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 September 30, 2022

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: 001-38285

BANDWIDTH INC.

(Exact name of registrant as specified in its charter)

Delaware	**56-2242657**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

900 Main Campus Drive
Raleigh, NC 27606
(Address of principal executive offices) (Zip Code)

(800) 808-5150
(Registrant's telephone number, including area code)

Securities Registered Pursuant to Section 12(b) of the Act:

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

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 x No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes x 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 October 31, 2022, 23,359,265 shares of the registrant's Class A common stock and 1,965,170 shares of registrant's Class B common stock were outstanding, respectively.

BANDWIDTH INC.

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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”). All statements contained in this Quarterly Report on Form 10-Q, other than statements of historical fact, are forward-looking statements. Forward-looking statements generally can be identified by the words “may,” “will,” “expect,” “believe,” “anticipate,” “intend,” “could,” “would,” “project,” “plan,” “estimate,” or “continue,” or the negative of these words or other similar terms or expressions that concern our expectations strategy, plans or intentions. Forward-looking statements contained in this Quarterly Report on Form 10-Q include, but are not limited to, statements about:

- our beliefs regarding the impact of macroeconomic conditions, including inflationary and/or recessionary pressures, on our business and financial condition;
- our ability to attract and retain customers, including large enterprises;
- our approach to identifying, attracting and keeping new and existing customers, as well as our expectations regarding customer turnover;
- our beliefs regarding network traffic growth and other trends related to the usage of our products and services;
- the impact of our customers’ violation of applicable laws, our policies or other misuse of our platform;
- our ability to successfully defend our network, systems and data against ever-evolving cybersecurity threats, including denial-of-service and ransomware attacks;
- our expectations regarding revenue, costs, expenses, gross margin, dollar based net retention rate, adjusted EBITDA, non-generally accepted accounting principles in the United States of America (“GAAP”) net income and capital expenditures;
- our beliefs regarding the growth of our business and how that impacts our liquidity and capital resources requirements;
- our expectations about the impact of public health epidemics, such as COVID-19 (as defined herein), or natural disasters on the global economy and our business, results of operations and financial condition;
- the sufficiency of our cash and cash equivalents to meet our liquidity needs;
- our ability to attract, train, and retain qualified employees and key personnel;
- our beliefs regarding the expense and productivity of and competition for our sales force;
- our expectations regarding headcount;
- our ability to maintain and benefit from our corporate culture;
- our plans to further invest in and grow our business, including international offerings, and our ability to effectively manage our growth and associated investments;
- our ability to introduce new products and services and enhance existing products and services;
- our ability to successfully integrate and benefit from any strategic acquisitions, including our acquisition of Voxbone (as defined herein), or future strategic acquisitions or investments;
- our ability to effectively manage our international operations and expansion;
- our ability to compete successfully against current and future competitors;

- the evolution of technology affecting our products, services and markets;
- the impact of certain new accounting standards and guidance, as well as the time and cost of continued compliance with existing rules and standards;
- our beliefs regarding the use of Non-GAAP financial measures;
- our ability to comply with modified or new industry standards, laws and regulations applicable to our products, services and business, including the General Data Protection Regulation ("GDPR"), the California Consumer Privacy Act of 2018 and other privacy regulations that may be implemented in the future, and Secure Telephone Identity Revisited and Signature-based Handling of Asserted Information Using toKENs and other robocalling prevention and anti-spam standards and increased costs associated with such compliance;
- our ability to manage fees that have been or may be instituted by network providers that increase our costs;
- our ability to maintain, protect and enhance our intellectual property;
- our expectations regarding litigation and other pending or potential disputes;
- our ability to service the interest on our Convertible Notes (as defined herein) and repay such Convertible Notes, to the extent required; and
- other risks related to our indebtedness.

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

You should not rely upon forward-looking statements as predictions of future events. We have based the forward-looking statements contained in this Quarterly Report on Form 10-Q primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition, results of operations and prospects. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties and other factors described in the section titled "Risk Factors" and elsewhere in this Quarterly Report on Form 10-Q. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this Quarterly Report on Form 10-Q. We cannot assure you that the results, events and circumstances reflected in the forward-looking statements will be achieved or occur, and actual results, events or circumstances could differ materially from those described in the forward-looking statements.

The forward-looking statements made in this Quarterly Report on Form 10-Q relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statements made in this Quarterly Report on Form 10-Q to reflect events or circumstances after the date of this Quarterly Report on Form 10-Q or to reflect new information or the occurrence of unanticipated events, except as required by law. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

BANDWIDTH INC.

Condensed Consolidated Balance Sheets

(In thousands)

(Unaudited)

	As of September 30, 2022	As of December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	$ 166,384	$ 331,453
Restricted cash	918	836
Marketable securities	145,171	—
Accounts receivable, net of allowance for doubtful accounts	76,597	61,572
Deferred costs	3,772	3,204
Prepaid expenses and other current assets	24,273	15,820
Total current assets	417,115	412,885
Property, plant and equipment, net	73,205	69,604
Operating right-of-use asset, net	11,251	14,061
Intangible assets, net	170,498	211,217
Deferred costs, non-current	5,145	4,676
Other long-term assets	32,293	8,673
Goodwill	298,892	344,423
Total assets	$ 1,008,399	$ 1,065,539
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 21,034	$ 9,142
Accrued expenses and other current liabilities	75,053	65,921
Current portion of deferred revenue	6,233	6,248
Advanced billings	7,672	6,380
Operating lease liability, current	7,166	5,807
Total current liabilities	117,158	93,498
Other liabilities	9,601	6,018
Operating lease liability, net of current portion	6,426	10,958
Deferred revenue, net of current portion	8,155	7,634
Deferred tax liability	35,215	48,396
Convertible senior notes	637,248	486,440
Total liabilities	813,803	652,944
Stockholders' equity:		
Class A and Class B common stock	25	25
Additional paid-in capital	359,465	502,477
Accumulated deficit	(81,981)	(76,867)
Accumulated other comprehensive loss	(82,913)	(13,040)
Total stockholders' equity	194,596	412,595
Total liabilities and stockholders' equity	$ 1,008,399	$ 1,065,539

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

BANDWIDTH INC.

Condensed Consolidated Statements of Operations
(In thousands, except share and per share amounts)
(Unaudited)

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Revenue	$ 148,325	$ 130,638	$ 416,178	$ 364,775
Cost of revenue	84,861	73,573	241,896	203,071
Gross profit	63,464	57,065	174,282	161,704
Operating expenses:				
Research and development	25,044	16,857	71,735	50,036
Sales and marketing	23,184	21,143	69,663	60,458
General and administrative	16,623	18,127	50,191	49,375
Total operating expenses	64,851	56,127	191,589	159,869
Operating (loss) income	(1,387)	938	(17,307)	1,835
Other (expense) income, net	(338)	(7,567)	2,282	(20,768)
Loss before income taxes	(1,725)	(6,629)	(15,025)	(18,933)
Income tax benefit (provision)	923	(315)	1,161	(255)
Net loss	$ (802)	$ (6,944)	$ (13,864)	$ (19,188)
Net loss per share, basic and diluted	$ (0.03)	$ (0.28)	$ (0.55)	$ (0.77)
Weighted average number of common shares outstanding, basic and diluted	25,304,057	25,114,762	25,268,216	25,075,941

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

BANDWIDTH INC.

Condensed Consolidated Statements of Comprehensive Loss

(In thousands)
(Unaudited)

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Net loss	$ (802)	$ (6,944)	$ (13,864)	$ (19,188)
Other comprehensive loss				
Unrealized gain on marketable securities, net of income taxes	458	—	120	—
Foreign currency translation, net of income taxes	(29,702)	(12,512)	(69,993)	(29,682)
Other comprehensive loss	(29,244)	(12,512)	(69,873)	(29,682)
Total comprehensive loss	$ (30,046)	$ (19,456)	$ (83,737)	$ (48,870)

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

BANDWIDTH INC.

Condensed Consolidated Statements of Changes in Stockholders' Equity

(In thousands, except share amounts)

(Unaudited)

