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

FORM 10-Q

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

For the quarterly period ended March 31, 2020

or

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

For the transition period from to

Commission File Number: 001-38897

FASTLY, INC.
(Exact name of registrant as specified in its charter)

Delaware	**27-5411834**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**

475 Brannan Street, Suite 300
San Francisco, CA 94107
(Address of principal executive offices) (Zip code)

(844) 432-7859
(Registrant's telephone number, including area code)

Not Applicable
(Former name, former address, or former fiscal year, if changed since last report)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A Common Stock, $0.00002 par value	FSLY	The New York Stock Exchange

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

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

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

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

As of May 5, 2020, 72.7 million shares of the registrants' Class A common stock were outstanding and 23.6 million shares of registrant's Class B common stock were outstanding.

TABLE OF CONTENTS

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended, (the "Exchange Act"), about us and our industry that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this report, including statements regarding our future results of operations and financial condition, business strategy, and plans and objectives of management for future operations, are forward-looking statements. In some cases, forward-looking statements may be identified 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.

Forward-looking statements are based on our management's beliefs and assumptions and on information currently available. 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" and elsewhere in this Quarterly Report on Form 10-Q, regarding, among other things:

- our ability to attract and retain customers;
- our ability to increase the usage of our platform by existing customers;
- defects, interruptions, security breaches, delays in performance, or similar problems with our platform;
- the potential impact of the COVID-19 pandemic on our business, operations, and the markets and communities in which we, our partners, and our customers operate;
- our financial performance, including our revenue, cost of revenue, operating expenses, and our ability to attain and sustain profitability;
- our ability to adapt and respond effectively to rapidly changing technology, evolving industry standards, changing regulations, and changing customer needs, requirements, or preferences;
- the growth of our relevant markets;
- our platform's functionality, scalability, performance, ease of use, reliability, and cost effectiveness relative to that of our competitors' products and services;
- our ability to compete effectively with existing competitors and new market entrants;
- our ability to attract and retain qualified employees and key personnel;
- our ability to maintain, protect, and enhance our intellectual property; and
- our ability to comply with laws and regulations that currently apply or may become applicable to our business both in the United States and internationally.

We caution you that the foregoing list may not contain all of the forward-looking statements made in this Quarterly Report on Form 10-Q.

Other sections of this Quarterly Report on Form 10-Q may 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 report or to conform these statements to actual results or to changes in our expectations. You should read this Quarterly Report on Form 10-Q and the documents that we reference in this Quarterly Report on Form 10-Q and have filed as exhibits to this report 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.

Investors and others should note that we may announce material business and financial information to our investors using our investor relations website (www.investors.fastly.com), our filings with the Securities and Exchange Commission, webcasts, press releases, and conference calls. We use these mediums, including our website, to communicate with investors and the general public about our company, our products, and other issues. It is possible that the information that we make available on our website may be deemed to be material information. We therefore encourage investors and others interested in our company to review the information that we make available on our website.

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

FASTLY, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands)
(unaudited)

	As of March 31, 2020	As of December 31, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 22,501	$ 16,142
Marketable securities	94,084	114,967
Accounts receivable, net of allowance for doubtful accounts of $1,821 and $1,816 as of March 31, 2020 and December 31, 2019, respectively	43,017	37,136
Restricted cash	70,087	70,087
Prepaid expenses and other current assets	12,139	10,991
Total current assets	241,828	249,323
Property and equipment, net	69,069	60,037
Goodwill	348	372
Intangible assets, net	1,089	1,125
Other assets	11,512	10,112
Total assets	$ 323,846	$ 320,969
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 9,457	$ 4,602
Accrued expenses	20,218	19,878
Current portion of long-term debt	5,291	4,472
Other current liabilities	5,430	8,169
Total current liabilities	40,396	37,121
Long-term debt, less current portion	26,043	25,158
Other long-term liabilities	1,357	1,038
Total liabilities	67,796	63,317
Commitments and contingencies (Note 9)		
Stockholders' equity:		
Class A and Class B common stock	2	2
Additional paid-in capital	459,360	449,463
Accumulated other comprehensive income	687	196
Accumulated deficit	(203,999)	(192,009)
Total stockholders' equity	256,050	257,652
Total liabilities and stockholders' equity	$ 323,846	$ 320,969

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

FASTLY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)
(unaudited)

	Three months ended March 31,	
	2020	**2019**
Revenue	$ 62,924	$ 45,556
Cost of revenue	27,265	19,718
Gross profit	35,659	25,838
Operating expenses:		
Research and development	14,298	10,176
Sales and marketing	19,168	15,039
General and administrative	14,169	8,700
Total operating expenses	47,635	33,915
Loss from operations	(11,976)	(8,077)
Interest income	719	416
Interest expense	(316)	(1,235)
Other income (expense), net	402	(776)
Loss before income taxes	(11,171)	(9,672)
Income taxes	819	55
Net loss	$ (11,990)	$ (9,727)
Net loss per share attributable to common stockholders, basic and diluted	$ (0.13)	$ (0.38)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	95,401	25,290

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

FASTLY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands)
(unaudited)

	Three months ended March 31,	
	2020	**2019**
Net loss	$ (11,990)	$ (9,727)
Other comprehensive income:		
Foreign currency translation adjustment	$ 13	$ 27
Income on investments in available-for-sale-securities	478	29
Total other comprehensive income	$ 491	$ 56
Comprehensive loss	$ (11,499)	$ (9,671)

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

FASTLY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)
(in thousands, except share amounts)
(unaudited)

	Three months ended March 31, 2020							
	Common Stock—Class A		Common Stock—Class B		Additional Paid-in Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance as of December 31, 2019	60,954,694	$ 1	33,863,021	$ 1	$ 449,463	$ 196	$ (192,009)	$ 257,652
Exercise of stock options	1,106,688	—	—	—	3,174	—	—	3,174
Vesting of early exercised stock options	—	—	36,590	—	146	—	—	146
Stock-based compensation	—	—	—	—	6,577	—		6,577
Conversion of Class B to Class A Stock	9,727,897	—	(9,727,897)	—	—	—	—	—
Net loss	—	—	—	—	—		(11,990)	(11,990)
Other comprehensive income	—	—	—	—	—	491	—	491
Balance as of March 31, 2020	71,789,279	$ 1	24,171,714	$ 1	$ 459,360	$ 687	$ (203,999)	$ 256,050

	Three months ended March 31, 2019								
	Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount					
Balance at December 31, 2018	53,630,213	$ 219,584	25,025,836	$ 1	$ 16,403	$ (2,109)	$ (36)	$ (146,186)	$ (131,927)
Impact of change in accounting policy	—	—	—	—	—	—	—	5,727	5,727
Exercise of stock options	—	—	449,751	—	639	—	—	—	639
Vesting of early exercised stock options	—	—	40,524	—	155	—	—	—	155
Stock-based compensation	—	—	—	—	1,467	—	—	—	1,467
Repayment of stockholder note	—	—	5,297	—	12	—	—	—	12
Net loss	—	—	—	—	—	—	—	(9,727)	(9,727)
Other comprehensive income	—	—	—	—	—	—	56	—	56
Balance as of March 31, 2019	53,630,213	$ 219,584	25,521,408	$ 1	$ 18,676	$ (2,109)	$ 20	$ (150,186)	$ (133,598)

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

FASTLY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(unaudited)

	Three months ended March 31, 2020	Three months ended March 31, 2019
Cash flows from operating activities:		
Net loss	$ (11,990)	$ (9,727)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	4,715	3,738
Amortization of deferred rent	204	17
Amortization of debt issuance costs	19	159
Stock-based compensation	6,329	1,467
Provision for doubtful accounts	150	602
Change in fair value of preferred stock warrant liabilities	—	706
Other adjustments	(39)	(224)
Interest paid on capital leases	(119)	(77)
Loss on disposals of property and equipment	—	36
Changes in operating assets and liabilities:		
Accounts receivable	(6,031)	(4,586)
Prepaid expenses and other current assets	(1,148)	(931)
Other assets	(1,400)	(1,860)
Accounts payable	3,112	1,686
Accrued expenses	(1,495)	(507)
Other liabilities	507	(582)
Net cash used in operating activities	(7,186)	(10,083)
Cash flows from investing activities:		
Purchases of marketable securities	—	(20,088)
Sales of marketable securities	—	3,578
Maturities of marketable securities	21,400	17,700
Purchases of property and equipment	(10,221)	(4,025)
Capitalized internal-use software	(1,437)	(759)
Net cash provided by (used in) investing activities	9,742	(3,594)
Cash flows from financing activities:		
Repayments of notes payable	—	(2,488)
Repayments of capital leases	(1,541)	(336)
Proceeds from employee stock purchase plan	2,133	—
Proceeds from exercise of vested stock options	3,174	639
Proceeds from early exercise of stock options	—	250
Proceeds from payment of stockholder note	—	12
Net cash provided by (used in) financing activities	3,766	(1,923)
Effects of exchange rate changes on cash, cash equivalents, and restricted cash	37	(8)
Net increase in cash, cash equivalents, and restricted cash	6,359	(15,608)
Cash, cash equivalents, and restricted cash at beginning of period	86,229	36,963
Cash, cash equivalents, and restricted cash at end of period	$ 92,588	$ 21,355

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

FASTLY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS—Continued
(in thousands)
(unaudited)

	Three months ended March 31,	
	2020	**2019**
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 155	$ 1,446
Cash paid for income taxes, net of refunds received	$ 814	$ 2
Property and equipment additions not yet paid in cash	$ 5,628	$ 32
Vesting of early-exercised stock options	$ 146	$ 155
Capital lease outstanding from current year addition	$ 3,226	$ 4,082
Change in other assets from change in accounting principle	$ —	$ 5,727
Stock-based compensation capitalized to internal-use software	$ 248	$ —
Reconciliation of cash, cash equivalents, and restricted cash as shown in the statements of cash flows		
Cash and cash equivalents	$ 22,501	$ 21,355
Restricted cash	70,087	—
Total cash, cash equivalents, and restricted cash	$ 92,588	$ 21,355

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

1. Nature of Business

Fastly, Inc. has built an edge cloud platform that can process, serve, and secure its customer’s applications as close to their end users as possible. As of March 31, 2020, our edge network spans 72 Points-of-Presence ("POPs") across 55 markets around the world. We were incorporated in Delaware in 2011 and are headquartered in San Francisco, California.

As used herein, "Fastly," "we," "our," "the Company," and similar terms include Fastly, Inc. and its subsidiaries, unless the context indicates otherwise.

Stock Split

On May 3, 2019, we implemented a 1-for-2 reverse stock split of our stock. All shares of common stock, stock-based instruments, and per-share data included in these financial statements give effect to the stock split and the changes in authorized shares have been adjusted retroactively for all periods presented.

Initial Public Offering ("IPO")

On May 21, 2019 we completed an IPO in which we sold 12,937,500 shares of our newly authorized Class A common stock, which included 1,687,500 shares sold pursuant to the exercise by the underwriters of an option to purchase additional shares, at the public offering price of $16.00 per share. We received net proceeds of $192.5 million, after deducting underwriting discounts and commissions, from sales of our shares in the IPO. The net proceeds include additional proceeds of $25.1 million, net of underwriters' discounts and commissions, from the exercise of the underwriters' option to purchase an additional 1,687,500 shares of our Class A common stock. Prior to the closing of the IPO, all shares of common stock then outstanding were reclassified as Class B common stock. Immediately upon the closing of the IPO, all shares of convertible preferred stock then outstanding were converted into 53,630,213 shares of Class B common stock on a one-to-one basis.

2. Summary of Significant Accounting Policies

Basis of Presentation

The interim unaudited condensed consolidated financial statements and accompanying notes have been prepared in accordance with United States generally accepted accounting principles ("U.S. GAAP") along with instructions to Form 10-Q and Article 10 of Securities and Exchange Commission ("SEC") Regulation S-X.

Certain changes in presentation have been made to conform the prior period presentation to the current period reporting. We have made certain presentation changes to distinguish and disclose as separate line items, the sales proceeds from marketable securities and the sales proceeds from our maturities of marketable securities in the Condensed Consolidated Statements of Cash Flows. We have also made certain presentation changes to distinguish and disclose as separate line items, the cash flows from purchases of property and equipment from the cash flows associated with capitalized internal-use software in the Condensed Consolidated Statements of Cash Flows.

