involves any of our directors regarding which indemnification is sought, nor are we aware of any threatened litigation that may result in claims for indemnification.

We maintain a directors' and officers' liability insurance policy. The policy insures directors and officers against unindemnified losses arising from certain wrongful acts in their capacities as directors and officers and reimburses us for those losses for which we have lawfully indemnified the directors and officers. The policy contains various exclusions.

In addition, the underwriting agreement filed as Exhibit 1.1 to this registration statement provides for indemnification by the underwriters of us and our officers and directors for certain liabilities arising under the Securities Act, or otherwise. Our amended and restated investors rights agreement with certain stockholders also provides for cross-indemnification in connection with the registration of our common stock on behalf of such investors.

Item 15. Recent Sales of Unregistered Securities.

The following list sets forth information regarding all unregistered securities issued by us since January 1, 2016 through the date of the prospectus that is a part of this registration statement:

Issuances of Common Stock and Options to Purchase Common Stock

From January 1, 2016 through the date of this registration statement, we have granted under our 2011 Plan options to purchase an aggregate of 24,034,219 shares of our Class B common stock and a restricted stock award to purchase 10,000 shares of our Class B common stock to employees, consultants, and directors, having exercise prices ranging from $1.18 to $5.01 per share. Of these, options to purchase an aggregate of 3,172,329 shares have been cancelled without being exercised. From January 1, 2016 through the date of this registration statement, an aggregate of 5,664,903 shares of our common stock were issued upon the exercise of stock options under the 2011 Plan, at exercise prices between $0.046 and $4.12 per share, for aggregate proceeds of approximately $5.3 million.

The offers, sales, and issuances of the securities described in the preceding paragraph were deemed to be exempt from registration either under Rule 701 promulgated under the Securities Act (Rule 701) in that the transactions were under compensatory benefit plans and contracts relating to compensation, or under Section 4(a)(2) of the Securities Act in that the transactions were between an issuer and members of its senior executive management and did not involve any public offering within the meaning of Section 4(a)(2). The recipients of such securities were our employees, directors, or consultants and received the securities under our equity incentive plans. Appropriate legends were affixed to the securities issued in these transactions.

Issuances of Preferred Stock and Warrants

These securities were issued pursuant to the exemption from registration provided by Section 4(a)(2) of the Securities Act of 1933, as amended, in reliance on the recipient's status as an "accredited investor" as defined in Rule 501(a) of Regulation D.

In April 2017 and May 2017, we issued and sold an aggregate of 13,218,064 shares of Series E Preferred Stock to 13 accredited investors at $3.7827 per share for an aggregate consideration of approximately $49,999,971.

In June 2018 and July 2018, we issued and sold an aggregate of 7,824,266 shares of Series F Preferred to 12 accredited investors at $5.1123 per share for an aggregate consideration of approximately $39,999,995.

In August 2016, we issued warrants to purchase an aggregate of 95,116 shares of Series D Preferred Stock with a weighted-average exercise price of $1.18 per share to a total of two accredited investors. None of such warrants have been exercised.

In December 2018, we issued warrants to purchase an aggregate of 608,781 shares of Series F Preferred Stock with a weighted-average exercise price of $5.11 per share to a total of three accredited investors. None of such warrants have been exercised.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits

Exhibit Number	Description of Document
1.1†	Form of Underwriting Agreement.
3.1	Amended and Restated Certificate of Incorporation of Fastly, Inc., as amended and as currently in effect.
3.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation of Fastly, Inc., dated December 20, 2018.
3.3†	Form of Amended and Restated Certificate of Incorporation of Fastly, Inc. to be effective upon the completion of this offering.
3.4	Amended Bylaws of Fastly, Inc., as currently in effect.
3.5†	Form of Amended and Restated Bylaws of Fastly, Inc. to be effective upon the completion of this offering.
4.1†	Form of Class A common stock certificate of Fastly, Inc.
5.1†	Opinion of Cooley LLP.
10.1	Amended and Restated Investor Rights Agreement by and among Fastly, Inc. and certain of its stockholders, dated June 29, 2018.
10.2+	2011 Equity Incentive Plan, as amended to date.
10.3+	Forms of Option Agreement, Notice of Stock Option Grant, and Exercise Notice under 2011 Equity Incentive Plan.
10.4†+	2019 Equity Incentive Plan.
10.5†+	Forms of Option Agreement, Notice of Stock Option Grant, and Exercise Notice under 2019 Equity Incentive Plan.
10.6†+	Form of Restricted Stock Unit Award Agreement under 2019 Equity Incentive Plan.
10.7†+	2019 Employee Stock Purchase Plan.
10.8†	Form of Indemnification Agreement by and between Fastly, Inc. and each of its directors and executive officers.
10.9+	Independent Contractor Services Agreement, by and between Fastly, Inc. and Possibilities Training Group, dated October 28, 2013.