	Class A voting common stock		Class B voting common stock		Additional paid-in capital	Accumulated other comprehensive income (loss)	Accumulated deficit	Total stockholders' equity
	Shares	Amount	Shares	Amount				
Balance at December 31, 2020	22,413,004	$ 22	2,496,125	$ 2	$ 451,463	$ 27,941	$ (49,505)	$ 429,923
Issuance of debt conversion option	—	—	—	—	66,908	—	—	66,908
Debt conversion option issuance costs, net of tax	—	—	—	—	(2,049)	—	—	(2,049)
Capped call option purchase price	—	—	—	—	(25,500)	—	—	(25,500)
Exercises of vested stock options	57,817	—	—	—	753	—	—	753
Vesting of restricted stock units	141,707	—	—	—	—	—	—	—
Equity awards withheld for tax liability	(19,879)	—	—	—	(3,187)	—	—	(3,187)
Conversion of Class B voting common stock to Class A voting common stock	280,955	1	(280,955)	—	—	—	—	1
Foreign currency translation	—	—	—	—	—	(23,185)	—	(23,185)
Stock-based compensation	—	—	—	—	4,390	—	—	4,390
Net loss	—	—	—	—	—	—	(5,316)	(5,316)
Balance at March 31, 2021	22,873,604	23	2,215,170	2	492,778	4,756	(54,821)	442,738
Debt conversion option issuance costs, net of tax	—	—	—	—	30	—	—	30
Exercises of vested stock options	4,406	—	—	—	46	—	—	46
Vesting of restricted stock units	15,605	—	—	—	—	—	—	—
Equity awards withheld for tax liability	(1,948)	—	—	—	(265)	—	—	(265)
Foreign currency translation	—	—	—	—	—	6,015	—	6,015
Stock-based compensation	—	—	—	—	3,377	—	—	3,377
Net loss	—	—	—	—	—	—	(6,928)	(6,928)
Balance at June 30, 2021	22,891,667	23	2,215,170	2	495,966	10,771	(61,749)	445,013
Exercises of vested stock options	8,700	—	—	—	101	—	—	101
Vesting of restricted stock units	16,383	—	—	—	—	—	—	—
Equity awards withheld for tax liability	(1,631)	—	—	—	(154)	—	—	(154)
Conversion of Class B voting common stock to Class A voting common stock	250,000	—	(250,000)	—	—	—	—	—
Foreign currency translation	—	—	—	—	—	(12,512)	—	(12,512)
Stock-based compensation	—	—	—	—	3,825	—	—	3,825
Net loss	—	—	—	—	—	—	(6,944)	(6,944)
Balance at September 30, 2021	23,165,119	23	1,965,170	2	499,738	(1,741)	(68,693)	429,329
Exercises of vested stock options	3,062	—	—	—	23	—	—	23
Vesting of restricted stock units	12,807	—	—	—	—	—	—	—
Equity awards withheld for tax liability	(3,000)	—	—	—	(229)	—	—	(229)
Foreign currency translation	—	—	—	—	—	(11,468)	—	(11,468)
Unrealized gain/loss on employee benefit pension plan	—	—	—	—	—	169	—	169
Stock-based compensation	—	—	—	—	2,945	—	—	2,945
Net loss	—	—	—	—	—	—	(8,174)	(8,174)

BANDWIDTH INC.

Condensed Consolidated Statements of Changes in Stockholders' Equity

(In thousands, except share amounts)

(Unaudited)

	Class A voting common stock		Class B voting common stock		Additional paid-in capital	Accumulated other comprehensive income (loss)	Accumulated deficit	Total stockholders' equity
	Shares	Amount	Shares	Amount				
Balance at December 31, 2021	23,177,988	23	1,965,170	2	502,477	(13,040)	(76,867)	412,595
Exercises of vested stock options	16,095	—	—	—	125	—	—	125
Vesting of restricted stock units	144,977	—	—	—	—	—	—	—
Equity awards withheld for tax liability	(30,029)	—	—	—	(1,751)	—	—	(1,751)
Adjustment to opening retained earnings due to adoption of ASU 2020-06	—	—	—	—	(156,248)	—	8,750	(147,498)
Foreign currency translation	—	—	—	—	—	(10,516)	—	(10,516)
Stock-based compensation	—	—	—	—	5,346	—	—	5,346
Net loss	—	—	—	—	—	—	(6,814)	(6,814)
Balance at March 31, 2022	23,309,031	23	1,965,170	2	349,949	(23,556)	(74,931)	251,487
Exercises of vested stock options	4,287	—	—	—	37	—	—	37
Vesting of restricted stock units	28,351	—	—	—	—	—	—	—
Equity awards withheld for tax liability	(7,005)	—	—	—	(145)	—	—	(145)
Unrealized loss on marketable securities	—	—	—	—	—	(338)	—	(338)
Foreign currency translation	—	—	—	—	—	(29,775)	—	(29,775)
Stock-based compensation	—	—	—	—	4,821	—	—	4,821
Net loss	—	—	—	—	—	—	(6,248)	(6,248)
Balance at June 30, 2022	23,334,664	23	1,965,170	2	354,662	(53,669)	(81,179)	219,839
Vesting of restricted stock units	30,395	—	—	—	—	—	—	—
Equity awards withheld for tax liability	(6,856)	—	—	—	(89)	—	—	(89)
Unrealized gain on marketable securities	—	—	—	—	—	458	—	458
Foreign currency translation	—	—	—	—	—	(29,702)	—	(29,702)
Stock-based compensation	—	—	—	—	4,892	—	—	4,892
Net loss	—	—	—	—	—	—	(802)	(802)
Balance at September 30, 2022	23,358,203	$ 23	1,965,170	$ 2	$ 359,465	$ (82,913)	$ (81,981)	$ 194,596

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

BANDWIDTH INC.

Condensed Consolidated Statements of Cash Flows

(In thousands)
(Unaudited)

	Nine months ended September 30,	
	2022	2021
Cash flows from operating activities		
Net loss	$ (13,864)	$ (19,188)
Adjustments to reconcile net loss to net cash provided by operating activities		
Depreciation and amortization	26,866	27,478
Non-cash reduction to the right-of-use asset	5,308	4,251
Amortization of debt discount and issuance costs	2,343	19,475
Stock-based compensation	15,059	11,592
Deferred taxes and other	(5,496)	686
Changes in operating assets and liabilities:		
Accounts receivable, net of allowances	(18,311)	(20,610)
Prepaid expenses and other assets	(13,389)	(4,173)
Accounts payable	14,305	7,122
Accrued expenses and other liabilities	17,142	1,590
Operating right-of-use liability	(5,623)	(4,535)
Net cash provided by operating activities	24,340	23,688
Cash flows from investing activities		
Purchase of property and equipment	(18,669)	(9,552)
Deposits for construction in progress	(14,545)	(3,000)
Capitalized software development costs	(2,121)	(3,212)
Purchase of land	—	(30,017)
Proceeds from sale of land	—	17,462
Purchase of marketable securities	(178,153)	—
Proceeds from sales and maturities of marketable securities	33,102	—
Proceeds from sales and maturities of other investments	—	40,000
Net cash (used in) provided by investing activities	(180,386)	11,681
Cash flows from financing activities		
Payments on finance leases	(162)	(161)
Proceeds from issuance of convertible senior notes	—	250,000
Purchase of Capped Call	—	(25,500)
Payment of debt issuance costs	(553)	(7,544)
Proceeds from exercises of stock options	162	886
Value of equity awards withheld for tax liabilities	(2,047)	(3,720)
Net cash (used in) provided by financing activities	(2,600)	213,961
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(6,341)	291
Net (decrease) increase in cash, cash equivalents, and restricted cash	(164,987)	249,621
Cash, cash equivalents, and restricted cash, beginning of period	332,289	81,437
Cash, cash equivalents, and restricted cash, end of period	$ 167,302	$ 331,058
Supplemental disclosure of cash flow information		
Cash paid for interest	$ 1,328	$ 674
Cash paid for taxes, net	$ 899	$ 961
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 3,322	$ 553
Supplemental disclosure of noncash investing and financing activities		
Purchase of property and equipment, accrued but not paid	$ 2,133	$ 7,611

BANDWIDTH INC.

Condensed Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

Obligation included in basis of acquired land	$ —	$ 7,752
Lease incentive	$ 3,807	$ 3,193
Obligation included in basis of land acquired by the Developer	$ —	$ 4,512
Equity awards withheld for tax liabilities, accrued but not paid	$ 65	$ 132
Unrealized gain on marketable securities, accrued but not realized	$ 120	$ —

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

BANDWIDTH INC.

Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Organization and Description of Business

Bandwidth Inc. (together with its subsidiaries, “Bandwidth” or the “Company”) was founded in July 2000 and incorporated in Delaware on March 29, 2001. The Company’s headquarters are located in Raleigh, North Carolina. The Company is an international cloud-based, software-powered communications platform-as-a-service (“CPaaS”) provider that enables enterprises to create, scale and operate voice or messaging communications services across any mobile application or connected device.

As a result of certain changes in our business during the quarter ended March 31, 2022, the company re-evaluated its segment reporting and determined that one segment was appropriate, rather than the previously reported segments comprising “CPaaS” and “Other”. The primary drivers for this change were the company’s strategic alignment of its operating departments and the sale of legacy assets. All previously reported segment information has been recast to conform with the one segment structure.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America (“GAAP”) and applicable rules and regulations of the U.S. Securities and Exchange Commission (the “SEC”) regarding interim financial reporting. Certain information and disclosures normally included in the financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to such rules and regulations. Therefore, these unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes included in the Company’s Annual Report on Form 10-K filed with the SEC on February 25, 2022.

The condensed consolidated balance sheet as of December 31, 2021, included herein, was derived from the audited financial statements as of that date, but does not include all disclosures, including certain notes required by GAAP on an annual reporting basis.

In the opinion of management, the accompanying unaudited condensed consolidated financial statements reflect all normal recurring adjustments necessary to present fairly the financial position, results of operations, comprehensive loss and cash flows for the interim periods, but are not necessarily indicative of the results of operations to be anticipated for the full year 2022 or any future period.

Cost Alignment

During the quarter ended March 31, 2022, the Company changed its presentation of certain costs to align with benchmarked definitions of cost of revenue, research and development, sales and marketing, and general and administrative expenses. As part of the benchmarked definitions, the Company has included allocations of facilities and shared IT costs based on employee headcount within the cost of revenue, research and development, sales and marketing, and general and administrative expense categories. Additionally, the product management function is now included in research and development rather than general and administrative as previously reported and the customer billing and collections function and the amortization of acquired customer relationship intangible assets are now included in sales and marketing rather than general and administrative as previously reported. Management believes use of the benchmarked definitions will increase comparability to peers and therefore usability of its financial statements.

All periods presented have been conformed to the current definitions of cost of revenue, research and development, sales and marketing, and general and administrative expenses. There was no impact to revenue or net income for any periods presented. The condensed consolidated balance sheets, condensed consolidated statements of changes in stockholders' equity and condensed consolidated statements of cash flows are not affected by these changes.