Principles of Consolidation

The accompanying interim condensed 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 Interim Financial Statements

The accompanying interim condensed consolidated balance sheet as of March 31, 2020, the related interim condensed consolidated statements of operations, the condensed consolidated statements of comprehensive loss, and the condensed consolidated statements of convertible preferred stock and stockholders' equity (deficit) for the three months ended March 31, 2020 and 2019, the condensed consolidated statements of cash flows for the three months ended March 31, 2020 and 2019, and the related footnote disclosures are unaudited. The unaudited interim condensed consolidated financial statements have been prepared in accordance with U.S. GAAP. In management’s opinion, the unaudited financial statements have been prepared on the same basis as the audited financial statements and include all adjustments, which include only normal recurring adjustments necessary for the fair presentation of our financial position as of March 31, 2020. The results for the three months ended March 31, 2020 are not necessarily indicative of the results expected for the full fiscal year or any other periods.

Use of Estimates

The preparation of our condensed 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. 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 condensed consolidated financial statements in the period of change and prospectively from the date of the change in estimate.The ongoing global COVID-19 pandemic has impacted many operational aspects of our business and may continue to do so in the future. We assessed the impact that COVID-19 had on our results of operations, including, but not limited to an assessment of our allowance for doubtful accounts, the carrying value of short-term and long-term investments, the carrying value of goodwill and other long-lived assets, and the impact to revenue recognition and cost of revenues. While the COVID-19 pandemic has not had a material adverse impact on our financial operations to date, the future impacts of the pandemic and any resulting economic impact are largely unknown and rapidly evolving. We will continue to actively monitor the impact that COVID-19 has on the results of our business operations, and may make decisions required by federal, state or local authorities, or that are determined to be in the best interests of our employees, customers, partners, suppliers and stockholders. As a result our estimates and judgments may change materially as new events occur or additional information becomes available to us.

Concentrations of Credit Risk

Financial instruments that potentially subject us to significant concentration of credit risk consist primarily of cash, cash equivalents, marketable securities, and accounts receivable. The primary focus of our investment strategy is to preserve capital and meet liquidity requirements. Our 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, we invest cash equivalents and marketable securities in a variety of fixed income securities, including government and investment-grade debt securities and money market funds. We place our 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 we make substantial sales. Our customer base consists of a large number of geographically dispersed customers diversified across several industries. To reduce risk, we routinely assess the financial strength of our customers. Based on such assessments, we believe that our accounts receivable credit risk exposure is limited. One customer accounted for 10.5% of revenue for the three months ended March 31, 2020, and 14.6% of the total accounts receivable balance as of March 31, 2020. No customer accounted for more than 10% of revenue for the three months ended March 31, 2019, or more than 10% of the total accounts receivable balance as of December 31, 2019**.**

Significant Accounting Policies

There have been no material changes to our significant accounting policies as compared to those described in “Note 2 – Summary of Significant Accounting Policies” of our Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

New Accounting Pronouncements to be Adopted

We are an emerging growth company as defined in Jumpstart Our Business Startups Act of 2012 ("JOBS Act"). For as long as we continue to be an emerging growth company, we intend 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. In the event that we no longer qualify as an emerging growth company, we will no longer be permitted to use these reporting exemptions.

In February 2016, the FASB issued new guidance, Accounting Standard Update No. 2016-02, Leases (Topic 842) ("ASU 2016-02"), 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 operating 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. We are currently evaluating the appropriate transition method and impact of this guidance on our condensed consolidated financial statements and related disclosures. We expect the the standard to be effective for our interim and annual periods beginning after December 15, 2020.

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. We are currently evaluating the impact of this guidance on our condensed consolidated financial statements and related disclosures. We expect the the standard to be effective for our interim and annual periods beginning after December 15, 2020.

In August 2018, the FASB issued Accounting Standards Update No. 2018-15, Intangibles—Goodwill and Other—Internal-Use Software (ASC 350-40): Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement ("ASU 2018-15"). This guidance provides that implementation costs be evaluated for capitalization using the same criteria as that used for internal-use software development costs, with amortization expense being recorded in the same income statement expense line as the hosted service costs and over the expected term of the hosting arrangement. We are currently evaluating the impact of this guidance on our condensed consolidated financial statements and related disclosures. We expect the the standard to be effective for our interim and annual periods beginning after December 15, 2020.

On December 18, 2019, the FASB released ASU 2019-12 which affects general principles within Topic 740, Income Taxes. The amendments of ASU 2019-12 are meant to simplify and reduce the cost of accounting for income taxes. The FASB has stated that the ASU is being issued as part of its Simplification Initiative, which is meant to reduce complexity in accounting standards by improving certain areas of generally accepted accounting principles (GAAP) without compromising information provided to users of financial statements. We are currently evaluating the impact of this guidance on our condensed consolidated financial statements and related disclosures. We expect the the standard to be effective for our interim and annual periods beginning after December 15, 2020.

3. Revenue

Revenue recognition

Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. We enter into contracts that can include various combinations of products and services, each of which are distinct and accounted for as separate performance obligations. Revenue is recognized net of any taxes collected from customers, which are subsequently remitted to governmental authorities.

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is the unit of account in Topic 606. Our contracts with customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. For contracts with multiple performance obligations, we allocate the contract transaction price to each performance obligation using our estimate of the standalone selling price ("SSP") of each distinct good or service in the contract.

Judgment is required to determine the SSP for each distinct performance obligation. We analyze separate sales of our products and services as a basis for estimating the SSP of our products and services. We then use that SSP as the basis for allocating the transaction price when our product and services are sold together in a contract with multiple performance obligations. In instances where SSP is not directly observable, such as when we do not sell the product or service separately, we determine the SSP using information that may include market conditions and other observable inputs. We typically have more than one SSP for individual products and services due to the stratification of those products and services by customers and circumstances. In these instances, we may use information, such geographic region and distribution channel, in determining the SSP.

The transaction price in a contract is typically equal to the minimum commit price in the contract less any discounts provided. Because our typical contracts represent distinct services delivered over time with the same pattern of transfer to the customer, usage-based consideration primarily related to actual consumption over the minimum commit levels is allocated to the period to which it relates. The amount of consideration recognized for usage above the minimum commit price is limited to the amount we expect to be entitled to receive in exchange for providing services. We have elected to apply the practical expedient for estimating and disclosing the variable consideration when variable consideration is allocated entirely to a wholly unsatisfied performance obligation or to a wholly unsatisfied promise to transfer a distinct good or service that forms part of a single performance obligation from our remaining performance obligations under these contracts.

Performance obligations represent stand-ready obligations that are satisfied over time as the customer simultaneously receives and consumes the benefits provided by us. These obligations can be content delivery, security, professional services, support, edge cloud platform services, and others. Accordingly, our revenue is recognized over time, consistent with the pattern of benefit provided to the customer over the term of the agreement.

At times, customers may request changes that either amend, replace, or cancel existing contracts. Judgment is required to determine whether the specific facts and circumstances within the contracts should be accounted for as a separate contract or as a modification.

Nature of products and services

We primarily derive revenue from the sale of services to customers executing contracts in which the standard contract term is one year, although terms may vary by contract. Most of our contracts are non-cancelable over the contractual term. These contracts commit the customer to a minimum monthly level of usage and specify the rate at which the customer must pay for actual usage above the monthly minimum.

Revenue by geography is based on the billing address of the customer. The following table presents our net revenue by geographic region:

	Three months ended March 31,	
	2020	2019
	(in thousands)	
United States	$ 41,008	$ 33,422
All other countries	21,916	12,134
Total revenue	$ 62,924	$ 45,556

The majority of our revenue is derived from enterprise customers, which are defined as customers with revenue in excess of $100,000 over the previous 12-month period. The following table presents our net revenue for enterprise and non-enterprise customers:

	Three months ended March 31,	
	2020	2019
	(in thousands)	
Enterprise customers	$ 55,806	$ 39,044
Non-enterprise customers	7,118	6,512
Total revenue	$ 62,924	$ 45,556

Contract balances

The timing of revenue recognition may differ from the timing of invoicing to customers. We have an unconditional right to consideration when we invoice our customers and record a receivable. We record a contract asset when revenue is recognized prior to invoicing, or a contract liability (deferred revenue) when revenue is recognized subsequent to invoicing.

Deferred revenue includes amounts billed to customers for which revenue has not been recognized and consists of the unearned portions of edge cloud platform usage. Our payment terms and conditions vary by contract type, but our standard terms are that payments are due within 15 days from the date of invoice.

The following tables present our contract assets, contract liabilities, and certain information related to these balances as of and for the three months ended March 31, 2020, as of December 31, 2019, and for the three months ended March 31, 2019:

	As of March 31, 2020	As of December 31, 2019
	(in thousands)	
Contract assets	$ 305	$ 271
Contract liabilities	$ 852	$ 317

	Three months ended March 31,	
	2020	2019
	(in thousands)	
Revenue recognized in the period from:		
Amounts included in contract liability at the beginning of the period	$ 178	$ 936

Remaining performance obligations

As of March 31, 2020, we had $71.0 million of remaining performance obligations, which includes deferred revenue and amounts that will be invoiced and recognized in future periods. We apply the practical expedient of ASC 606, which gives us the optional exemption from disclosing certain information about our remaining performance obligations for our service contracts for which the original contract duration is one year or less, such as the aggregate transaction price allocated to the performance obligations that are unsatisfied (or partially unsatisfied) as of the end of the reporting period. The typical contract term is one year, although terms may vary by contract. We expect to recognize 88% of this balance over the next 12 months and the remainder within the following year.

Costs to obtain a contract

We capitalize incremental costs associated with obtaining customer contracts, specifically for sales commissions. These costs are deferred on our Condensed Consolidated Balance Sheets and amortized over the expected period of benefit on a straight-line basis. Based on the nature of our unique technology and services, the rate at which we continually enhance and update our technology, and our historical customer retention, the expected period of benefit is determined to be approximately five years. Amortization is recorded within the sales and marketing line item on the accompanying Condensed Consolidated Statements of Operations. The incremental costs associated with obtaining customer contracts, the majority of which are deferred commissions, are included in other assets on the accompanying Condensed Consolidated Balance Sheets.

As of March 31, 2020 and December 31, 2019, our costs to obtain contracts were as follows:

	As of March 31, 2020	As of December 31, 2019
	(in thousands)	
Deferred commissions	$ 7,944	$ 6,804

During the three months ended March 31, 2020 and 2019, we recognized $0.7 million and $0.5 million of amortization related to deferred commissions. These costs are recorded within the sales and marketing line item on the accompanying Condensed Consolidated Statements of Operations.

4. Investments and Fair Value Measurements

Our total cash, cash equivalents and marketable securities consisted of the following:

	As of March 31, 2020	As of December 31, 2019
	(in thousands)	
Cash and cash equivalents:		
Cash	$ 8,503	$ 11,623
Money market funds	13,998	2,020
Commercial paper	—	2,499
Total cash and cash equivalents	$ 22,501	$ 16,142
Marketable securities:		
Corporate notes and bonds	$ 9,024	$ 17,470
Commercial paper	2,498	5,481
U.S. Treasury securities	68,713	78,160
Asset-backed securities	13,849	13,856
Total marketable securities	$ 94,084	$ 114,967

Available-for-Sale Investments

The following table summarizes adjusted cost, gross unrealized gains and losses, and fair value related to available-for-sale securities classified as marketable securities on the accompanying Condensed Consolidated Balance Sheets as of March 31, 2020 and December 31, 2019:

	As of March 31, 2020			
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
	(in thousands)			
Corporate notes and bonds	$ 9,051	$ —	$ (27)	$ 9,024
Commercial paper	2,498	—	—	2,498
U.S. Treasury securities	68,106	607	—	68,713
Asset-backed securities	13,854	—	(5)	13,849
Total available-for-sale investments	$ 93,509	$ 607	$ (32)	$ 94,084

	As of December 31, 2019			
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
	(in thousands)			
Corporate notes and bonds	$ 17,462	$ 9	$ (1)	$ 17,470
Commercial paper	5,481	—	—	5,481
U.S. Treasury securities	78,075	85	—	78,160
Asset-backed securities	13,852	4	—	13,856
Total available-for-sale investments	$ 114,870	$ 98	$ (1)	$ 114,967

The majority of our securities classified as available-for-sale as of March 31, 2020 have contractual maturities of one year or less. Certain securities held and classified as available-for-sale as of March 31, 2020 have contractual maturities greater than one year; however, we do not intend to hold these securities to maturity. Consistent with our intentions to hold the securities for less than 12 months we classify all securities as short-term. As of December 31, 2019, all securities classified as available-for-sale had contractual maturities of one year or less. There were no securities in a continuous loss position for 12 months or longer as of March 31, 2020 and December 31, 2019. 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 we believe that the decrease in fair value of these securities is temporary.