Exhibit Number	Description of Document
10.10+	Change of Control and Retention Agreement, by and between Fastly, Inc. and Joshua Bixby, dated February 6, 2019.
10.11+	Offer Letter Agreement, by and between Fastly, Inc. and Adriel Lares, dated April 26, 2016.
10.12+	Change of Control and Retention Agreement, by and between Fastly, Inc. and Adriel Lares, dated September 12, 2016.
10.13+	Offer Letter Agreement, by and between Fastly, Inc. and Paul Luongo, dated November 27, 2013.
10.14+	Change of Control and Retention Agreement, by and between Fastly, Inc. and Paul Luongo, dated February 26, 2014.
10.15+	Offer Letter Agreement, by and between Fastly, Inc. and Wolfgang Maasberg, dated March 21, 2016.
10.16+	Change of Control and Retention Agreement, by and between Fastly, Inc. and Wolfgang Maasberg, dated October 11, 2016.
10.17	Office Lease Agreement, by and between Fastly, Inc. and CLPF-475 Brannan Street, L.P., dated August 22, 2014.
10.18	First Amendment to Lease Agreement, by and between Fastly, Inc. and CLPF-475 Brannan Street, L.P., dated May 27, 2015.

10.19	Warrant to Purchase Stock, by and between Fastly, Inc. and Silicon Valley Bank, dated July 24, 2013.
10.20	First Amendment to Warrant to Purchase Stock, by and between Fastly, Inc. and SVB Financial Group, dated September 30, 2013.
10.21	Warrant to Purchase Stock, by and between Fastly, Inc. and Silicon Valley Bank, dated September 30, 2013.
10.22	Plain English Warrant Agreement, by and between Fastly, Inc. and TriplePoint Capital LLC, dated November 25, 2013.
10.23	Warrant to Purchase Stock, by and between Fastly, Inc. and Silicon Valley Bank, dated November 21, 2014.
10.24	Warrant to Purchase Stock, by and between Fastly, Inc. and WestRiver Mezzanine Loans, LLC, dated November 21, 2014.
10.25	Warrant to Purchase Stock, by and between Fastly, Inc. and Silicon Valley Bank, dated August 11, 2016.
10.26	Warrant to Purchase Stock, by and between Fastly, Inc. and WestRiver Mezzanine Loans, LLC, dated August 11, 2016.
10.27	Warrant to Purchase Stock, by and between Fastly, Inc. and Silicon Valley Bank, dated December 24, 2018.
10.28	Warrant to Purchase Stock, by and between Fastly, Inc. and Hercules Capital, Inc., dated December 24, 2018.
10.29	Warrant to Purchase Stock, by and between Fastly, Inc. and Westriver Innovation Lending Fund VIII, L.P., dated December 24, 2018.
10.30	Second Amended and Restated Loan and Security Agreement, by and between Fastly, Inc. and Silicon Valley Bank, dated November 1, 2017.
10.31	Credit Agreement, by and between Fastly, Inc. and Silicon Valley Bank, dated December 24, 2018.
10.32	Second Amendment to Lease Agreement, by and between Fastly, Inc. and CLPF-475 Brannan Street, L.P., dated March 11, 2019.
21.1	List of Subsidiaries of Registrant.
23.1†	Consent of Cooley LLP (included in Exhibit 5.1).
23.2	Consent of Deloitte & Touche LLP, independent registered public accounting firm.
24.1	Power of Attorney. Reference is made to the signature page hereto.

†	To be filed by amendment.
+	Indicates management contract or compensatory plan.

(b) Financial Statement Schedules

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or notes.

Item 17. Undertakings.

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Power of Attorney. Reference is made to the signature page hereto.

SIGNATURES Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in San Francisco, California, on the 19th day of April, 2019.

	FASTLY, INC.
By:	/s/ Artur Bergman
	Artur Bergman
	Chief Executive Officer

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Artur Bergman, Adriel Lares, and Paul Luongo, and each of them, his or her true and lawful agent, proxy, and attorney-in-fact, with full power of substitution and resubstitution, for him or her and in his or her name, place, and stead, in any and all capacities, to (1) act on, sign, and file with the Securities and Exchange Commission any and all amendments (including post-effective amendments) to this registration statement together with all schedules and exhibits thereto and any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, together with all schedules and exhibits thereto, (2) act on, sign, and file such certificates, instruments, agreements, and other documents as may be necessary or appropriate in connection therewith, (3) act on and file any supplement to any prospectus included in this registration statement or any such amendment or any subsequent registration statement filed

pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and (4) take any and all actions which may be necessary or appropriate to be done, as fully for all intents and purposes as he or she might or could do in person, hereby approving, ratifying and confirming all that such agent, proxy, and attorney-in-fact or any of his or her substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Artur Bergman Artur Bergman	Chief Executive Officer and Director (Principal Executive Officer)	April 19, 2019
/s/ Adriel Lares Adriel Lares	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	April 19, 2019
/s/ Sunil Dhaliwal Sunil Dhaliwal	Director	April 19, 2019
/s/ David Hornik David Hornik	Director	April 19, 2019
/s/ Gil Penchina Gil Penchina	Director	April 19, 2019
/s/ Christopher B. Paisley Christopher B. Paisley	Director	April 19, 2019
/s/ Kelly Wright Kelly Wright	Director	April 19, 2019