The following is a comparison of the change in costs to the prior period:

	Three months ended September 30, 2021		Nine months ended September 30, 2021	
	As reported	As previously reported	As reported	As previously reported
	(In thousands)			
Statement of Operations				
Cost of revenue	$ 73,573	$ 72,395	$ 203,071	$ 199,782
Research and development	16,857	13,359	50,036	39,509
Sales and marketing	21,143	13,592	60,458	38,168
General and administrative	18,127	30,354	49,375	85,481

Principles of Consolidation

The condensed consolidated financial statements include the accounts of Bandwidth Inc. and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of the Company's condensed consolidated financial statements in conformity with GAAP requires the Company to make estimates and judgments that affect the amounts reported in these financial statements and accompanying notes. These estimates in the condensed consolidated financial statements include, but are not limited to, allowance for doubtful accounts, reserve for expected credit losses, reserve for sales credits, recoverability of long lived and intangible assets, fair value of acquired intangible assets and goodwill, discount rates used in the valuation of right-of-use assets and lease liabilities, the fair value of the liability of the Company's Convertible Notes (as defined herein), estimated period of benefit, valuation allowances on deferred tax assets, certain accrued expenses and contingencies, economic and demographic actuarial assumptions related to pension and other postretirement benefit costs and liabilities, estimated cash flows on asset retirement obligation. Although the Company believes that the estimates it uses are reasonable, due to the inherent uncertainty involved in making these estimates, actual results reported in future periods could differ from those estimates.

Cash and Cash Equivalents

The Company classifies all highly liquid investments with original stated maturities of three months or less from the date of purchase as cash equivalents. All highly liquid investments with original stated maturities of greater than three months from the date of purchase are classified as current marketable securities. Cash deposits are primarily in financial institutions in the United States. However, cash for monthly operating costs of international operations are deposited in banks outside the United States. The Company has a policy of making investments only with commercial institutions that have at least an investment grade credit rating. The Company utilizes money market funds as an investment option and only invests in AAA rated funds.

Restricted Cash

Restricted cash consists primarily of employee withholding tax liability and employee benefits contributions not yet remitted. The Company has classified this asset as a short-term asset in order to match the expected period of restriction.

Marketable Securities

The Company's marketable securities consist of time deposits, U.S. treasury debt securities, commercial paper, and corporate debt securities. The Company classifies marketable securities as available-for-sale at the time of purchase and reevaluates such classification as of each balance sheet date. The Company may sell these securities at any time for use in current operations even if they have not yet reached maturity. As a result, the Company classifies investments with maturities greater than 90 days as marketable securities in the accompanying condensed consolidated balance sheets. Available-for-sale securities are recorded at fair value at the end of each reporting period. Unrealized gains and losses are excluded from earnings and recorded as a separate component within accumulated other comprehensive loss on the condensed consolidated balance sheets until realized. Interest income is reported within other (expense) income, net on the condensed consolidated statements of operations. The Company evaluates its investments to assess whether the amortized cost basis is in excess of estimated fair value and determines what amount of that difference, if any, is caused by expected credit losses. Allowance for credit losses are recognized as a charge in other (expense) income, net on the condensed consolidated statements of operations, and any remaining unrealized losses are included in accumulated other comprehensive loss on the condensed consolidated balance sheets. Due to the nature and investment grade of the Company's marketable securities, there were no credit losses recorded for the three and nine months ended September 30, 2022. There have been no impairment charges for any unrealized losses during the period. The Company determines realized gains and losses on the sale of marketable securities using the specific identification method and records such gains and losses in other (expense) income, net on the condensed consolidated statements of operations.

Accounts Receivable and Current Expected Credit Losses

Accounts receivable are stated at realizable value, net of allowances, which includes an allowance for doubtful accounts and a reserve for expected credit losses. The allowance for doubtful accounts is based on management's assessment of the collectability of its customer accounts. The Company regularly reviews the composition of the accounts receivable aging, historical bad debts, changes in payment patterns, customer creditworthiness, current economic trends, and reasonable and supportable forecasts about the future. Relevant risk characteristics include customer size and historical loss patterns. Management has evaluated the expected credit losses related to trade accounts receivable and determined that an allowance of approximately $0.8 million and $1.7 million for uncollectible accounts and customer balances that are disputed was required as of September 30, 2022 and December 31, 2021, respectively. Refer to Note 4, "Financial Statement Components" to these condensed consolidated financial statements, for a rollforward of the components of the allowances as of September 30, 2022 and December 31, 2021.

The Company includes unbilled receivables in its accounts receivable balance. Generally, these receivables represent earned revenue from services provided to customers, which will be billed in the next billing cycle. All amounts are considered collectible and billable. As of September 30, 2022 and December 31, 2021, unbilled receivables were $40.4 million and $31.8 million, respectively.

Concentration of Credit Risk

Financial instruments that are exposed to concentration of credit risk consist primarily of cash and cash equivalents, marketable securities and trade accounts receivable. Cash deposits may be in excess of insured limits. The Company believes that the financial institutions that hold its cash deposits are financially sound and, accordingly, minimal credit risk exists with respect to these balances.

With regard to customers, credit evaluation and account monitoring procedures are used to minimize the risk of loss. The Company believes that no additional credit risk beyond amounts provided for by the allowance for doubtful accounts are inherent in accounts receivable. As of September 30, 2022, no individual customer represented more than 10% of the Company's accounts receivable, net of allowance for doubtful accounts. As of December 31, 2021, one individual customer represented approximately 10%, respectively, of the Company's accounts receivable, net of allowance for doubtful accounts.

For the three and nine months ended September 30, 2022 and 2021, no individual customer represented more than 10% of the Company's revenue.

Debt Issuance Costs

The Company incurs debt issuance costs associated with obtaining and entering into credit agreements and issuing convertible notes. These costs customarily include non-refundable structuring fees, commitment fees, up-front fees and syndication expenses. The Company has a policy of deferring and amortizing these costs based on the effective interest method over the term of the credit agreements or the convertible notes, as applicable.

Goodwill

In accordance with Accounting Standards Codification ("ASC") 350, "Intangibles - Goodwill and Other" ("ASC 350"), goodwill is not amortized, but rather is reviewed for impairment at the reporting unit level on the last day of the Company's fourth quarter of each fiscal year, or when there is evidence that events or changes in circumstances indicate that the fair value of the reporting unit is less than the carrying amount of the reporting unit, including goodwill.

The Company establishes its reporting units based on its current organizational structure and management's view of the business. The Company has determined it has one reporting unit.

Under ASC 350, the Company has the option to first assess qualitatively whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill. In performing qualitative assessments, consistent with ASC 350-20-35-3C, the Company considers, among other factors, macroeconomic conditions (both in the United States and internationally), the Company's overall financial performance (including, but not limited to, comparisons to prior periods, current period internal expectations, and comparable peer companies), broader industry and market considerations, and the trading price performance of the Company's Class A common stock.

As of September 30, 2022 and December 31, 2021, the Company has recorded goodwill of $298.9 million and $344.4 million, respectively.

During the third quarter of 2022, the Company completed an interim qualitative assessment under ASC 350 to determine whether the existence of events or circumstances indicated that it was more likely than not that the fair value of its reporting unit was less than its respective carrying value. The Company concluded that based on the relevant events and circumstances, it was more likely than not that the reporting unit's fair value exceeded its related carrying value and therefore no quantitative assessment was required. No goodwill impairment charges were recorded for the three and nine months ended September 30, 2022 and 2021.

Recently Adopted Accounting Standards

In August 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2020-06, *Debt - Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging - Contracts in Entity's Own Equity (Subtopic 815-40)*, which is intended to address issues identified as a result of the complexity associated with applying GAAP for certain financial instruments with characteristics of liabilities and equity. For convertible instruments, ASU 2020-06 reduces the number of accounting models for convertible debt instruments and convertible preferred stock, and enhances information transparency by making targeted improvements to the disclosures for convertible instruments and EPS guidance on the basis of feedback from financial statement users. ASU 2020-06 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2021. Early adoption was permitted, but no earlier than fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. The Company adopted the new guidance on January 1, 2022 using the modified retrospective approach resulting in decreases in accumulated deficit of $8.8 million, additional paid in capital of $156.2 million, and deferred tax liability of $1.0 million. The Company also recorded an increase in the convertible notes balance of $148.4 million as a result of the reversal of the separation of the convertible debt between debt and equity. The adoption of this standard decreased the amount of non-cash interest expense to be recognized in current and future periods as a result of eliminating the discount associated with the equity component. For the three and nine months ended September 30, 2022, the combined interest expense of the Convertible Notes was $6.9 million and $20.3 million lower, respectively, upon the adoption of ASU 2020-06. The number of diluted shares increased as a result of transitioning from the treasury stock method to the as-if converted method, but did not change the earnings per share for the three and nine months ended September 30, 2022 and 2021 as the Company incurred a net loss in both reporting periods.

In May 2021, the FASB issued ASU 2021-04, *Earnings Per Share (Topic 260), Debt —Modifications and Extinguishments (Subtopic 470-50), Compensation--Stock Compensation (Topic 718), and Derivatives and Hedging--Contracts in Entity's Own Equity (Subtopic 815-40)*, which is intended to provide clarity surrounding the treatment for a modification or an exchange of a freestanding equity-classified written call option. The amendments also provide guidance for the recognition and measurement of earnings-per-share ("EPS") for certain modifications or exchanges of freestanding equity-classified written call options for entities that present EPS. The amendments do not affect a holder's accounting for freestanding call options. ASU 2021-04 is effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. Early adoption was permitted, including adoption in an interim period. The Company adopted the new guidance on January 1, 2022. The Company did not have any modifications or exchanges of freestanding written call options classified in equity during the reporting period and therefore did not have an impact on its financial statements.