Fair Value of Financial Instruments

For certain of our 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.

We measure our cash equivalents, marketable securities, and restricted cash at fair value. We classify our cash equivalents, marketable securities and restricted cash within Level 1 or Level 2 because we value these investments using quoted market prices or alternative pricing sources and models utilizing market observable inputs. The fair value of our Level 1 financial assets is based on quoted market prices of the identical underlying security. The fair value of our 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.

Financial assets and liabilities measured and recorded at fair value on a recurring basis consisted of the following types of instruments:

	As of March 31, 2020			
	Level 1	Level 2	Level 3	Total
	(in thousands)			
Cash equivalents:				
Money market funds	$ 13,998	$ —	$ —	$ 13,998
Total cash equivalents	13,998	—	—	13,998
Marketable securities:				
Corporate notes and bonds	—	9,024	—	9,024
Commercial paper	—	2,498	—	2,498
U.S. Treasury securities	—	68,713	—	68,713
Asset-backed securities	—	13,849	—	13,849
Total marketable securities	—	94,084	—	94,084
Restricted cash:				
Money market funds	70,087	—	—	70,087
Total restricted cash	70,087	—	—	70,087
Total financial assets	$ 84,085	$ 94,084	$ —	$ 178,169

	As of December 31, 2019			
	Level 1	Level 2	Level 3	Total
	(in thousands)			
Cash equivalents:				
Money market funds	$ 2,020	$ —	$ —	$ 2,020
U.S. Treasury securities	—	2,499	—	2,499
Total cash equivalents	2,020	2,499	—	4,519
Marketable securities:				
Corporate notes and bonds	—	17,470	—	17,470
Commercial paper	—	5,481	—	5,481
U.S. Treasury securities	—	78,160	—	78,160
Asset-backed securities	—	13,856	—	13,856
Total marketable securities	—	114,967	—	114,967
Restricted cash:				
Money market funds	70,087	—	—	70,087
Total restricted cash	70,087	—	—	70,087
Total financial assets	$ 72,107	$ 117,466	$ —	$ 189,573

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 three months ended March 31, 2020 and 2019.

5. Balance Sheet Information

Property and equipment, net

Property and equipment, net consisted of the following:

	As of March 31, 2020	As of December 31, 2019
	(in thousands)	
Computer and networking equipment	$ 101,593	$ 89,830
Leasehold improvements	3,278	3,285
Furniture and fixtures	679	681
Office equipment	616	579
Internal-use software	15,586	13,901
Property and equipment, gross	$ 121,752	$ 108,276
Accumulated depreciation and amortization	(52,683)	(48,239)
Property and equipment, net	$ 69,069	$ 60,037

Depreciation and amortization expense on property and equipment for the three months ended March 31, 2020 and 2019 was approximately $4.7 million and $3.7 million, respectively. Included in these amounts was amortization expense for capitalized internal-use software costs of approximately $0.6 million and $0.8 million for the three months ended March 31, 2020 and 2019, respectively. As of March 31, 2020 and December 31, 2019, the unamortized balance of capitalized internal-use software costs on our Condensed Consolidated Balance Sheets was approximately $9.6 million and $8.5 million, respectively.

Accrued expenses

Accrued expenses consisted of the following:

	As of March 31, 2020	As of December 31, 2019
	(in thousands)	
Accrued compensation and related benefits	$ 9,666	$ 8,734
Sales and use tax payable	4,500	3,938
Accrued colocation and bandwidth costs	2,519	3,237
Other accrued liabilities	3,533	3,969
Total accrued expenses	$ 20,218	$ 19,878

Other Current Liabilities

Other current liabilities consisted of the following:

	As of March 31, 2020	As of December 31, 2019
	(in thousands)	
Liability for early-exercised stock options (see Note 11)	$ 385	$ 467
Deferred revenue	852	317
Accrued computer and networking equipment	3,896	7,060
Other current liabilities	297	325
Total other current liabilities	$ 5,430	$ 8,169

Other Long-Term Liabilities

Other long-term liabilities consisted of the following:

	As of March 31, 2020	As of December 31, 2019
	(in thousands)	
Deferred rent	$ 1,016	$ 634
Other long-term liabilities	341	404
Total other long-term liabilities	$ 1,357	$ 1,038

6. Goodwill and Intangible Assets

The changes in the carrying amount of goodwill for the three months ended March 31, 2020 are as follows:

	Three months ended March 31, 2020
	(in thousands)
Balance as of December 31, 2019	$ 372
Foreign currency translation	(24)
Balance as of March 31, 2020	$ 348

Intangible assets are comprised of internet protocol address costs and domain name costs that are subject to amortization. We did not purchase additional internet protocol addresses and domain names during the three months ended March 31, 2020 and 2019.

As of March 31, 2020 and December 31, 2019, our intangible assets consisted of the following:

	As of March 31, 2020			As of December 31, 2019		
	Gross carrying value	Accumulated amortization	Net carrying value	Gross carrying value	Accumulated amortization	Net carrying value
	(in thousands)					
Finite-lived intangible assets						
Internet protocol addresses	$ 1,448	$ (398)	$ 1,050	$ 1,448	$ (362)	$ 1,086
Domain name	39	—	39	39	—	39
Total finite-lived intangible assets	$ 1,487	$ (398)	$ 1,089	$ 1,487	$ (362)	$ 1,125

The annual expected amortization expense of intangible assets subject to amortization as of March 31, 2020 is as follows:

	As of March 31, 2020
	(in thousands)
Remainder of 2020	$ 119
2021	158
2022	158
2023	148
2024	145
Thereafter	361
Total	$ 1,089

We perform tests for impairment of goodwill and long-lived assets on an annual basis as of October 31 or more frequently if events or changes in circumstances indicate that the long-lived assets might be impaired. We did not record any impairment charges during the three months ended March 31, 2020 and 2019.

The aggregate expense related to amortization of intangible assets for both the three months ended March 31, 2020 and the three months ended March 31, 2019 were less than $0.1 million.

7. Debt Instruments

Capital Lease Agreement

In June 2017, we entered into a Capital Lease Agreement with an equipment provider for $5.0 million in network equipment, at an annual interest rate of 5.24% over a term of four years.

In March 2018, we entered into an additional agreement with the equipment provider for $0.5 million in network equipment at an annual interest rate of 5.38% over a term of four years. In February 2019 and March 2019, we entered into additional agreements with the equipment provider for $2.9 million and $1.3 million, respectively, in network equipment, at an annual interest rate of 5.38% over terms of three years.

In August 2019, we entered into an additional agreement with the equipment provider for $1.3 million in network equipment at an annual interest rate of 6.33% over a term of three years. In November 2019, we entered into an additional capital lease agreement with the equipment provider for $2.2 million in network equipment at an annual interest rate of 5.69% over a term of three years. In December 2019, we entered into an additional agreement with the equipment provider for $1.0 million, at an annual interest rate of 5.42% over terms of three years. The additional agreement for December 2019, incorporates the same terms and conditions as those under the Capital Lease Agreement entered into in June 2017.

In January 2020 and March 2020, we entered into additional agreements with the equipment provider for $1.0 million, and $2.3 million, respectively, at an annual interest rate of 5.42% over terms of three years for both agreements. Both the additional agreements incorporate the same terms and conditions as those under the Capital Lease Agreement entered into in June 2017.

As of March 31, 2020 and December 31, 2019, $11.2 million and $9.5 million was outstanding under the Capital Lease Agreement. 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.

Cash Collateralized Revolving Credit Agreement

In November 2019, we entered into a Revolving Credit Agreement for an aggregate commitment amount of $70.0 million with a maturity date of November 3, 2022. The amount of borrowings available under the Revolving Credit Agreement at any time are collateralized by our cash, which is classified as restricted cash on our balance sheets.

The interest rate associated with each advance under the Revolving Credit Agreement is equal to the sum of LIBOR for the applicable interest period plus 1.50% which is a per annum rate based on outstanding borrowings. The commitment fee is 0.20% per annum based on the average daily unused amount of the commitment amount. Interest payments on outstanding borrowings are due on the last day of each interest period and payments for the commitment fee are due at the end of each calendar quarter. As of both March 31, 2020 and December 31, 2019, the outstanding balance on the Revolving Credit Agreement was $20.3 million.

The following table reflects the carrying values of the debt and capital lease agreements as of March 31, 2020 and December 31, 2019:

	As of March 31, 2020	As of December 31, 2019
	(in thousands)	
Liability component:		
Principal amount—Cash Collateralized Revolving Credit Agreement	$ 20,300	$ 20,300
Less: unamortized debt issuance costs	(200)	(219)
Less: current portion of long-term debt	—	—
Long-term debt, less current portion—Cash Collateralized Revolving Credit Agreement	$ 20,100	$ 20,081
Principal amount—Capital Lease Agreement	11,234	9,549
Less: current portion of long-term debt	(5,291)	(4,472)
Long-term debt, less current portion—Capital Lease Agreement	$ 5,943	$ 5,077
Total long-term debt, less current portion	$ 26,043	$ 25,158

Contractual future repayments for our debt and capital lease obligations as of March 31, 2020 are as follows:

	Principal	Interest	Total
		(in thousands)	
Remainder of 2020	$ 3,704	$ 1,867	$ 5,571
2021	4,838	2,072	6,910
2022	22,758	21,140	43,898
2023	234	2	236
2024	—	—	—
Thereafter	—	—	—
Total	$ 31,534	$ 25,081	$ 56,615

Interest expense related to debt for the three months ended March 31, 2020 and 2019 was $0.3 million and $1.2 million, respectively.

8. Common Stock Warrant Liabilities

Prior to the IPO, we issued convertible preferred stock warrants in conjunction with prior the issuances of debt. We recorded these warrants to purchase convertible preferred stock as a liability on the consolidated balance sheets at fair value upon issuance as the warrants were exercisable for contingently redeemable preferred stock which was classified outside of stockholders' equity (deficit). The liability associated with these warrants were subject to remeasurement at each balance sheet date, with changes in fair value recorded in the consolidated statement of operations and comprehensive Loss as other expense, net.

On May 17, 2019, immediately upon closing of the IPO, our warrants to purchase convertible preferred stock were automatically converted to warrants to purchase an equal number of shares of our Class B common stock. As a result, the warrant was remeasured a final time, immediately prior to the closing of the IPO, and reclassified to additional paid-in capital within stockholders' equity. Changes in the fair value were recorded within other expense, net on the consolidated statement of operations.

In the three months ended March 31, 2020 there were no exercises of Class B common stock warrants. In the three months ended March 31, 2019, there were no exercises of preferred stock warrants. As of March 31, 2020 and December 31, 2019, the warrants are classified and recorded as additional paid-in capital on the condensed consolidated balance sheets.

9. Commitments and Contingencies

Operating Lease Commitments

We lease our facilities under non-cancelable operating leases. These operating leases expire at various dates through July 2027 and generally require the payment of real estate taxes, insurance, maintenance, and operating costs. There have been no material changes to our operating lease commitments as compared to those described in our most recently filed Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

We recognize rent expense on a straight-line basis over the lease period and have accrued for rent expense incurred but not paid. Rent expense for the three months ended March 31, 2020 and 2019 was $2.3 million and $1.8 million, respectively. During the three months ended March 31, 2020 and 2019, we also had sublease agreements with tenants of various properties vacated by us. The amount earned from our sublease tenants was approximately $0.3 million and $0.3 million during the three months ended March 31, 2020 and 2019, respectively.