Recent Accounting Pronouncements Not Yet Adopted

The Company did not have any applicable recent accounting pronouncements not yet adopted.

3. Fair Value Measurements

The carrying amounts of cash and cash equivalents, accounts receivable, accounts payable and accrued expenses approximate fair value as of September 30, 2022 and December 31, 2021 because of the relatively short duration of these instruments. Marketable securities consist of time deposits, corporate debt securities, U.S. treasury securities, and commercial paper not otherwise classified as cash equivalents. All marketable securities are considered to be available-for-sale and are recorded at their estimated fair values. Unrealized gain and losses for available-for-sale securities are recorded in other comprehensive loss.

The Company evaluated its financial assets and liabilities subject to fair value measurements on a recurring basis to determine the appropriate level in which to classify them for each reporting period.

The following tables summarize the assets measured at fair value as of September 30, 2022 and December 31, 2021:

	Amortized cost or carrying value	Unrealized gains	Unrealized losses	Fair value measurements on a recurring basis September 30, 2022			
				Level 1	Level 2	Level 3	Total
	(In thousands)						
Financial assets:							
Cash and cash equivalents:							
Money market account	$ 45,505	$ —	$ —	$ 45,505	$ —	$ —	$ 45,505
Commercial paper	30,819	—	—	30,819	—	—	30,819
Total included in cash and cash equivalents	$ 76,324	$ —	$ —	$ 76,324	$ —	$ —	$ 76,324
Marketable securities:							
Time deposits	$ 10,683	$ —	$ (17)	$ 10,666	$ —	$ —	$ 10,666
U.S. treasury securities	20,368	—	(21)	20,347	—	—	20,347
Corporate debt securities	43,221	—	(235)	—	42,986	—	42,986
Commercial paper	70,779	393	—	71,172	—	—	71,172
Total marketable securities	$ 145,051	$ 393	$ (273)	$ 102,185	$ 42,986	$ —	$ 145,171
Total financial assets	$ 221,375	$ 393	$ (273)	$ 178,509	$ 42,986	$ —	$ 221,495

	Fair value measurements on a recurring basis December 31, 2021			
	Level 1	Level 2	Level 3	Total
	(In thousands)			
Financial assets:				
Cash and cash equivalents:				
Money market account	$ 241,157	$ —	$ —	$ 241,157
Total financial assets	$ 241,157	$ —	$ —	$ 241,157

The Company classifies its marketable securities as current assets as they are available for current operating needs. The following table summarizes the contractual maturities of marketable securities as of September 30, 2022:

	Amortized cost	Aggregate fair value
	(In thousands)	
Financial assets:		
Less than one year	$ 145,051	$ 145,171
Total	$ 145,051	$ 145,171

As of September 30, 2022, the marketable securities were in an unrealized gain position. The Company has determined that (i) it does not have the intent to sell any of these investments, and (ii) it is not more likely than not that it will be required to sell any of these investments before recovery of the entire amortized cost basis. As of September 30, 2022, the Company anticipates that it will recover the entire amortized cost basis of its marketable securities before maturity.

During the three and nine months ended September 30, 2022, there were $33.1 million in maturities of marketable securities. Interest earned on marketable securities was $0.4 million and $0.6 million in the three and nine months ended September 30, 2022, respectively. The interest is recorded in other (expense) income, net, on the accompanying condensed consolidated statements of operations. As of September 30, 2022, the accrued interest receivable, net of allowance for credit losses, was $0.4 million. Accrued interest receivable is recorded in prepaid expenses and other current assets on the accompanying condensed consolidated balance sheet.

As of September 30, 2022, the fair value of the 2026 Convertible Notes and 2028 Convertible Notes, as further described in Note 8, “Debt”, was approximately $260.6 million and $147.9 million, respectively. As of December 31, 2021, the fair value of the 2026 Convertible Notes and the 2028 Convertible Notes was approximately $427.1 million and $194.2 million, respectively. The fair value was determined based on the closing price for the Convertible Notes on the last trading day of the reporting period and is considered as Level 2 in the fair value hierarchy.

4. Financial Statement Components

Accounts receivable, net of allowances consist of the following:

	As of September 30, 2022	As of December 31, 2021
	(In thousands)	
Trade accounts receivable	$ 36,963	$ 31,036
Unbilled accounts receivable	40,396	31,786
Allowance for doubtful accounts and reserve for expected credit losses	(792)	(1,661)
Other accounts receivable	30	411
Total accounts receivable, net	$ 76,597	$ 61,572

Components of allowance for doubtful accounts and reserve for expected credit losses are as follows:

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Allowance for doubtful accounts:				
Balance, beginning of period	$ (945)	$ (1,364)	$ (1,661)	$ (1,203)
Charged to bad debt expense, net of reversals	(117)	(169)	64	(475)
Deductions (1)	236	54	728	182
Impact of foreign currency translation	34	12	77	29
Balance, end of period	$ (792)	$ (1,467)	$ (792)	$ (1,467)

(1) Write-off of uncollectible accounts after all collection efforts have been exhausted.

Accrued expenses and other current liabilities consisted of the following:

	As of September 30, 2022	As of December 31, 2021
	(In thousands)	
Accrued expense	$ 32,609	$ 31,264
Accrued compensation and benefits	17,549	19,042
Accrued sales, use, VAT and telecommunications related taxes	17,327	11,046
Current portion of finance lease	121	177
Income tax payable	6,691	3,420
Other accrued expenses	756	972
Total accrued expenses and other current liabilities	$ 75,053	$ 65,921

5. Right-of-Use Asset and Lease Liabilities

Right-of-use ("ROU") assets represent the Company's right to use an underlying asset for the lease term, and lease liabilities represent the Company's obligation to make lease payments arising from the lease. The Company determines if an arrangement is a lease at inception. ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. Operating lease expense attributable to lease payments is recognized on a straight-line basis over the lease term and is part of allocated facilities costs based on employee headcount within the cost of revenue, research and development, sales and marketing, and general and administrative expense categories on the Company's condensed consolidated statements of operations. Finance leases result in the recognition of depreciation expense, which is recognized on a straight-line basis over the expected life of the leased asset, and interest expense, which is recognized following an effective interest rate method. Depreciation expense attributable to finance leases is included in operating expenses on the Company's condensed consolidated statements of operations. The Company presents the operating leases in long-term assets and current and long-term liabilities in the accompanying condensed consolidated balance sheets. Finance leases are reported in property, plant and equipment, net, accrued expenses and other current liabilities, and other liabilities on the Company's condensed consolidated balance sheets.

The Company previously sub-leased approximately 17,073 square feet of office space to a related party, Relay, Inc. (f/k/a Republic Wireless, Inc.) ("Relay"). The lease term under this non-cancellable lease expired in July 2022.

As of September 30, 2022, the Company had various leased properties in the United States and internationally, with remaining lease terms of one month to 4.25 years, some of which include options to extend the leases for up to 5 years. None of the options to extend the leases are recognized in operating lease ROU assets or lease liabilities. The Company has one lease with an early-termination option, which it does not expect to exercise.

The components of lease expense recorded in the consolidated statement of operations were as follows:

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Operating lease cost	$ 1,809	$ 1,699	$ 6,037	$ 5,002
Finance lease cost:				
Depreciation of assets	44	60	138	165
Interest on lease liabilities	3	5	10	14
Sublease income	(14)	(96)	(206)	(288)
Total net lease cost	$ 1,842	$ 1,668	$ 5,979	$ 4,893

During the three and nine months ended September 30, 2022, short-term operating lease expense was $0.2 million and $0.4 million, respectively. During the three and nine months ended September 30, 2021, short-term operating lease expense was $0.4 million and $1.1 million, respectively.

Supplemental balance sheet information related to leases was as follows:

Leases	Classification	As of September 30, 2022	As of December 31, 2021
		(In thousands)	
Assets:			
Operating lease assets	Operating right-of-use asset, net (1)	$ 11,251	$ 14,061
Finance lease assets	Property, plant and equipment, net (2)	286	373
Total leased assets		$ 11,537	$ 14,434
Liabilities:			
Current			
Operating	Operating lease liability, current	$ 7,166	$ 5,807
Finance	Accrued expenses and other current liabilities	121	177
Non-current			
Operating	Operating lease liability, net of current portion	6,426	10,958
Finance	Other liabilities	156	202
Total lease liabilities		$ 13,869	$ 17,144

(1) Operating lease assets are recorded net of accumulated amortization of $17.5 million and $14.8 million as of September 30, 2022 and December 31, 2021, respectively.

(2) Finance lease assets are recorded net of accumulated depreciation of $0.3 million and $0.2 million as of September 30, 2022 and December 31, 2021, respectively.