Purchase Commitments

As of March 31, 2020, we had long-term commitments for cost of revenue related agreements (i.e., bandwidth usage, colocation, peering and other managed services with various networks, internet service providers ("ISPs") and other third-party vendors). Our minimum future commitments related to cost of revenue related agreements as of March 31, 2020 were as follows:

	Cost of Revenue Commitments	
	(in thousands)	
Remainder of 2020	$	33,184
2021		13,290
2022		4,790
2023		284
2024		72
Thereafter		—
Total	$	51,620

We also have long-term commitments for various non-cancelable software as a service ("SaaS") agreements. There have been no material changes to our purchase commitments related to SaaS agreements as compared to those described in our most recently filed Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

Legal Matters

We are 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 our business, results of operations, financial condition, or cash flows.

Indemnification

We enter into standard indemnification agreements in the ordinary course of business. Pursuant to these agreements, we agree to indemnify, hold harmless, and reimburse the indemnified party for losses suffered or incurred by the indemnified party, generally our business partners or customers, in connection with our 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 we could be required to make under these indemnification agreements is unlimited; however, we carry insurance that covers certain third-party claims relating to our services and could limit our exposure in that respect.

We have agreed to indemnify each of our 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, was, or has agreed to serve as an officer or director of the Company. We have director and officer insurance policies that may limit our exposure and may enable us to recover a portion of certain future amounts paid.

To date, we have not encountered material costs as a result of such indemnification obligations and have not accrued any related liabilities in our financial statements. In assessing whether to establish an accrual, we consider such factors as the degree of probability of an unfavorable outcome and the ability to make a reasonable estimate of the amount of loss.

10. Convertible Preferred Stock

Prior to the IPO, we had seven outstanding series of Convertible Preferred Stock each with a par value of $0.00002 per share, convertible at the option of the holder, that was classified as temporary equity on our consolidated balance sheet.

On May 17, 2019, immediately upon closing of the IPO, our convertible preferred stock was automatically converted to shares of our Class B common stock. As of both March 31, 2020 and December 31, 2019, we had no convertible preferred stock issued or outstanding.

11. Stockholders' Equity

Common Stock

Our Amended and Restated Certificate of Incorporation, as amended and restated in May 2019, authorizes the issuance of 1.0 billion shares of Class A common stock and 94.1 million shares of Class B common stock, and 10.0 million shares of preferred stock, each at a par value per share of $0.00002. Holders of Class A common stock are entitled to one vote per share and holders of Class B common stock are entitled to 10 votes per share. Preferred stockholders, do not have voting rights.

As of March 31, 2020 and December 31, 2019, 24.2 million and 33.9 million shares of Class B common stock were issued and outstanding, respectively. As of March 31, 2020 and December 31, 2019, 71.8 million and 61.0 million shares of Class A common stock were issued and outstanding, respectively. As of both March 31, 2020 and December 31, 2019, no shares of preferred stock were issued and outstanding.

Equity Incentive Plans

In March 2011, our stockholders approved our 2011 Equity Incentive Plan ("2011 Plan") which allows for the issuance of incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock awards, and restricted stock unit awards ("RSUs") to employees, directors, and consultants of the Company. Options granted under our 2011 Plan are exercisable for shares of our Class B common stock.

As of both March 31, 2020 and December 31, 2019, there were 23.6 million shares of Class B common stock reserved for issuance under the 2011 Plan. As of both March 31, 2020 and December 31, 2019, there were no shares of Class B common stock available for issuance pursuant to future grants under the 2011 Plan.

In May 2019, in conjunction with our IPO, our Board and stockholders approved our 2019 Equity Incentive Plan (the "2019 Plan") which allows for the issuance of incentive stock options, non-statutory stock options, stock appreciation rights, RSUs, 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. Options are exercisable for shares of our Class A common stock. No further awards will be issued under the 2011 Plan.

As of March 31, 2020 and December 31, 2019, there were 19.2 million shares and 14.4 million shares of Class A common stock reserved for issuance under the 2019 Plan, respectively. As of March 31, 2020 and December 31, 2019, there were 16.0 million and 12.4 million Class A common stock available for issuance under the 2019 Plan, respectively.

In May 2019, in conjunction with our IPO, our Board and stockholders approved the Employee Stock Purchase Plan ("ESPP"). The ESPP allows eligible employees to purchase shares of our Class A common stock through payroll deductions of up to 15% of their eligible compensation, subject to a maximum of $25,000 per calendar year.

As of March 31, 2020 and December 31, 2019, there were 3.5 million shares and 2.5 million shares of Class A common stock reserved for issuance under the ESPP, respectively. As of March 31, 2020 and December 31, 2019, there were 3.1 million shares and 2.2 million shares of Class A common stock available for future issuance under the ESPP, respectively.

Stock Options

Options granted under the 2011 Plan are exercisable for Class B common stock and 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.

Options granted under the 2019 Plan are exercisable for Class A common stock and 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. Forfeitures are recognized as they occur.

The following table summarizes stock option activity during the three months ended March 31, 2020:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
	(in thousands)		(in years)	(in thousands)
Outstanding at December 31, 2019	11,269	$ 4.68	7.3	$ 173,471
Granted	—	—		
Exercised	(1,107)	2.68		
Cancelled/forfeited	(61)	6.94		
Outstanding at March 31, 2020	10,101	$ 4.89	7.2	$ 142,692
Vested and exercisable at March 31, 2020	6,443	$ 3.00	6.4	$ 102,947

The total pre-tax intrinsic value of options exercised during the three months ended March 31, 2020 and 2019 was $20.2 million and $3.2 million, respectively.

The total grant date fair value of employee options vested for the three months ended March 31, 2020 and 2019 was $2.3 million and $1.4 million, respectively.

The weighted average grant-date fair value for options granted to employees during the three months ended March 31, 2019 was $5.10. There were no options granted during the three months ended March 31, 2020.

We estimate 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. We estimated the fair value of stock option awards using the Black-Scholes option pricing model with the following weighted-average assumptions:

	Three months ended March 31,	
	2020	2019
Fair value of common stock	N/A	$10.32
Expected term (in years)	N/A	6.02
Risk-free interest rate	N/A	2.50%
Expected volatility	N/A	40.0%
Dividend yield	N/A	—%

During the three months ended March 31, 2020 and 2019, we recorded stock-based compensation expense from stock options of approximately $1.8 million and $1.5 million, respectively.

As of March 31, 2020, total unrecognized stock-based compensation cost related to outstanding unvested stock options that are expected to vest was $16.2 million. This unrecognized stock-based compensation cost is expected to be recognized over a weighted-average period of approximately 2.58 years.

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 accompanying Condensed Consolidated Balance Sheets and reclassified into equity as the options vest. As of March 31, 2020 and December 31, 2019, a total of 163,305 and 199,895 shares of Class B 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 $0.7 million and $0.9 million as of March 31, 2020 and December 31, 2019, respectively, is recorded in other current liabilities and other liabilities on the accompanying Condensed Consolidated Balance Sheets.

The activity of non-vested shares as a result of early exercise of options granted to employees and non-employees, is as follows:

	Three months ended March 31, 2020 (in thousands)
Beginning balance as of December 31, 2019	200
Early exercise of options	—
Vested	(37)
Repurchased	—
Ending balance as of March 31, 2020	163

RSUs

We began granting RSUs under the 2019 Plan during the fiscal year ended December 31, 2019. The fair value of RSUs is based on the grant date fair value and is expensed on a straight-line basis over the applicable vesting period. RSUs typically vest over four years, at the rate of 25% on the first anniversary of the vest date and ratably on a quarterly basis over the remaining 36-month period thereafter, based on continued service. Forfeitures are recognized as they occur.

The following table summarizes RSU activity during the three months ended March 31, 2020:

	Shares (in thousands)	Weighted-Average Grant Date Fair Value Per Share
Nonvested RSUs as of December 31, 2019	1,641	$ 20.07
Granted	1,072	20.03
Vested	—	
Cancelled/forfeited	(11)	20.04
RSUs outstanding as of March 31, 2020	2,702	$ 20.04

During the three months ended March 31, 2020, we recognized stock-based compensation expense related to RSUs of $4.1 million. There was no stock-based compensation expense recognized related to RSUs during the three months ended March 31, 2019.

As of March 31, 2020, total unrecognized stock-based compensation cost related to non-vested RSUs was $47.9 million. This unrecognized stock-based compensation cost is expected to be recognized over a weighted-average period of approximately 3.16 years.

Performance-based Stock Units ("PSUs")

In March 2020, the Company granted a maximum total of 87,918 shares of performance-based restricted stock unit awards ("PSUs") to certain employees of the company, pursuant to the Company's 2019 Equity Incentive Plan. The PSUs represents the right of the employees to be issued on a future date, one (1) share of Class A common stock for each RSU received that will vest on the applicable vesting date.

The issuance of the underlying shares occurs upon approval by the Compensation Committee of the Board of Directors based on the level of achievement of certain Company and individual performance goals set by the Compensation Committee for year ending December 31, 2020 and their continued service with the Company. Subject to employees' continuous service with the Company through each vesting date, 25% of the number of RSUs credited to them upon certification of achievement will vest on February 15, 2021, May 15, 2021, August 15, 2021, and November 15, 2021, respectively.

As of the three months ended March 31, 2020, none of these performance conditions have been set or met. We expect to record stock-based compensation related to these PSUs once it is considered probable that the performance conditions will be met.

ESPP

The ESPP allows eligible employees to purchase shares of our common stock through payroll deductions of up to 15% of their eligible compensation. The ESPP provides for six-month offering periods, commencing in May and November of each year. At the end of each offering period employees are able to purchase shares at 85% of the lower of the fair market value of our Class A common stock on the first trading day of the offering period or on the date of purchase.

We estimate the fair value of shares to be issued under the ESPP on the first day of the offering period using the Black-Scholes valuation model. The inputs to the Black-Scholes option pricing model are our stock price on the first date of the offering period, the risk-free interest rate, the estimated volatility of our stock price over the term of the offering period, the expected term of the offering period and the expected dividend rate. Stock-based compensation expense related to the ESPP is recognized on a straight-line basis over the offering period. Forfeitures are recognized as they occur.

We estimated the fair value of shares granted under the ESPP on the first date of the offering period using the Black-Scholes option pricing model with the following assumptions:

	Three months ended March 31,	
	2020	**2019**
Fair value of common stock	$6.02	N/A
Expected term (in years)	0.50	N/A
Risk-free interest rate	1.59%	N/A
Expected volatility	43.0%	N/A
Dividend yield	—%	N/A

During the three months ended March 31, 2020, we withheld $2.2 million in contributions from employees, and recognized $0.7 million in stock-based compensation expense related to the ESPP. No contributions were withheld, and no stock-based compensation expense was recognized related to the ESPP in the three months ended March 31, 2019. No common stock was issued under the ESPP in the three months ended March 31, 2020.

Stock-based Compensation Expense

The following table summarizes the components of total stock-based compensation expense included in the accompanying Condensed Consolidated Statements of Operations:

	Three months ended March 31,	
	2020	2019
	(in thousands)	
Stock-based compensation expense by caption:		
Cost of revenue	$ 615	$ 144
Research and development	1,671	432
Sales and marketing	1,483	369
General and administrative	2,560	522
Total	$ 6,329	$ 1,467

12. Net Loss Per Share Attributable to Common Stockholders

We compute net loss per share using the two-class method required for multiple classes of common stock and participating securities. The rights of the holders of the Class A common stock and Class B common stock are identical, except with respect to voting and conversion. Accordingly, the Class A common stock and Class B common stock share equally in our net losses. Prior to the IPO, our participating securities also included convertible preferred stock. The holders of convertible preferred stock did not have a contractual obligation to share in our losses, and as a result, net losses were not allocated to these participating securities.

The following table sets forth the calculation of basic and diluted net loss per share attributable to common stockholders during the periods presented. The shares issued in the IPO, the shares issued pursuant to the exercise by the underwriters of an option to purchase additional shares, and the shares of Class A and Class B common stock issued upon conversion of the outstanding shares of convertible preferred stock in the IPO are included in the table below weighted for the period outstanding:

	Three months ended March 31,			
	2020		2019	
	Class A(1)	Class B(2)	Class A	Class B(2)
	(in thousands, except per share amounts)			
Net loss attributable to common stockholders	$ (8,196)	$ (3,794)	N/A	$ (9,727)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	65,210	30,191	N/A	25,290
Net loss per share attributable to common stockholders, basic and diluted	$ (0.13)	$ (0.13)	N/A	$ (0.38)

(1) Class A common stock includes the issuance of 12.9 million shares of Class A common stock issued by us in connection with our IPO and shares issued upon the exercise of options subsequent to our IPO.

(2) Class B common stock includes, for all periods presented, the conversion of all of our preferred stock into an aggregate of 53.6 million shares of our Class B common stock upon closing of the IPO.

Since we were in a loss position for the periods 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 of Shares	
	As of March 31,	
	2020	2019
	(in thousands)	
Convertible preferred stock	—	53,630
Stock options	10,101	8,073
RSUs	2,702	—
Early exercised stock options	163	260
Common stock warrants	183	—
Convertible preferred stock warrants	—	519
Shares issuable pursuant to the ESPP	185	—
Performance-based Stock Units	88	—
Total	13,422	62,482

13. Income Taxes

Our provision for income taxes for interim periods is determined using an estimate of our annual effective tax rate, adjusted for discrete items, if any, that arise during the period. Each quarter, we update our estimate of the annual effective tax rate, and if the estimated annual effective tax rate changes, we make a cumulative adjustment in such period.

In the three months ended March 31, 2020 and 2019, we recorded income tax expenses of $0.8 million and $0.1 million, respectively. We continue to maintain a full valuation allowance on our U.S. Federal and state net deferred tax assets. The tax expense for the three months ended March 31, 2020 and 2019 was primarily due to foreign and state income tax expense.

On March 27, 2020, the “Coronavirus Aid, Relief and Economic Security (CARES) Act” was signed into law (the "CARES Act"). The CARES Act includes provisions relating to refundable payroll tax credits, deferment of the employer portion of certain payroll taxes, net operating loss carryback periods, alternative minimum tax credit refunds, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property.

We intend to utilize the provision to defer payment of certain payroll taxes beginning in the second quarter of 2020. Any deferred payments will be accrued for as a liability and included in our condensed consolidated balance sheet for the applicable period.

We are continuing to evaluate the other provisions of the CARES Act, but do not expect them to have a material impact on our consolidated financial statements.

14. Information About Revenue and Geographic Areas

We consider operating segments to be components of the Company in which separate financial information is available and is evaluated regularly by our Chief Operating Decision Maker ("CODM") in deciding how to allocate resources and in assessing performance. Our CODM is the Chief Executive Officer ("CEO"). The CEO 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.

We have determined that we operate under one business activity with no segment managers who are held accountable for operations, operating results, or plans for levels or components below the consolidated unit level. Accordingly, we have determined that we have a single reporting segment and operating unit structure.

Revenue

Revenue by geography is based on the billing address of the customer. Refer to Note 3, "Revenue" for more information on net revenue by geographic region.

Long-Lived Assets

The following table presents long-lived assets by geographic region:

	As of March 31, 2020	As of December 31, 2019
	(in thousands)	
United States	$ 43,818	$ 40,747
All other countries	25,251	19,290
Total long-lived assets	$ 69,069	$ 60,037

15. Related Party Transactions

In July 2016, a stockholder borrowed approximately $0.1 million to exercise stock options for 53,125 shares of common stock pursuant to a promissory note from the stockholder. The note bears interest at a rate of 1.77%. In June 2019, the promissory note was repaid in full. Prior to repayment, for the purposes of the financial statements, the shares were not reported as exercised, issued, or outstanding. This stockholder is not one of our executive officers or directors. There were no outstanding balances as of both March 31, 2020 and December 31, 2019.

ITEM 2. 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 condensed consolidated financial statements and related notes that are included elsewhere in this Quarterly Report on Form 10-Q. 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 Quarterly Report on Form 10-Q. Our fiscal year ends on December 31.

As used herein, "Fastly," "we," "our," "the Company" and similar terms include Fastly, Inc. and its subsidiaries, unless the context indicates otherwise.

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. We recently launched the beta of Compute@Edge, a powerful new language-agnostic compute environment, designed to empower developers to build far more advanced edge applications with greater security, more robust logic, and new levels of performance. 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. As of March 31, 2020, our 88 terabit software-centric network is located in 72 uniquely designed Points-of-Presence ("POPs") across 55 markets around the world. 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.

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 significant 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, and online digital engagement. The success of these direct selling efforts is reflected by our 297 enterprise customers as of March 31, 2020 that generated 88% of our total revenue for the trailing 12 months ended March 31, 2020.

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 Dollar-Based Net Expansion Rate ("DBNER"), which was 133.0% and 130.4% for the trailing 12 months ended March 31, 2020 and 2019, respectively. For a more complete description and discussion of DBNER, refer to the section titled "Key Business Metrics".

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.

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 three months ended March 31, 2020 and 2019, our revenue was $62.9 million and $45.6 million, respectively. Our 10 largest customers generated an aggregate of 31% and 31% of our revenue in the trailing 12 months ended March 31, 2020 and 2019, respectively. We incurred a net loss of $12.0 million and $9.7 million in the three months ended March 31, 2020 and 2019, respectively.

Recent Events

Executive Leadership Change

On February 18, 2020, Artur Bergman stepped down as our Chief Executive Officer and was appointed as our Chief Architect and Executive Chairperson. Mr. Bergman continues to serve as a member of our Board of Directors, and was appointed as Chairperson of the Board on February 18, 2020. In addition, the Board appointed Joshua Bixby as our Chief Executive Officer. In connection with Mr. Bixby's appointment, the Board expanded the size of the Board from six (6) to seven (7) members and appointed Mr. Bixby to serve as a Class I director. Mr. Bixby's term as a member of the Board will expire at the meeting of the stockholders to be held in June 2020. Mr. Bixby does not serve on any committees of the Board.

Further details on the executive leadership change are described our most recently filed Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

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 points of presence ("POPs") in select international locations. As of March 31, 2020 and 2019, 51% and 45% of our customers were headquartered outside of the United States, respectively.

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 March 31, 2020, we had 62 sales representatives and sales managers across our company.

These efforts will require us to invest significantly in 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 in order 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 in 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 three months ended March 31, 2020, our research and development expenses as a percentage of revenue was 23%.

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 total investment in property and equipment for the three months ended March 31, 2020 was $13.5 million, representing 21% of our revenue in such periods. We expect our investment in property and equipment 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, 2020, we had 72 POPs are located in 55 markets across 26 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.

Uncertainty of Coronavirus (COVID-19) Pandemic

The ongoing global COVID-19 pandemic has adversely impacted, and may continue to adversely impact, many aspects of our business. As certain of our customers or potential customers experience downturns or uncertainty in their own business operations and revenue resulting from the spread of COVID-19, they have and may continue to decrease or delay their technology spending, request pricing concessions or seek renegotiations of their contracts, any of which may result in decreased revenue for us. In addition, we have experienced and may continue to experience customer losses, including due to bankruptcy or our customers ceasing operations, which may continue to result in an inability to collect receivables from these customers. In addition, a portion of our revenue is related to usage of our platform in connection with live events, such as sporting events that have been or may be postponed or cancelled. A decline in revenue or the collectability of our receivables could harm our business. The nature and extent of the impact of the COVID-19 pandemic on our customers and our customers' response to the COVID-19 pandemic is difficult to assess or predict, and we may be unable to accurately forecast our revenues or financial results, especially given that the near and long term impact of the pandemic remains uncertain. We have seen an increase in usage of our platform following the implementation of preventative measures to contain or mitigate the outbreak of COVID-19. However, we cannot predict how long we will see this increased level of usage as these preventative measures, including shelter-in-place orders, school closures, travel bans and restrictions, limitations on business activity, quarantines, and other related measures and community practices, change over time. Our results of operations could be materially above or below our forecasts, which could adversely affect our results of operations, disappoint analysts and investors, and/or cause our stock price to decline.

The COVID-19 pandemic has been declared a national emergency in many countries. In response to the COVID-19 pandemic, many state, local, and foreign governments have put in place, and others in the future may put in place, quarantines, executive orders, shelter-in-place orders, and similar government orders and restrictions in order to control the spread of the disease. Such orders or restrictions, or the perception that such orders or restrictions could occur, have resulted in business closures, work stoppages, slowdowns and delays, work-from-home policies, travel restrictions, and cancellation or postponement of events, among other effects that could negatively impact productivity and disrupt our operations and those of our partners and customers. In March 2020, we closed all of our offices, suspended non-essential travel, cancelled or postponed Fastly-sponsored events, and discouraged employee attendance at industry events and in-person work-related meetings. We may take further actions that alter our operations as may be required by federal, state, or local authorities, or which we determine are in our best interests. While much of our operations can be performed remotely, certain activities such as expanding and maintaining our network of POPs around the world often require personnel to be on-site, and our ability to carry out these activities may be negatively impacted if our employees or local data center personnel are not able to travel. For activities that may be conducted remotely, there is no guarantee that we will be as effective while working remotely because our team is dispersed, employees may have less capacity to work due to increased personal obligations (such as childcare, eldercare, or caring for family who become sick), may become sick themselves and be unable to work, or may be otherwise negatively affected, mentally or physically, by the COVID-19 pandemic and prolonged social distancing. Decreased effectiveness and availability of our team could adversely affect our results due to slow-downs in our sales cycles and recruiting efforts, delays in our entry into customer contracts, delays in addressing performance issues, delays in product development, delays and inefficiencies among various operational aspects of our business, including our financial organization, or other decreases in productivity that could seriously harm our business. Moreover, our finance organization’s ability to ensure that we comply with the requirements of Section 404 may be impaired, including the ability of our registered public accounting firm to issue an attestation report on management’s assessment of our internal control over financial reporting. Furthermore, we may decide to postpone or cancel planned investments in our business in response to changes in our business as a result of the spread of COVID-19, which may impact our ability to attract and retain customers and our rate of innovation, either of which could harm our business.

Our business is also dependent upon the timely supply of certain parts and components manufactured in China to construct our servers. To the extent that our suppliers are impacted by the COVID-19 pandemic, it likely will reduce the availability, or result in delays, of parts and components to us, which in turn could interrupt our ability to complete the construction of our servers to meet the usage needs of our customers.

In addition, while the potential impact and duration of the COVID-19 pandemic on the global economy and our business in particular may be difficult to assess or predict, the pandemic has resulted in, and may continue to result in, significant disruption of global financial markets, reducing our ability to access capital, which could negatively affect our liquidity in the future.

The global impact of COVID-19 continues to rapidly evolve, and we will continue to monitor the situation closely. We have undertaken business continuity planning to identify and address the risks to our business posed by this pandemic, and have, among other things, prepared to eliminate single points of failure among our employees to address the decrease in employee productivity. The ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. We do not yet know the full extent of potential delays or impacts on our business, operations, or the global economy as a whole. While the spread of COVID-19 may eventually be contained or mitigated, there is no guarantee that a future outbreak of this or any other widespread epidemics will not occur, or that the global economy will recover, either of which could harm our business.

For additional details, refer to the section titled "Risk Factors."

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.

	March 31,	
	2020	**2019**
Number of customers (as of end of period)	1,837	1,621
Number of enterprise customers (as of end of period)	297	243
DBNER (trailing 12 months)	133.0%	130.4%

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, from which we recognized revenue during the period, and are active as of the end of 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 March 31, 2020 and 2019, we had 1,837 and 1,621 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 March 31, 2020, we had 297 enterprise customers which generated 88% of our revenue for the trailing 12 months ended March 31, 2020. As of March 31, 2019, we had 243 enterprise customers which generated 85% of our revenue for the trailing 12 months ended March 31, 2019. We believe the recruitment and cultivation of enterprise customers is critical to our long-term success.

DBNER

Our ability to generate and increase our revenue is dependent upon our ability to increase the number of new customers and 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 trailing 12 months ended March 31, 2020, we divide (i) revenue, for the trailing 12 months ended March 31, 2020, from customers that entered into a customer agreement on or before March 31, 2019, and that remained customers as of March 31, 2020, by (ii) revenue, for the trailing 12 months ended March 31, 2019, from the same set of customers.