Supplemental cash flow and other information related to leases was as follows:

	Nine months ended September 30, 2022	Nine months ended September 30, 2021
	(In thousands)	
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows from operating leases	$ 5,623	$ 4,535
Financing cash flows from finance leases	162	161
	$ 5,785	$ 4,696
Weighted average remaining lease term (in years)		
Operating leases	2.28	3.14
Finance leases	2.48	2.56
Weighted average discount rate		
Operating leases	4.61 %	4.77 %
Finance leases	4.50 %	4.00 %

Maturities of lease liabilities were as follows:

	As of September 30, 2022	
	Operating Leases	Finance Leases
	(In thousands)	
2022 (remaining)	$ 1,580	$ 30
2023	8,030	130
2024	2,560	86
2025	1,532	37
2026	599	11
Total lease payments	14,301	294
Less: imputed interest	(709)	(17)
Total lease obligations	13,592	277
Less: current obligations	(7,166)	(121)
Long-term lease obligations	$ 6,426	$ 156

On June 4, 2021, the Company purchased approximately 40 acres of undeveloped land (the "Property") in Raleigh, North Carolina, from the State of North Carolina (the "State") for $30.0 million. Additionally, as consideration for the Property, the Company agreed to construct, at its expense, a parking lot and related improvements (the "Parking Improvements") on land owned by the State adjacent to the Property. Subsequent to the purchase of the Property, the Company sold a portion of the Property constituting approximately 23.76 acres (the "Conveyed Parcel") to USEF Edwards Mill Owner, LLC (the "Developer") for $17.5 million. The Company retained approximately 17.06 acres of the Property, which was recorded at cost and is included in the Company's condensed consolidated balance sheet as a component of property, plant and equipment, net. A lease incentive was recognized for the difference between the consideration received from the Developer for the Conveyed Parcel and the cost basis of the Conveyed Parcel and is included as a component of other liabilities on the condensed consolidated balance sheet. As of September 30, 2022, the balance of the lease incentive, including additional incentives obtained during project development, was $8.5 million.

On May 27, 2021, the Company entered into a Lease Agreement (the "Lease") with the Developer for the Conveyed Parcel, together with improvements for office and related infrastructure to be constructed thereon, collectively constituting approximately 534,000 gross square feet (the "Project"). The lease became effective upon closing of the sale of the Conveyed Parcel to the Developer. When construction of the Project is completed, the Company intends to relocate its corporate headquarters to the Project. The lease term will commence upon substantial completion of the final building to be delivered, as evidenced by a certificate of occupancy issued by the City of Raleigh (the "Commencement Date"), and continue for a period of twenty (20) years (the "Initial Term"). It is anticipated that the Commencement Date will occur in June 2023. The Company has the option to renew the Initial Term for two ten-year periods at a rental rate equal to 100% of the then-prevailing market rental rate for comparable buildings in the Raleigh, North Carolina, market. Upon the effective date, the Company deposited $2.5 million with the Developer as security on the lease. The deposit is included in other long-term assets on the Company's condensed consolidated balance sheet. Additionally, the Company made deposits of $17.5 million to fund certain improvements expected to be constructed as part of the development of the Project.

No ROU assets or lease liabilities have been recognized in connection with the lease as of September 30, 2022. Future lease payments are included in Note 12, "Commitments and Contingencies."

6. Property, Plant and Equipment

Property, plant and equipment, net consisted of the following:

	As of September 30, 2022	As of December 31, 2021
	(In thousands)	
Furniture and fixtures	$ 2,197	$ 2,240
Computer and office equipment	7,638	5,419
Telecommunications equipment	77,855	76,963
Leasehold improvements	6,212	6,970
Software	7,188	6,942
Internal-use software development	24,100	22,917
Automobile	582	616
Land	21,598	17,269
Total cost	147,370	139,336
Less—accumulated depreciation	(74,165)	(69,732)
Total property, plant and equipment, net	$ 73,205	$ 69,604

The Company capitalized $0.9 million and $2.1 million of software development costs for the three and nine months ended September 30, 2022, respectively, and $0.8 million and $3.2 million for the three and nine months ended September 30, 2021, respectively.

Amortization expense related to capitalized software development costs were $0.6 million and $1.6 million for the three and nine months ended September 30, 2022, respectively, and $0.5 million and $1.4 million for the three and nine months ended September 30, 2021, respectively. As of September 30, 2022, unamortized implementation costs related to cloud computing arrangements are $0.3 million, of which $0.1 million are included in prepaid expenses and other current assets and $0.2 million are included in other long-term assets.

The Company leases automobiles under leases accounted for as finance leases with expiration dates ranging from October 6, 2022 to June 23, 2026. As of September 30, 2022, cost and accumulated depreciation of the assets under finance leases recorded by the Company were $0.6 million and $0.3 million, respectively.

The Company recognized depreciation expense, which includes amortization of capitalized software development costs, as follows:

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Cost of revenue	$ 3,403	$ 3,138	$ 10,141	$ 9,345
Research and development	610	578	1,767	1,539
Sales and marketing	346	214	1,027	787
General and administrative	302	539	913	1,312
Total depreciation expense	$ 4,661	$ 4,469	$ 13,848	$ 12,983

7. Intangible Assets

Intangible assets, net consisted of the following as of September 30, 2022:

	Gross Amount	Accumulated Amortization	Net Carrying Value	Amortization Period
		(In thousands)		(In years)
Customer relationships	$ 134,579	$ (21,889)	$ 112,690	15 - 20
Developed technology	70,743	(13,559)	57,184	10
Other, definite lived	2,828	(2,828)	—	2 - 7
Licenses, indefinite lived	624	—	624	Indefinite
Total intangible assets, net	$ 208,774	$ (38,276)	$ 170,498	

Intangible assets, net consisted of the following as of December 31, 2021:

	Gross Amount	Accumulated Amortization	Net Carrying Value	Amortization Period
		(In thousands)		(In years)
Customer relationships	$ 155,081	$ (16,861)	$ 138,220	15 - 20
Developed technology	82,548	(10,315)	72,233	10
Other, definite lived	3,158	(3,158)	—	2 - 7
Licenses, indefinite lived	764	—	764	Indefinite
Total intangible assets, net	$ 241,551	$ (30,334)	$ 211,217	

The Company recognized amortization expense as follows:

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Cost of revenue	$ 1,831	$ 2,128	$ 5,797	$ 6,479
Sales and marketing	2,287	2,636	7,221	8,016
Total amortization expense	$ 4,118	$ 4,764	$ 13,018	$ 14,495

The remaining weighted average amortization period for definite lived intangible assets is 11.3 years.

Future estimated amortization expense for definite lived intangible assets is as follows:

	As of September 30, 2022
	(In thousands)
2022 (remaining)	$ 3,968
2023	15,873
2024	15,873
2025	15,873
2026	15,873
Thereafter	102,414
	$ 169,874

8. Debt

Revolving Credit Facility

On June 6, 2022, the Company entered into a credit agreement (the “Credit Agreement”) among the Company, as borrower, the lenders from time to time party thereto, and Silicon Valley Bank as administrative agent, issuing lender and swingline lender. The Credit Agreement provides for a $50.0 million revolving credit facility (the “Credit Facility”), including a $20.0 million sublimit for the issuance of letters of credit and a swingline subfacility of up to $5.0 million. The Credit Facility matures on June 6, 2025.

Interest on borrowings under the Credit Facility accrues at an annual rate tied to a base rate or the Secured Overnight Financing Rate (“SOFR”), at the Company’s election. Loans based on SOFR bear interest at a rate equal to SOFR plus an applicable margin between 1.50% and 2.00% depending upon the Company’s consolidated adjusted quick ratio for the immediately preceding quarter, and loans based on the base rate bear interest at a rate equal to the base rate plus an applicable margin between 0.50% and 1.00% depending upon the Company’s consolidated adjusted quick ratio for the immediately preceding quarter. The Company is required to pay a quarterly commitment fee equal to 0.0625% on the unused portion of the borrowing commitment. The Credit Agreement requires that the Company meet a minimum quick ratio on a quarterly basis if the Company does not maintain the minimum liquidity amount of $70.0 million in cash and cash equivalents at all times.

As of September 30, 2022, unamortized debt issuance costs were $0.5 million of which $0.2 million were included in prepaid expenses and other current assets and $0.3 million were included in other long-term assets.

As of September 30, 2022, there were no borrowings under the Credit Facility and the Company was in compliance with all financial and non-financial covenants for all periods presented. The available borrowing capacity under the Credit Facility was $50.0 million as of September 30, 2022.

Convertible Senior Notes and Capped Call Transactions

2026 Convertible Notes

On February 28, 2020, the Company issued $400.0 million aggregate principal amount of 0.25% Convertible Notes due March 1, 2026 in a private placement to qualified institutional buyers pursuant to Rule 144A under the Securities Act (the “2026 Convertible Notes”). The interest on the 2026 Convertible Notes is payable semi-annually in arrears on March 1 and September 1 of each year, beginning on September 1, 2020.

The 2026 Convertible Notes may bear special interest under specified circumstances relating to the Company’s failure to comply with its reporting obligations under the indenture governing the 2026 Convertible Notes (the “2026 Indenture”) or if the 2026 Convertible Notes are not freely tradeable as required by the 2026 Indenture. The 2026 Convertible Notes will mature on March 1, 2026, unless earlier repurchased, redeemed by the Company, or converted pursuant to their terms. The total net proceeds from the 2026 Convertible Notes, after deducting initial purchaser discounts, costs related to the 2026 Capped Calls (as defined herein), and debt issuance costs, paid by the Company, were approximately $344.7 million.

Each $0.001 principal amount of the 2026 Convertible Notes is initially convertible into 10.9857 shares of the Company’s Class A common stock, par value $0.001 per share, which is equivalent to an initial conversion price of approximately $91.03 per share. The conversion rate is subject to adjustment upon the occurrence of certain specified events but will not be adjusted for any accrued and unpaid special interest. In addition, upon the occurrence of a make-whole fundamental change, as defined in the 2026 Indenture, the Company will, in certain circumstances, increase the conversion rate by a number of additional shares for a holder that elects to convert its 2026 Convertible Notes in connection with such make-whole fundamental change or during the relevant redemption period.