For the trailing 12 months ended March 31, 2020 and 2019 our DBNER was 133.0% and 130.4%, respectively. We believe that an annual cohort analysis of our customers 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 2017, 2018, and 2019 are referred to as the 2017 Cohort, 2018 Cohort, and 2019 Cohort, 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. For example, the DBNER for the 2017 Cohort was 305.5% for the year ended December 31, 2018. However, the DBNER for the 2017 Cohort was 144.3% for the year ended December 31, 2019, which generally represents their third year as a customer, depending on when they entered into a customer agreement. 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 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.

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. Usage charges are determined on a monthly basis based on actual usage within the month and do not impact usage charges within any other month. 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, 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. Research and development expenses also include 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 in absolute dollars as we continue to invest in efforts to enhance the functionality of our platform and develop new products and features to produce next-generation edge computing solutions. Over the long term we expect our research and development expenses to decrease as a percentage of our revenue. However, our research and development expenses may fluctuate as a percentage of our revenue from period to period due to the timing and extent of these expenses.

Sales and Marketing

Sales and marketing expenses consist primarily of personnel costs, including commissions for our sales employees, 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. As a result, we expect our sales and marketing expenses to continue to increase in absolute dollars and may increase as a percentage of revenue in the foreseeable future. Over the long term, we expect our sales and marketing expenses to decrease as a percentage of our revenue. However, our sales and marketing expenses may fluctuate as a percentage of our revenue from period to period due to the timing and extent of these expenses.

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 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 in absolute dollars and as a percentage of revenue in the forseeable future. Over the long term, we expect our general and administrative expenses to decrease as a percentage of our revenue. However, our general and administrative expenses may fluctuate as a percentage of our revenue from period to period due to the timing and extent of these expenses.

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 full valuation allowance on our U.S. Federal and state deferred tax assets. 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.

	Three months ended March 31,	
	2020	**2019**
	(in thousands)	
Condensed Consolidated Statement of Operations:		
Revenue	$ 62,924	$ 45,556
Cost of revenue(1)	27,265	19,718
Gross profit	35,659	25,838
Operating expenses:		
Research and development(1)	14,298	10,176
Sales and marketing(1)	19,168	15,039
General and administrative(1)	14,169	8,700
Total operating expenses	47,635	33,915
Loss from operations	(11,976)	(8,077)
Interest income	719	416
Interest expense	(316)	(1,235)
Other income (expenses), net	402	(776)
Loss before income taxes	(11,171)	(9,672)
Income taxes	819	55
Net loss attributable to common stockholders	$ (11,990)	$ (9,727)

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

	Three months ended March 31,	
	2020	2019
	(in thousands)	
Cost of revenue	$ 615	$ 144
Research and development	1,671	432
Sales and marketing	1,483	369
General and administrative	2,560	522
Total	$ 6,329	$ 1,467

	Three months ended March 31,	
	2020	2019
Condensed Consolidated Statements of Operations, as a percentage of revenue:*		
Revenue	100 %	100 %
Cost of revenue	43	43
Gross profit	57	57
Operating expenses:		
Research and development	23	22
Sales and marketing	30	33
General and administrative	23	19
Total operating expenses	76	74
Loss from operations	(19)	(18)
Interest income	1	1
Interest expense	(1)	(3)
Other income (expenses), net	1	(2)
Loss before income taxes	(18)	(22)
Income taxes	1	—
Net loss attributable to common stockholders	(19)%	(22)%

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

Revenue

	Three months ended March 31,		
	2020	2019	Change
	(in thousands)		
Revenue	$ 62,924	$ 45,556	38%

Revenue was $62.9 million for the three months ended March 31, 2020 compared to $45.6 million for the three months ended March 31, 2019, an increase of $17.4 million, or 38%. We had 1,837 customers and 297 enterprise customers as of March 31, 2020. We had 1,621 customers and 243 enterprise customers as of March 31, 2019. This represents an increase of 216, or 13%, in customers and 54, or 22%, in enterprise customers from March 31, 2019. Approximately 94% of our revenue in the three months ended March 31, 2020 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 $41.0 million and 65% of revenue for the three months ended March 31, 2020, and $33.4 million and 73% of revenue for the three months ended March 31, 2019. This represents an increase of $7.6 million, or 23%. International revenue was $21.9 million and 35% of revenue for the three months ended March 31, 2020, and $12.1 million and 27% of revenue for the three months ended March 31, 2019. This represents an increase of $9.8 million, or 81%. We had 906 domestic customers and 931 international customers as of March 31, 2020. We had 897 domestic customers and 724 international customers as of March 31, 2019. This is an increase in domestic customers of 9, or 1%, and an increase in international customers of 207, or 29%, compared to March 31, 2019.

Cost of Revenue

	Three months ended March 31,		
	2020	**2019**	**Change**
	(in thousands)		
Cost of revenue	$ 27,265	$ 19,718	38%

For the three months ended March 31, 2020 and 2019, 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 build out 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.

Cost of revenue was $27.3 million for the three months ended March 31, 2020 compared to $19.7 million for the three months ended March 31, 2019, an increase of $7.5 million, or 38%. The increase in cost of revenue is primarily due to an increase in bandwidth costs of $3.0 million, an increase in colocation costs of $1.1 million, an increase in depreciation and amortization expense of $0.9 million as we continue to invest in our platform, and an increase in other network costs of $0.8 million to support the increased traffic on our platform. In addition, there was an increase in personnel costs of $1.6 million due to an increase in headcount to support the growth of our business.

Gross Profit and Gross Margin

	Three months ended March 31,		
	2020	**2019**	**Change**
	(in thousands)		
Gross profit	$ 35,659	$ 25,838	38 %
Gross margin	57%	57%	— %

Gross profit was $35.7 million for the three months ended March 31, 2020 compared to $25.8 million for the three months ended March 31, 2019, an increase of $9.8 million, or 38%. The increase in gross profit in the three months ended March 31, 2020 compared to 2019 is due to the increase in both revenue from usage of our platform and the corresponding increase in associated costs of revenue.

Gross margin was 57% for the three months ended March 31, 2020 compared to 57% for the three months ended March 31, 2019, remaining consistent compared to prior year.

Operating Expenses

	Three months ended March 31,		
	2020	**2019**	**Change**
	(in thousands)		
Research and development	$ 14,298	$ 10,176	41 %
Sales and marketing	19,168	15,039	27 %
General and administrative	14,169	8,700	63 %
Total operating expenses	$ 47,635	$ 33,915	40 %
Percentage of revenue:			
Research and development	23%	22%	(1)%
Sales and marketing	30%	33%	3 %
General and administrative	23%	19%	(4)%

Research and development

Research and development expenses were $14.3 million for the three months ended March 31, 2020 compared to $10.2 million for the three months ended March 31, 2019, an increase of $4.1 million, or 41%. This is primarily due to an increase of $4.3 million of personnel related costs, such as salaries, benefits, bonuses, and stock-based compensation due to an increase in headcount and an increase in stock-based compensation expense related to the increase in the fair value of our stock options, the issuance of restricted stock unit awards ("RSUs"), and expense associated with the Employee Stock Purchase Plan ("ESPP").

Sales and marketing

Sales and marketing expenses were $19.2 million for the three months ended March 31, 2020 compared to $15.0 million for the three months ended March 31, 2019, an increase of $4.1 million, or 27%. This is primarily due to a $2.7 million increase in personnel related costs, such as salaries, sales commissions, benefits, and stock-based compensation, due to an increase in headcount and an increase in stock-based compensation expense related to the increase in the fair value of our stock options, the issuance of RSUs, and expense associated with the ESPP. The increase is also due to an increase of $0.6 million in travel costs due to an increase in headcount, an increase of $0.4 million in marketing costs, and an increase of $0.3 million in professional fees, driven by the growth of our business year over year.

General and administrative

General and administrative costs were $14.2 million for the three months ended March 31, 2020 compared to $8.7 million for the three months ended March 31, 2019, an increase of $5.5 million, or 63%. This is primarily due to an increase of $3.3 million of personnel related costs, such as salaries, benefits, and stock-based compensation due to an increase in headcount and an increase in stock-based compensation expense related to the increase in the fair value of our stock options, the issuance of RSUs, and expense associated with the ESPP. The increase is also due to an increase of $0.8 million in external professional services such as legal, accounting, and enterprise systems, an increase of $0.7 million in facilities and information systems costs, and an increase of $0.6 million of business insurance costs associated with becoming a public company. The increase was partially offset by a $0.5 million decrease in bad debt expense.

Other Income and Expense

Interest Income

	Three months ended March 31,		
	2020	2019	Change
	(in thousands)		
Interest income	$ 719	$ 416	73%

Interest income was $0.7 million for the three months ended March 31, 2020 compared to $0.4 million for the three months ended March 31, 2019, an increase of $0.3 million, or 73%. This increase is due to interest on proceeds raised from our IPO.

Interest Expense

	Three months ended March 31,		
	2020	2019	Change
	(in thousands)		
Interest expense	$ 316	$ 1,235	(74)%

Interest expense was $0.3 million for the three months ended March 31, 2020 compared to $1.2 million for the three months ended March 31, 2019, a decrease of $0.9 million, or 74%. This decrease is primarily due to the decrease in outstanding debt.

Other income (expense), net

	Three months ended March 31,		
	2020	2019	Change
	(in thousands)		
Other income (expense), net	$ 402	$ (776)	(152)%

Other income, net was $0.4 million for the three months ended March 31, 2020 compared to other expense, net of $0.8 million for the three months ended March 31, 2019, an increase in other income, net of $1.2 million, or 152%. This increase is primarily due to the conversion of warrant liabilities to additional paid in capital upon the IPO, resulting in no mark-to-market adjustment in the three months ended March 31, 2020.

Liquidity and Capital Resources

On May 21, 2019, upon the completion of our IPO, we received net proceeds of $192.5 million, after deducting underwriting discounts and commissions, from sales of 12,937,500 shares of our Class A common stock in the IPO. The net proceeds include additional proceeds of $25.1 million, net of underwriters' discounts and commissions, from the exercise of the underwriters' option to purchase an additional 1,687,500 shares of our Class A common stock.

To date, we have financed our operations primarily through equity issuances, payments received from customers, the net proceeds we received through sales of equity securities, and borrowings under our credit facilities. Our principal uses of cash in recent periods have primarily been around funding our operations and capital expenditures.

As of March 31, 2020, we had cash, cash equivalents, and marketable securities totaling $116.6 million, and restricted cash totaling $70.1 million. Our cash, cash equivalents, and marketable securities primarily consisted of bank deposits and money market funds held at major financial institutions and investment-grade commercial paper and corporate debt securities.

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.

Cash Collateralized Revolving Credit Agreement

In November 2019, we entered into a Revolving Credit Agreement for an aggregate commitment amount of $70.0 million with a maturity date of November 3, 2022. The amount of borrowings available under the Revolving Credit Agreement at any time are collateralized by our cash. As of March 31, 2020, $20.3 million had been drawn on the Revolving Credit Agreement.

The interest rate associated with each advance under the Revolving Credit Agreement is equal to the sum of LIBOR for the applicable interest period plus 1.50%, which is a per annum rate based on outstanding borrowings. The commitment fee is 0.20% per annum based on the average daily unused amount of the commitment amount. Interest payments on outstanding borrowings are due on the last day of each interest period and payments for the commitment fee are due at the end of each calendar quarter.

Cash Flows

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

	Three months ended March 31,	
	2020	2019
Cash used in operating activities	$ (7,186)	$ (10,083)
Cash provided by (used in) investing activities	9,742	(3,594)
Cash provided by (used in) financing activities	3,766	(1,923)

Cash Flows from Operating Activities

For the three months ended March 31, 2020, cash used in operating activities consisted primarily of our net loss of $12.0 million adjusted for non-cash items, including $4.7 million of depreciation and amortization, and $6.3 million of stock-based compensation expense. With respect to changes in operating assets and liabilities, there was an increase in accounts receivable of $6.0 million, primarily due to the growth of our business and the timing of cash receipts from certain of our larger customers, an increase in other long-term assets of $1.4 million due to higher commissions being capitalized subsequent to the adoption of ASC 606, and an increase of $1.1 million in prepaid expenses and other assets due to pre-payments for SaaS licenses. This was partially offset by an increase of $2.1 million in accounts payable, accrued expenses, and other liabilities due to timing of payments.