The 2026 Convertible Notes will be redeemable in whole or in part at the Company’s option on or after March 6, 2023, but before the fortieth (40^{th}) scheduled trading day before the maturity date, at a cash redemption price equal to 100% of the principal amount of the 2026 Convertible Notes to be redeemed, plus accrued and unpaid interest, if any, if the last reported sale price of the Class A common stock has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading days ending on, and including, the trading day immediately before the date the redemption notices were sent; and the trading day immediately before such notices were sent.

Prior to the close of business on the business day immediately preceding September 1, 2025, the 2026 Convertible Notes may be convertible at the option of the holders only under the following circumstances:

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

(2) during the five consecutive business days immediately after any 10 consecutive trading day period (such 10 consecutive trading day period, the “measurement period”) in which the trading price per $0.001 principal amount of 2026 Convertible Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price per share of the Company’s Class A common stock on such trading day and the conversion rate on such trading day;

(3) upon the occurrence of certain corporate events or distributions on its Class A common stock; and

(4) if the Company calls such 2026 Convertible Notes for redemption.

On or after September 1, 2025, until the close of business on the second scheduled trading day immediately preceding the maturity date, holders of the 2026 Convertible Notes may, at their option, convert all or a portion of their 2026 Convertible Notes regardless of the foregoing conditions.

Prior to and during the nine months ended September 30, 2021, the conditional conversion feature of the 2026 Convertible Notes was triggered as the last reported sale price of the Company's Class A common stock was more than or equal to 130% of the conversion price for at least 20 trading days (whether or not consecutive) in the period of 30 consecutive trading days ending on or after June 30, 2020 (the last trading day of the calendar quarter), and therefore the 2026 Convertible Notes were convertible, in whole or in part, at the option of the holders between July 1, 2020 through September 30, 2021. The conditional conversion feature of the 2026 Convertible Notes was not triggered from October 1, 2021 through September 30, 2022 as the last reported sale price of the Company's Class A common stock was not more than or equal to 130% of the conversion price for at least 20 trading days (whether or not consecutive) in the period of 30 consecutive trading days (the last trading day of the calendar quarter). Whether the 2026 Convertible Notes will be convertible following such period will depend on the satisfaction of this condition or another conversion condition in the future. The Company continues to classify the 2026 Convertible Notes as a long-term liability in its condensed consolidated balance sheet as of September 30, 2022, based on contractual settlement provisions.

Upon conversion, the Company will pay or deliver, as the case may be, cash, shares of Class A common stock, or a combination of cash and shares of Class A common stock, at the Company's election. It is the Company's current intent to settle the principal amount of the 2026 Convertible Notes with cash.

No sinking fund is provided for the 2026 Convertible Notes. Upon the occurrence of a fundamental change (as defined in the 2026 Indenture) prior to the maturity date, holders may require the Company to repurchase all or a portion of the 2026 Convertible Notes for cash at a price equal to the principal amount of the 2026 Convertible Notes to be repurchased, plus any accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

In accounting for the issuance of the 2026 Convertible Notes, prior to the adoption of ASU 2020-06, the Company separated the 2026 Convertible Notes into liability and equity components. The carrying amount of the liability component was calculated by measuring the fair value of a similar debt instrument that does not have an associated convertible feature. The carrying amount of the equity component representing the conversion option was $125.2 million and was determined by deducting the fair value of the liability component from the par value of the 2026 Convertible Notes. The difference represented the debt discount that was amortized to interest expense at an effective interest rate of 6.763% over the term of the 2026 Convertible Notes. The carrying amount of the equity component was $57.5 million and is recorded in additional paid-in-capital. The equity component was not remeasured as long as it continued to meet the conditions for equity classification. The excess of the principal amount of the liability component over its carrying amount, or the debt discount, was amortized to interest expense at an annual effective interest rate of 6.907% over the contractual terms of the 2026 Convertible Notes. Upon adoption of ASU 2020-06 on January 1, 2022, the Company reversed the separation of the debt and equity component representing the conversion option and accounted for the 2026 Convertible Notes in their entirety as debt. The Company also reversed the amortization of the debt discount, with a cumulative adjustment to retained earnings on the adoption date.

In accounting for the transaction costs related to the 2026 Convertible Notes, prior to the adoption of ASU 2020-06, the Company allocated the total amount incurred to the liability and equity components of the 2026 Convertible Notes based on the proportion of the proceeds allocated to the debt and equity components. Issuance costs attributable to the liability component were approximately $8.2 million, were recorded as an additional debt discount and amortized to interest expense using the effective interest method over the contractual terms of the 2026 Convertible Notes. Issuance costs attributable to the equity component of $3.7 million were netted with the equity component in stockholders' equity. Upon adoption of ASU 2020-06 on January 1, 2022, the Company reversed the allocation of the issuance costs to the equity component and accounted for the entire amount as debt issuance cost that will be amortized as interest expense at an effective interest rate of 0.513% for the term of the 2026 Convertible Notes with a cumulative adjustment to retained earnings on the adoption date.

2028 Convertible Notes

On March 16, 2021, the Company issued $250.0 million aggregate principal amount of 0.50% Convertible Notes due April 1, 2028 in a private placement to qualified institutional buyers pursuant to Rule 144A under the Securities Act (the “2028 Convertible Notes” and, together with the 2026 Convertible Notes, the “Convertible Notes”). The interest on the 2028 Convertible Notes is payable semi-annually in arrears on April 1 and October 1 of each year, beginning on October 1, 2021.

The 2028 Convertible Notes may bear special interest under specified circumstances relating to the Company’s failure to comply with its reporting obligations under the indenture governing the 2028 Convertible Notes (the “2028 Indenture”) or if the 2028 Convertible Notes are not freely tradeable as required by the 2028 Indenture. The 2028 Convertible Notes will mature on April 1, 2028, unless earlier repurchased, redeemed by the Company, or converted pursuant to their terms. The total net proceeds from the 2028 Convertible Notes, after deducting initial purchaser discounts, costs related to the 2028 Capped Calls (as defined herein), and debt issuance costs, paid by the Company, were approximately $217.0 million.

Each $0.001 principal amount of the 2028 Convertible Notes is initially convertible into 5.5781 shares of the Company’s Class A common stock, par value $0.001 per share, which is equivalent to an initial conversion price of approximately $179.27 per share. The conversion rate is subject to adjustment upon the occurrence of certain specified events but will not be adjusted for any accrued and unpaid special interest. In addition, upon the occurrence of a make-whole fundamental change, as defined in the 2028 Indenture, the Company will, in certain circumstances, increase the conversion rate by a number of additional shares for a holder that elects to convert its 2028 Convertible Notes in connection with such make-whole fundamental change or during the relevant redemption period.

The 2028 Convertible Notes will be redeemable in whole or in part at the Company’s option on or after April 6, 2025, but before the fortieth (40^{th}) scheduled trading day before the maturity date, at a cash redemption price equal to 100% of the principal amount of the 2028 Convertible Notes to be redeemed, plus accrued and unpaid interest, if any, if the last reported sale price of the Class A common stock has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading days ending on, and including, the trading day immediately before the date the redemption notices were sent; and the trading day immediately before such notices were sent.

On or after April 6, 2025 until the close of business on the scheduled trading day immediately preceding the maturity date, the 2028 Convertible Notes may be convertible at the option of the holders only under the following circumstances:

(1) during any calendar quarter commencing after the calendar quarter ending on June 30, 2021 (and only during such calendar quarter), if the last reported sale price per share of the Company’s Class A common stock exceeds 130% of the conversion price for each of at least 20 trading days, whether or not consecutive, during the 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter;

(2) during the five consecutive business days immediately after any 10 consecutive trading day period (such 10 consecutive trading day period, the “measurement period”) in which the trading price per $0.001 principal amount of 2028 Convertible Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price per share of the Company’s Class A common stock on such trading day and the conversion rate on such trading day;

(3) upon the occurrence of certain corporate events or distributions on its Class A common stock; and

(4) if the Company calls such 2028 Convertible Notes for redemption.

On or after October 1, 2027, until the close of business on the second scheduled trading day immediately preceding the maturity date, holders of the 2028 Convertible Notes may, at their option, convert all or a portion of their Convertible Notes regardless of the foregoing conditions.

Prior to and during the three and nine months ended September 30, 2022 and 2021, the conditional conversion feature of the 2028 Convertible Notes was not triggered as the last reported sale price of the Company's Class A common stock was not more than or equal to 130% of the conversion price for at least 20 trading days (whether or not consecutive) in the period of 30 consecutive trading days (the last trading day of the calendar quarter). Whether the 2028 Convertible Notes will be convertible following such period will depend on the satisfaction of this condition or another conversion condition in the future. The Company continues to classify the 2028 Convertible Notes as a long-term liability in its condensed consolidated balance sheet as of September 30, 2022, based on contractual settlement provisions.

Upon conversion, the Company will pay or deliver, as the case may be, cash, shares of Class A common stock, or a combination of cash and shares of Class A common stock, at the Company's election. It is the Company's current intent to settle the principal amount of the 2028 Convertible Notes with cash.

No sinking fund is provided for the 2028 Convertible Notes. Upon the occurrence of a fundamental change (as defined in the 2028 Indenture) prior to the maturity date, holders may require the Company to repurchase all or a portion of the 2028 Convertible Notes for cash at a price equal to the principal amount of the 2028 Convertible Notes to be repurchased, plus any accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

In accounting for the issuance of the 2028 Convertible Notes, prior to the adoption of ASU 2020-06, the Company separated the 2028 Convertible Notes into liability and equity components. The carrying amount of the liability component was calculated by measuring the fair value of a similar debt instrument that does not have an associated convertible feature. The carrying amount of the equity component representing the conversion option was $66.9 million and was determined by deducting the fair value of the liability component from the par value of the 2028 Convertible Notes. The difference represents the debt discount that was amortized to interest expense at an effective interest rate of 5.125% over the term of the 2028 Convertible Notes. The carrying amount of the equity component was $39.4 million and was recorded in additional paid-in-capital. The equity component was not remeasured as long as it continued to meet the conditions for equity classification. The excess of the principal amount of the liability component over its carrying amount, or the debt discount, was amortized to interest expense at an annual effective interest rate of 4.959% over the contractual terms of the 2028 Convertible Notes. Upon adoption of ASU 2020-06 on January 1, 2022, the Company reversed the separation of the debt and equity component representing the conversion option and accounted for the 2028 Convertible Notes in their entirety as debt. The Company also reversed the amortization of the debt discount, with a cumulative adjustment to retained earnings on the adoption date

In accounting for the transaction costs related to the 2028 Convertible Notes, prior to the adoption of ASU 2020-06, the Company allocated the total amount incurred to the liability and equity components of the 2028 Convertible Notes based on the proportion of the proceeds allocated to the debt and equity components. Issuance costs attributable to the liability component were approximately $5.5 million, were recorded as an additional debt discount and amortized to interest expense using the effective interest method over the contractual terms of the 2028 Convertible Notes. Issuance costs attributable to the equity component of $2.0 million were netted with the equity component in stockholders' equity. Upon adoption of ASU 2020-06 on January 1, 2022, the Company reversed the allocation of the issuance costs to the equity component and accounted for the entire amount as debt issuance cost that will be amortized as interest expense at an effective interest rate of 0.442% for the term of the 2028 Convertible Notes with a cumulative adjustment to retained earnings on the adoption date.

As discussed above, upon adoption of ASU 2020-06, the Company reversed the separation of the debt and equity components of the 2026 and 2028 Convertible Notes, and accounted for the Convertible Notes wholly as debt. Additionally, the issuance costs of the 2026 and 2028 Convertible Notes were accounted for as debt issuance costs in their entirety. There is no longer a net carrying amount for the equity component as of the adoption date, January 1, 2022.

The net carrying amount of the liability components of the 2026 and 2028 Convertible Notes were as follows:

	As of September 30, 2022	As of December 31, 2021
	(In thousands)	
2026 Convertible Notes:		
Principal	$ 400,000	$ 400,000
Unamortized discount	N/A	(92,034)
Unamortized debt issuance costs	(6,837)	(6,043)
2026 Convertible Notes net carrying amount	$ 393,163	$ 301,923
2028 Convertible Notes:		
Principal	$ 250,000	$ 250,000
Unamortized discount	N/A	(60,488)
Unamortized debt issuance costs	(5,915)	(4,995)
2028 Convertible Notes net carrying amount	$ 244,085	$ 184,517
Total net carrying amount	$ 637,248	$ 486,440

The net carrying amount of the equity components of the 2026 and 2028 Convertible Notes were as follows:

	As of September 30, 2022	As of December 31, 2021
	(In thousands)	
2026 Convertible Notes:		
Proceeds allocated to the conversion options (debt discount)	N/A	$ 125,152
Issuance costs	N/A	(3,742)
2026 Convertible Notes net carrying amount	N/A	$ 121,410
2028 Convertible Notes:		
Proceeds allocated to the conversion options (debt discount)	N/A	$ 66,908
Issuance costs	N/A	(2,019)
2028 Convertible Notes net carrying amount	N/A	$ 64,889
Total net carrying amount	N/A	$ 186,299

The following table sets forth the interest expense recognized related to the 2026 and 2028 Convertible Notes:

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
2026 Convertible Notes:	(In thousands)			
Contractual interest expense	$ 250	$ 250	$ 750	$ 750
Amortization of debt discount [1]	N/A	4,664	N/A	13,761
Amortization of debt issuance costs	497	306	1,488	903
Total interest expense related to the 2026 Convertible Notes	$ 747	$ 5,220	$ 2,238	$ 15,414
2028 Convertible Notes:				
Contractual interest expense	$ 313	$ 313	$ 939	$ 678
Amortization of debt discount [1]	N/A	2,029	N/A	4,366
Amortization of debt issuance costs	266	168	796	362
Total interest expense related to the 2028 Convertible Notes	$ 579	$ 2,510	$ 1,735	$ 5,406
Total interest expense	$ 1,326	$ 7,730	$ 3,973	$ 20,820

[1] Upon adoption of ASU 2020-06, the debt discount associated with the equity component on convertible debt outstanding was reversed, which resulted in a decrease in the amount of non-cash interest expense to be recognized going forward.

In connection with the offering of the 2026 Convertible Notes and the 2028 Convertible Notes, the Company entered into privately negotiated capped call transactions with certain counterparties (the “2026 Capped Calls” and the “2028 Capped Calls,” respectively and, collectively, the “Capped Calls”). The 2026 Capped Calls and the 2028 Capped Calls each have an initial strike price of approximately $91.03 and $179.27 per share, respectively, subject to certain adjustments, which corresponds to the initial conversion price of the 2026 Convertible Notes and the 2028 Convertible Notes. The 2026 Capped Calls and the 2028 Capped Calls have initial cap prices of $137.40 and $260.76 per share subject to certain adjustments, respectively. The 2026 Capped Calls and the 2028 Capped Calls cover, subject to anti-dilution adjustments, approximately 4,394,276 and 1,394,525 shares of Class A common stock for the 2026 Convertible Notes and 2028 Convertible Notes, respectively. The Capped Calls are generally intended to reduce or offset the potential dilution to the Class A common stock upon any conversion of the 2026 Convertible Notes and 2028 Convertible Notes with such reduction or offset, as the case may be, subject to a cap based on the cap price. The Capped Calls expire on the earlier of (i) the last day on which any convertible securities remain outstanding and (ii) March 1, 2026 for the 2026 Capped Calls and April 1, 2028 for the 2028 Capped Calls, subject to earlier exercise. The Capped Calls are subject to either adjustment or termination upon the occurrence of specified extraordinary events affecting the Company, including a merger event, a tender offer, and a nationalization, insolvency or delisting involving the Company. In addition, the Capped Calls are subject to certain specified additional disruption events that may give rise to a termination of the Capped Calls, including changes in law, insolvency filings, and hedging disruptions. The Capped Call transactions are recorded in stockholders’ equity and are not accounted for as derivatives. The net cost of $43.3 million and $25.5 million incurred to purchase the 2026 Capped Calls and the 2028 Capped Calls, respectively, was recorded as a reduction to additional paid-in capital in the accompanying condensed consolidated balance sheets.

The Convertible Notes are effectively subordinated to the Company’s future senior secured indebtedness, including the Credit Facility, to the extent of the value of the collateral securing that indebtedness. The Convertible notes are the senior, unsecured obligations of the Company and are equal in right of payment with the Company’s future senior unsecured indebtedness, if any, senior in right of payment to the Company’s existing and future indebtedness that is expressly subordinated to the Convertible Notes and the Convertible Notes will be structurally subordinated to all existing and future indebtedness and other liabilities, including trade payables, and preferred equity, if any, of the Company's subsidiaries.

9. Geographic Information

The Company's long-lived assets were primarily held in the United States as of September 30, 2022 and December 31, 2021. As of September 30, 2022 and December 31, 2021, long-lived assets held outside of the United States were $8.9 million and $9.2 million, respectively.

The Company generates its revenue primarily in the United States. Revenue by geographic area is detailed in the table below (which is determined based on the customer billing address):

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
United States	$ 134,214	$ 115,059	$ 371,478	$ 322,762
International	14,111	15,579	44,700	42,013
Total	$ 148,325	$ 130,638	$ 416,178	$ 364,775

10. Stockholders' Equity

Common Stock

As of September 30, 2022, 23,358,203 and 1,965,170 shares of Class A common stock and Class B common stock, respectively, were issued and outstanding.

As of December 31, 2021, 23,177,988 and 1,965,170 shares of Class A common stock and Class B common stock, respectively, were issued and outstanding.

Reserved Shares

The Company had reserved shares of Class A common stock for issuance under stock-based award agreements as follows:

	As of September 30, 2022	As of December 31, 2021
Stock options issued and outstanding	159,827	180,209
Nonvested restricted stock units issued and outstanding	1,018,312	344,486
Stock-based awards available for grant under the 2017 Plan	3,488,874	3,060,674
	4,667,013	3,585,369

11. Stock-Based Compensation

2010 Stock Option Plan

As of July 26, 2010, the Company adopted the 2010 Equity Compensation Plan (the "2010 Plan"). On November 9, 2017, the 2010 Plan was terminated in connection with the Company's initial public offering. Accordingly, no shares are available for future issuance under the 2010 Plan. However, the 2010 Plan continues to govern the terms and conditions of the outstanding awards granted thereunder.

Amended and Restated 2017 Incentive Award Plan

The Company's Amended and Restated 2017 Incentive Award Plan (as amended from time to time, the "2017 Plan") became effective on November 9, 2017. The 2017 Plan provides for the grant of stock options, including incentive stock options and non-qualified stock options, stock appreciation rights, restricted stock, dividend equivalents, restricted stock units, and other stock or cash based awards to employees, consultants and directors of the Company. A total of 1,050,000 shares of the Company's Class A common stock were originally reserved for issuance under the 2017 Plan. These available shares automatically increase each January 1, beginning on January 1, 2018, by 5% of the number of shares of the Company's Class A common stock outstanding on the final day of the immediately preceding calendar year. On January 1, 2022, the shares available for grant under the 2017 Plan were automatically increased by 1,158,900 shares.