For the three months ended March 31, 2019, cash used in operating activities consisted primarily of our net loss of $9.7 million adjusted for non-cash items, including $3.7 million of depreciation and amortization, $1.5 million of stock-based compensation expense, an increase in our warrant liability of $0.7 million, 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 $0.6 million. This was partially offset by an increase in accounts receivable increased of $4.6 million and an increase of $2.8 million in prepaid expenses and other assets, 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, SaaS licenses, and commissions.

Cash Flows from Investing Activities

For the three months ended March 31, 2020, cash provided by investing activities was $9.7 million, primarily consisting of $21.4 million of maturities and sales of marketable securities. This was offset by $10.2 million of payments related to purchases of property and equipment to expand our network, and $1.4 million of additions to capitalized internal-use software.

For the three months ended March 31, 2019, cash used in investing activities was $3.6 million, primarily consisting of $4.8 million of payments related to purchases of property and equipment to expand our network. We also purchased an additional $20.1 million of marketable securities and sold $21.3 million of marketable securities.

Cash Flows from Financing Activities

For the three months ended March 31, 2020, cash provided by financing activities was $3.8 million, primarily consisting of $3.2 million in proceeds from stock option exercises by our employees and $2.1 million in proceeds from the ESPP. This was partially offset by $1.5 million of capital lease payments.

For the three months ended March 31, 2019, cash used in financing activities was $1.9 million, primarily consisting of $2.5 million of debt payments, partially offset by $0.9 million in proceeds from stock option exercises by our employees.

Contractual Obligations and Other Commitments

Our principal commitments consist of obligations under operating leases, purchase obligations for contracts with our cloud infrastructure provider, network service providers, and other vendors, and outstanding debt. There have been no material changes in our contractual obligations and commitments from our most recently filed Annual Report on Form 10-K for the fiscal year ended December 31, 2019, except for those described under Note 7 and Note 9 of the notes to our unaudited condensed consolidated financial statements included in Part I, Item 1 of this Form 10-Q.

Off-Balance Sheet Arrangements

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

Critical Accounting Policies and Estimates

We prepare our condensed consolidated financial statements in accordance with U.S. GAAP. The preparation of our condensed consolidated financial statements requires us to make estimates, judgments, and assumptions that affect the reported amounts of assets, liabilities, revenue, costs, 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.

There have been no material changes to our critical accounting policies and estimates as compared to the critical accounting policies and estimates disclosed in “Management's Discussion and Analysis – Critical Accounting Policies” of our Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

Recent Accounting Pronouncements

See “Summary of Significant Accounting Policies" in Note 1 of the notes to our unaudited condensed consolidated financial statements included in Part I, Item 1 of this Form 10-Q.

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. To the extent that we lose our emerging growth company status and no longer qualify as an emerging growth company, we will no longer be permitted to use these reporting exemptions.

Item 3. 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, cash equivalents, and marketable securities of $116.6 million, and restricted cash of $70.1 million as of March 31, 2020, which consisted of bank deposits, money market funds, corporate notes and bonds, commercial paper, U.S. Treasury securities, and asset-backed securities. The cash and cash equivalents are held for working capital purposes. The restricted cash is held as cash collateral in connection with our Cash Collateralized Revolving Credit Agreement. 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. Amounts borrowed under the Cash Collateralized Revolving Credit Agreement bear the same interest throughout the initial interest period, which ends in November 2020, at a rate of 3.46%. A hypothetical 10% change in interest rates during the period presented would not have had a material impact on our condensed 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 denominated in the British pound, Japanese Yen, Australian Dollar, and Euro. 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 condensed 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 condensed consolidated financial statements.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

The Company's management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")), as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on the evaluation of our disclosure controls and procedures as of March 31, 2020, our principal executive officer and principal financial officer concluded that, as of such date, due to the material weakness described below, our disclosure controls and procedures were not effective.

Material Weakness

Management identified material weaknesses in our internal control over financial reporting for the years ended December 31, 2019, 2018, and 2017, related to the lack of sufficient qualified accounting personnel and information systems personnel, which led to incorrect application of generally accepted accounting principles, and insufficiently designed segregation of duties, information technology access security and change management, and 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. During the three months ended March 31, 2020, management hired additional staff and continues to actively recruit for open positions within the accounting department and will, as necessary, supplement any interim staffing needs with temporary resources. We will continue to monitor and assess our remediation initiatives to ensure that the aforementioned material weaknesses are remediated.

Notwithstanding the material weaknesses, management has concluded that the financial statements included elsewhere in this Quarterly Report present fairly, in all material respects, our financial position, results of operations and cash flows in conformity with GAAP.

Changes in Internal Control

Other than as described above, there have been no changes in our internal control over financial reporting in connection with the evaluation required by Rules 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the period covered by this Quarterly Report on Form 10-Q that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

PART II - OTHER INFORMATION

Item 1. 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.

Item 1A. 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 Quarterly Report on Form 10-Q, including the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our unaudited condensed consolidated financial statements and related notes, 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.

We have marked with an asterisk (*) those risks described below that reflect substantive changes from, or additions to, the risks described in our Annual Report on Form 10-K for the year ended December 31, 2019.

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 and errors in our platform and may discover additional defects or errors 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 or open source software 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, public health issues, such as the COVID-19 pandemic, 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 defects or errors in software, failures of hardware, damages to a facility, or misconfigurations of any of our services, we may have to divert resources away from other planned work, could experience lengthy interruptions in our platform, and also incur 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. Disaster recovery arrangements, including the existence of redundant data centers that are designed to become active during certain lapses of service, may not function as intended, and any disruptions to our service 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 or our data centers, 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, cause our revenue to decrease and/or our expenses to increase, and divert resources away from product development. 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, failures involving redundant data centers, 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, or the failure to launch products or features on anticipated timelines;
- 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.

Health epidemics, including the current COVID-19 pandemic, have had, and could in the future have, an adverse impact on our business, operations, and the markets and communities in which we, our partners and customers operate.*

Our business and operations could be adversely affected by health epidemics, including the current COVID-19 pandemic, impacting the markets and communities in which we, our partners and customers operate. In December 2019, a disease referred to as COVID-19 was first reported and has spread to many countries worldwide, including the United States, and was declared a pandemic.

The ongoing global COVID-19 pandemic has adversely impacted, and may continue to adversely impact, many aspects of our business. As certain of our customers or potential customers experience downturns or uncertainty in their own business operations and revenue resulting from the spread of COVID-19, they have and may continue to decrease or delay their technology spending, request pricing concessions or payment extensions, or seek renegotiations of their contracts, any of which may result in delayed or decreased revenue for us. We have experienced and may continue to experience customer losses, including due to bankruptcy or our customers ceasing operations, which may result in an inability to collect receivables from these customers. In addition, a portion of our revenue is related to usage of our platform in connection with live events, such as sporting events that have been or may be postponed or cancelled. A decline in revenue or the collectability of our receivables could harm our business. The nature and extent of the impact of the COVID-19 pandemic on our customers and our customers' response to the COVID-19 pandemic is difficult to assess or predict, and we may be unable to accurately forecast our revenues or financial results, especially given that the near and long term impact of the pandemic remains uncertain. We have seen an increase in usage of our platform following the implementation of preventative measures to contain or mitigate the outbreak of COVID-19. However, we cannot predict how long we will see this increased level of usage as these preventative measures, including shelter-in-place orders, school closures, travel bans and restrictions, limitations on business activity, quarantines, and other related measures and community practices, change over time. Our results of operations could be materially above or below our forecasts, which could adversely affect our results of operations, disappoint analysts and investors, and/or cause our stock price to decline.

The COVID-19 pandemic has been declared a national emergency in many countries. In response to the COVID-19 pandemic, many state, local, and foreign governments have put in place, and others in the future may put in place, quarantines, executive orders, shelter-in-place orders, and similar government orders and restrictions in order to control the spread of the disease. Such orders or restrictions, or the perception that such orders or restrictions could occur, have resulted in business closures, work stoppages, slowdowns and delays, work-from-home policies, travel restrictions, and cancellation or postponement of events, among other effects that could negatively impact productivity and disrupt our operations and those of our partners and customers. In March 2020, we closed all of our offices, suspended non-essential travel, cancelled or postponed Fastly-sponsored events, and discouraged employee attendance at industry events and in-person work-related meetings. We may take further actions that alter our operations as may be required by federal, state, or local authorities, or which we determine are in our best interests. While much of our operations can be performed remotely, certain activities such as expanding and maintaining our network of POPs around the world often require personnel to be on-site, and our ability to carry out these activities may be negatively impacted if our employees or local data center personnel are not able to travel. In addition, if standards bodies continue to require that audits be conducted in person, travel restrictions may also affect our ability to complete audits of our data centers and facilities, which may in turn affect our compliance certifications and cause customers to reduce or cease using our services. For activities that may be conducted remotely, there is no guarantee that we will be as effective while working remotely because our team is dispersed, employees may have less capacity to work due to increased personal obligations (such as childcare, eldercare, or caring for family who become sick), may become sick themselves and be unable to work, or may be otherwise negatively affected, mentally or physically, by the COVID-19 pandemic and prolonged social distancing. Decreased effectiveness and availability of our team could adversely affect our results due to slow-downs in our sales cycles and recruiting efforts, delays in our entry into customer contracts, delays in addressing performance issues, delays in product development, delays and inefficiencies among various operational aspects of our business, including our financial organization, or other decreases in productivity that could seriously harm our business. Moreover, our finance organization's ability to ensure that we comply with the requirements of Section 404 may be impaired, including the ability of our registered public accounting firm to issue an attestation report on management's assessment of our internal control over financial reporting. Furthermore, we may decide to postpone or cancel planned investments in our business in response to changes in our business as a result of the spread of COVID-19, which may impact our ability to attract and retain customers and our rate of innovation, either of which could harm our business.

In addition, while the potential impact and duration of the COVID-19 pandemic on the global economy and our business in particular may be difficult to assess or predict, the pandemic has resulted in, and may continue to result in, significant disruption of global financial markets, reducing our ability to access capital, which could negatively affect our liquidity in the future.

The global impact of COVID-19 continues to rapidly evolve, and we will continue to monitor the situation closely. We have undertaken business continuity planning to identify and address the risks to our business posed by this pandemic, and have, among other things, prepared to eliminate single points of failure among our employees to address the decrease in employee productivity. The ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. We do not yet know the full extent of potential delays or impacts on our business, operations, or the global economy as a whole. While the spread of COVID-19 may eventually be contained or mitigated, there is no guarantee that a future outbreak of this or any other widespread epidemics will not occur, or that the global economy will recover, either of which 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 report. If we do not address these risks successfully, our business may be harmed.

We generated a net loss of $12.0 million for the three months ended March 31, 2020, and as of March 31, 2020, we had an accumulated deficit of $204.0 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 benefited 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 Content Delivery Networks ("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 trailing 12 months ended March 31, 2020, our top ten customers accounted for approximately 31% 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 U.S. and foreign 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.

If the U.S. government prohibits our current or potential customers from doing business with us, whether through policy, regulations or laws, we could face direct liability or our delivery of content by our platform may be blocked. For example, in the current environment of economic trade negotiations and tensions between the Chinese and U.S. governments, the U.S. government has expressed concerns about the ability of companies operating in China to do business in the U.S. or with U.S. companies. As a result, we could lose the ability to contract with current or potential customers, which 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, our employees, 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, and our employees or third parties may disagree with our interpretation of our values, or take issue with how we execute on our values, which may result in us becoming a target for negative publicity, increased scrutiny, lawsuits, or network attacks, 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 benefited 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 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 and forecasts of market growth 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 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, 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;
- 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 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 630 employees as of December 31, 2019 to 685 employees as of March 31, 2020. 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 Chief Architect and Executive Chairman and Joshua Bixby, our 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, or the transition of executives within our business, such as with respect to Mr. Bergman and Mr. Bixby, 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, public health issues, such as the COVID-19 pandemic, 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, 2019 are only permitted to be carried forward for 20 years under applicable U.S. tax law. Under the Tax Cuts and Jobs Act (the "Tax Act"), our federal NOLs generated in tax years ending after December 31, 2019 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. On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") was enacted in response to the COVID-19 pandemic. The CARES Act, among other things, permits NOL carryovers and carrybacks to offset 100% of taxable income for taxable years beginning before 2021. In addition, the CARES Act allows NOLs incurred in 2018, 2019, and 2020 to be carried back to each of the five preceding taxable years to generate a refund of previously paid income taxes. We are currently evaluating the impact of the CARES Act, but at present does not expect that the NOL carryback provision of the CARES Act would result in a material cash benefit to us.

In addition, under Section 382 of the United States Internal Revenue Code of 1986, as amended (the "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 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 three months ended March 31, 2020, the percentage of revenue generated from customers outside the United States was 35% 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 March 31, 2020, approximately 19% 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 business is dependent upon the timely supply of certain parts and components manufactured in China to construct our servers. To the extent that our suppliers are impacted by the COVID-19 pandemic, it likely will reduce the availability, or result in delays, of parts and components to us, which in turn could interrupt our ability to complete the construction of our servers to meet the usage needs of our customers.

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.

Following the result of a referendum in 2016, the United Kingdom left the European Union on January 31, 2020, commonly referred to as Brexit.

Pursuant to the formal withdrawal arrangements agreed between the United Kingdom and the European Union, the UK will be subject to a transition period until December 31, 2020 (the "Transition Period") during which EU rules will continue to apply. Negotiations between the UK and the EU are expected to continue in relation to the customs and trading relationship between the UK and the EU following the expiry of the Transition Period.

The uncertainty concerning the UK’s legal, political, and economic relationship with the EU after the Transition Period 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).

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.

Adverse tax laws or regulations could be enacted or existing laws could be applied to us, which could adversely affect our business and financial condition.*

We operate and are subject to taxes in the United States and numerous other jurisdictions throughout the world. Changes to federal, state, local, or international tax laws on income, sales, use, indirect, or other tax laws, statutes, rules, regulations, or ordinances on multinational corporations are currently being considered by the United States and other countries where we do business. These contemplated legislative initiatives include, but are not limited to, changes to transfer pricing policies and definitional changes to permanent establishment that could be applied solely or disproportionately to services provided over the internet. These contemplated tax initiatives, if finalized and adopted by countries, may ultimately impact our effective tax rate and could adversely affect our sales activity resulting in a negative impact on our operating results and cash flows.

In addition, existing tax laws, statutes, rules, regulations, or ordinances could be interpreted, changed, modified, or applied adversely to us (possibly with retroactive effect), which could require us to pay additional tax amounts, fines or penalties, and interest for past amounts. The additional tax obligations could relate to our taxes or obligations to report or withhold on customer taxes. We could take steps to collect customer related taxes, but if we are unsuccessful in collecting such taxes from our customers, we could be held liable for such costs, thereby adversely impacting our operating results and cash flows. Further, if our customers must pay additional fines or penalties, it could adversely affect demand for our services.

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. More recently, on March 18, 2020, the Families First Coronavirus Response Act ("FFCR Act"), and on March 27, 2020, the CARES Act were each enacted in response to the COVID-19 pandemic. The FFCR Act and the CARES Act contain numerous income tax provisions, such as relaxing limitations on the deductibility of interest and the use of net operating losses arising in taxable years beginning after December 31, 2017. We are currently evaluating the impact of this legislation on our consolidated financial position, results of operations, and cash flows. Future regulatory guidance under the FFCR Act and the CARES Act (as well as under the TCJA) remains forthcoming, and such guidance could ultimately increase or lessen their impact on our business and financial condition. It is also highly possible that Congress will enact additional legislation in connection with the COVID-19 pandemic, some of which could have an impact on us. 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. A change in these principles or interpretations could have a significant effect on our reported financial results for periods prior to and subsequent to such change, and could affect the reporting of transactions completed before the announcement of a change.

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. We adopted this standard as of January 1, 2019 using the modified retrospective method and its impact is reflected in our consolidated financial statements, which includes several newly required disclosures. Market practices with respect to these new disclosures are continuously evolving, and securities analysts and investors may not fully understand the implications of our disclosures or how or why they may differ from similar disclosures by other companies. Any additional new accounting standards could have a significant effect on our reported results. If our reported results fall below analyst or investor expectations, our stock price could decline.

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 condensed 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 condensed 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 are 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, 2019, 2018, and 2017 related to the lack of sufficient qualified accounting personnel, which led to incorrect application of U.S. GAAP, and insufficiently designed segregation of duties, information technology access security and change management, and controls over business processes, including the financial statement close and reporting processes with respect to the development of accounting policies, procedures, and estimates. Management has been actively engaged in remediating the above described material weakness. The following remedial actions have been taken during the three months ended March 31, 2020:

- hired additional full-time accounting resources with appropriate levels of experience;
- continued to actively recruit for open positions within the accounting department and will, as necessary, supplement any interim staffing needs with temporary resources;
- reallocated responsibilities across the accounting organization to ensure that the appropriate level of knowledge and experience is applied based on risk and complexity of transactions and tasks under review;
- strengthened our internal policies, processes and reviews, including substantial completion of the formal documentation thereof;
- implemented a formal financial month-end close policy and process; and
- engaged a professional accounting services firm to help us assess and commence documentation of our internal controls for complying with the Sarbanes-Oxley Act.

While significant progress has been made to enhance our internal control over financial reporting, we are still in the process of implementing, documenting and testing these processes, procedures and controls. Additional time is required to complete implementation and to assess and ensure the sustainability of these procedures. We believe the above actions will be effective in remediating the material weaknesses described above and we will continue to devote significant time and attention to these remedial efforts. However, the material weaknesses cannot be considered remediated until the applicable remedial controls operate for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively.

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 (the "CCPA"), which became effective on January 1, 2020. The CCPA requires companies that process information on California residents to make new disclosures to consumers about their data collection, use and sharing practices, allows consumers to opt out of certain data sharing with third parties and provides a new cause of action for data breaches. It remains unclear how the CCPA will be interpreted and the extent of its impact on our business. 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 Ownership of Our Class A Common Stock

The dual class structure of our common stock has the effect of concentrating voting control with the holders of our Class B common stock, 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 has one vote per share. As of March 31, 2020, our Class B common stock held by stockholders, including our executive officers and directors and their affiliates, represents approximately 77.2% of the voting power of our outstanding capital stock, and Chief Architect and Executive Chairman, Artur Bergman, holds approximately 11.8% of our outstanding classes of common stock as a whole, but controls approximately 34.7% of the voting power of our outstanding common stock. As a result, our executive officers, directors, and other affiliates and our Chief Architect and Executive Chairman on his own currently have and will continue to 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 limits the ability for holders of Class A common stock 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.

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;
- 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.

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

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.

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, 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.

As of March 31, 2020, we have outstanding a total of 71,789,279 shares of Class A common stock and 24,335,019 shares of Class B common stock. All of our outstanding shares are eligible for sale in the public market, other than shares and options held by directors, executive officers, and other affiliates that are subject to volume limitations under Rule 144 of the Securities Act, and various vesting agreements.

Certain holders of our Class B common stock (including shares 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.

Future sales also could cause the trading price of our Class A common stock to decline and make it more difficult for investors to sell shares of our Class A common stock.

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.

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 may take advantage of these exemptions until we are no longer an emerging growth company. 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 are 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 includes 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.” Although we may qualify as an "emerging growth company" for as long as five years following our initial public offering, we expect to not be an "emerging growth company" sooner, which would expedite our obligation for our independent registered public accounting firm to issue an attestation report on management's assessment of our internal control over financial reporting and would accelerate our adoption of accounting standards. We are in the early stages of 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;
- 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 provides that the Court of Chancery of the State of Delaware and 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 provides 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.

Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated certificate of incorporation provides 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. 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. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring such a claim arising under the Securities Act against us, our directors, officers, or other employees in a venue other than in the federal district courts of the United States of America. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our amended and restated certificate of incorporation. This may require significant additional costs associated with resolving the dispute in other jurisdictions, and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions.

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

Unregistered Sales of Equity Securities

None.

Use of Proceeds from Public Offering of Class A Common Stock

On May 21, 2019, we closed our initial public offering ("IPO"), in which we sold 12,937,500 shares of Class A common stock at a price to the public of $16.00 per share, including 1,687,500 shares sold in connection with the exercise of the underwriters' option to purchase additional shares. The offer and sale of all of the shares in the IPO were registered under the Securities Act pursuant to a registration statement on Form S-1 (File No. 333-230953), which was declared effective by the SEC on May 16, 2019. We raised $192.5 million in net proceeds after deducting underwriting discounts and commissions. No payments were made by us to directors, officers, or persons owning 10 percent or more of our capital stock or to their associates, or to our affiliates, other than payments in the ordinary course of business to officers for salaries. There has been no material change in the planned use of proceeds from our IPO as described in our final prospectus filed with the SEC on May 17, 2019 pursuant to Rule 424(b). We invested the funds received in accordance with our board approved investment policy, which provides for investments in obligations of the U.S. government, money market instruments, registered money market funds, and corporate bonds. The managing underwriters of our IPO were BofA Merrill Lynch, Citigroup, and Credit Suisse. Following the sale of the shares in connection with the IPO, the offering terminated.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
3.1	Amended and Restated Certificate of Incorporation	8-K	001-38897	3.1	May 21, 2019	
3.2	Amended and Restated Bylaws	S-1/A	333-230953	3.4	May 6, 2019	
4.1	Form of Class A common stock certificate of Fastly, Inc.	S-1/A	333-230953	4.1	May 6, 2019	
4.2	Reference is made to Exhibits 3.1 through 3.2					
10.1+	Employment Agreement, by and between Fastly International (Holdings) Ltd. and Joshua Bixby dated February 19, 2020.	8-K	001-38897	10.1	February 20, 2020	
10.2+	Equity Offer Letter, by and between Fastly, Inc. and Joshua Bixby dated February 19, 2020	8-K	001-38897	10.2	February 20, 2020	
10.3+	Modification to Offer Letter Agreement, by and between Fastly, Inc. and Artur Bergman dated February 19, 2020.	8-K	001-38897	10.3	February 20, 2020	
31.1	Certification of the Chief Executive Officer pursuant to Exchange Act Rule 13a-14 as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of the Chief Financial Officer pursuant to Exchange Act Rule 13a-14 as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1*	Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					
32.2*	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					
101. INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document					X
101.SCH	Inline XBRL Taxonomy Schema Linkbase Document					X
101.CAL	Inline XBRL Taxonomy Calculation Linkbase Document					X
101.DEF	Inline XBRL Taxonomy Definition Linkbase Document					X
101.LAB	Inline XBRL Taxonomy Labels Linkbase Document					X
101.PRE	Inline XBRL Taxonomy Presentation Linkbase Document					X
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)					X

\+ Indicates management contract or compensatory plan.

* The certifications furnished in Exhibit 32.1 and 32.2 hereto are deemed to be furnished with this Quarterly Report on Form 10-Q and will not be deemed to be "filed" for purposes of Section 18 of the Exchange Act, except to the extent that the Registrant specifically incorporates it by reference.

SIGNATURES

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

		FASTLY, INC.
May 8, 2020	By:	/s/ Joshua Bixby
		Joshua Bixby *Chief Executive Officer (Principal Executive Officer)*
May 8, 2020	By:	/s/ Adriel Lares
		Adriel Lares *Chief Financial Officer (Principal Financial and Accounting Officer)*

Exhibit 31.1

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Joshua Bixby, certify that:

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

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

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

4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    c. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date:	May 8, 2020	By:	/s/ Joshua Bixby
			Joshua Bixby
			Chief Executive Officer

Exhibit 31.2

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Adriel Lares, certify that:

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

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

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

4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    c. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date:	May 8, 2020	By:	/s/ Adriel Lares
			Adriel Lares
			Chief Financial Officer

Exhibit 32.1

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

In connection with the Quarterly Report of Fastly, Inc. (the "Company") on Form 10-Q for the period ending March 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date:	May 8, 2020	By:	/s/ Joshua Bixby
			Joshua Bixby
			Chief Executive Officer

Exhibit 32.2

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

In connection with the Quarterly Report of Fastly, Inc. (the “Company”) on Form 10-Q for the period ending March 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date:	May 8, 2020	By:	/s/ Adriel Lares
			Adriel Lares
			Chief Financial Officer