The terms of the stock option grants are determined by the Company's Board of Directors. The Company's stock options vest based on terms of the stock option agreements. The stock options have a contractual life of ten years.

Restricted stock units ("RSUs") granted to employees and non-employee members of the Board of Directors under the 2017 Plan are generally subject to a time-based vesting condition. The compensation expense related to these awards is based on the grant date fair value of the RSUs and is recognized on a ratable basis over the applicable service period. Vesting schedules may differ as between different categories of award recipients.

Stock Options

The following summarizes the stock option activity for the periods presented:

	Number of options outstanding	Weighted-average exercise price (Per share)	Weighted-average remaining contract life (In years)	Aggregate intrinsic value (In thousands)
Outstanding as of December 31, 2021	180,209	$ 10.14	3.39	$ 11,104
Granted	—	—		
Exercised	(20,382)	7.95		
Forfeited or cancelled	—	—		
Outstanding as of September 30, 2022	159,827	$ 10.42	2.82	$ 477
Options vested and exercisable at September 30, 2022	159,827	$ 10.42	2.82	$ 477
Options vested and expected to vest as of September 30, 2022	159,827	$ 10.42	2.82	$ 477

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Aggregate intrinsic value of stock options exercised	$ —	$ 880	$ 634	$ 9,059
Total estimated grant date fair value of options vested	—	153	—	199

Aggregate intrinsic value is computed based on the difference between the option exercise price and the fair value of the Company's common stock as of September 30, 2022, based on the Company's Class A common stock price as reported on the NASDAQ Global Select Market.

No options were granted for the three and nine months ended September 30, 2022 and 2021.

As of September 30, 2022, the Company had no unrecognized compensation cost related to non-vested stock options. All outstanding stock options are fully vested.

Restricted Stock Units

The following summarizes the RSU activity for the period presented:

	Number of awards outstanding	Weighted-average grant date fair value (Per share)
Nonvested RSUs as of December 31, 2021	344,486	$ 82.38
Granted	965,786	47.87
Vested	(203,723)	62.70
Forfeited or cancelled	(88,237)	75.67
Nonvested RSUs as of September 30, 2022	1,018,312	$ 54.32

As of September 30, 2022, total unrecognized compensation cost related to non-vested RSUs was $46.3 million, which will be amortized over a weighted-average period of 3.01 years.

Stock-Based Compensation Expense

The Company recognized total stock-based compensation expense as follows:

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Cost of revenue	$ 93	$ 80	$ 283	$ 275
Research and development	1,767	877	5,298	2,892
Sales and marketing	593	603	2,219	1,847
General and administrative	2,439	2,265	7,259	6,578
Total	$ 4,892	$ 3,825	$ 15,059	$ 11,592

12. Commitments and Contingencies

Operating Leases

The Company leases office space under operating lease agreements that expire over the next 4.25 years. See Note 5, “Right-of-Use Asset and Lease Liabilities” to the condensed consolidated financial statements, for additional details on the Company’s operating lease commitments.

Contractual Obligations

As of September 30, 2022, the Company has $14.7 million in non-cancellable purchase obligations, consisting of primarily network equipment maintenance and software license contracts, of which $11.8 million will be fulfilled within one year.

On May 27, 2021, the Company entered into the Lease with the Developer for the Conveyed Parcel, together with the Project. The respective obligations of the Company and the Developer under the Lease were conditioned upon the Developer acquiring fee simple title to the Conveyed Parcel, which occurred on June 4, 2021. The Lease term will commence upon the Commencement Date and continue for the Initial Term. It is anticipated that the Commencement Date will occur in June 2023. If the Commencement Date does not occur within one hundred twenty (120) days from the scheduled Commencement Date, the Company shall be entitled to certain rent abatements, as described in the Lease. If the Commencement Date is not delivered within twelve (12) months of the scheduled Commencement Date, the Company may terminate the Lease.

The Company has the option to renew the Initial Term for two ten-year periods. Base rent payments will begin on the Commencement Date. The initial base rent will increase by 1.85% on each anniversary of the Commencement Date. Total lease payments over the Initial Term are approximately $495.7 million. See Note 5, “Right-of-Use Asset and Lease Liabilities” to the condensed consolidated financial statements, for additional details on the Company's operating lease commitments.

Legal Matters

The Company is involved as a defendant in various litigation, including, but not limited to, lawsuits alleging that the Company failed to bill, collect and remit certain taxes and surcharges associated with the provision of 911 services pursuant to applicable laws in various jurisdictions and an action brought under the Telephone Consumer Protection Act of 1991 relating to our alleged failure to block unsolicited phone calls to the plaintiff and putative class members.

We intend to vigorously defend these lawsuits and believe that we have meritorious defenses to each. However, litigation is inherently uncertain, and any judgment or injunctive relief entered against us or any adverse settlement could adversely affect our business, results of operations and financial condition.

13. Employee Benefit Plans

The Company sponsors a U.S. defined contribution 401(k), which allows eligible U.S.-based employees to defer a portion of their compensation. The Company, at its discretion, may make matching contributions. With the acquisition of Voxbone S.A. on November 1, 2020, the Company assumed sponsorship for Voxbone S.A.’s U.S. defined contribution 401(k). In connection with that acquisition, the Company also assumed sponsorship for a non-U.S. defined contribution plan for which it pays fixed contributions into a separate entity. The Company has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current or prior periods. The contributions are recognized as employee benefit expense when they are due. The Company made matching contributions for the defined contribution plans of $1.0 million and $3.2 million for the three and nine months ended September 30, 2022, respectively, and $0.8 million and $2.6 million for the three and nine months ended September 30, 2021, respectively.

In addition, as a result of the acquisition of Voxbone S.A., the Company assumed sponsorship for Voxbone S.A.’s non-U.S. defined benefit pension plans. The liability recognized is the present value of the defined benefit obligation at the end of the reporting period less the fair value of the plan assets and is included in other liabilities in the accompanying condensed consolidated balance sheets. The defined benefit obligation is calculated annually by an independent actuary using the Projected Unit Credit Method.

The Company reports the service cost component of net periodic benefit cost in the same line item as other compensation costs arising from the services rendered by the employee and records the other components of net periodic benefit cost in other expense, net.

14. Income Taxes

At the end of each interim reporting period, the Company determines the income tax provision by using an estimate of the annual effective tax rate, adjusted for discrete items occurring in the quarter. The effective income tax rate reflects the effect of federal and state income taxes and the permanent impacts of differences in book and tax accounting.

The Company's effective tax rate was 53.5% and 7.7% for the three and nine months ended September 30, 2022, respectively, and (4.8)% and (1.3)% for the three and nine months ended September 30, 2021, respectively. The increases in the effective tax rates are primarily due to an increase in tax benefit resulting from additional operating losses outside of the U.S. which are not offset by a valuation allowance.

Judgment is required in determining whether deferred tax assets will be realized in full or in part. Management assesses the available positive and negative evidence on a jurisdictional basis to estimate if deferred tax assets will be recognized and when it is more likely than not that all or some deferred tax assets will not be realized, and a valuation allowance must be established. As of September 30, 2022, the Company continues to maintain a valuation allowance for its U.S. federal and state net deferred tax assets.

The Company's effective tax rate for the three months ended September 30, 2022 differed from the federal statutory tax rate of 21.0% in the U.S. primarily due to a permanent research tax deduction in a foreign jurisdiction and foreign tax rate differentials. The Company's effective tax rate for the nine months ended September 30, 2022 differed from the federal statutory tax rate of 21.0% in the U.S. primarily due to the valuation allowance recognized against federal and state deferred tax assets in the U.S. Other permanent tax adjustments within the effective tax rates, which are offset by the valuation allowance, include state taxes, federal research credit under Internal Revenue Code Section 41, equity compensation in the U.S. and other U.S. non-deductible expenditures.

15. Related Parties

The Company has certain involvement with Relay via an ongoing Master Services Agreement and a Facilities Sharing Agreement that expired in July 2022. Amounts charged under these arrangements totaled $0.3 million and $1.1 million for the three and nine months ended September 30, 2022, respectively, and $0.4 million and $1.4 million for the three and nine months ended September 30, 2021, respectively. Amounts due under these arrangements totaled less than $0.1 million and $0.1 million as of September 30, 2022 and December 31, 2021, respectively.

16. Basic and Diluted Loss per Common Share

Basic net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding during the period. The Company is in a net loss position for the three and nine months ended September 30, 2022 and 2021 and therefore diluted shares equals basic shares.

The components of basic and diluted loss per share are as follows:

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
	(In thousands, except share and per share amounts)			
Earnings per share				
Net loss attributable to common stockholders	$ (802)	$ (6,944)	$ (13,864)	$ (19,188)
Net loss per share, basic and diluted	$ (0.03)	$ (0.28)	$ (0.55)	$ (0.77)
Weighted average number of common shares outstanding, basic and diluted	25,304,057	25,114,762	25,268,216	25,075,941

The following common share equivalents were excluded from the weighted average shares used to calculate net loss per common share because their effects would have been anti-dilutive:

	As of September 30,	
	2022	2021
Stock options issued and outstanding	159,827	183,271
Restricted stock units issued and outstanding	1,018,312	369,614
Convertible senior notes [(1)] [(2)]	5,788,805	1,316,199
Total	6,966,944	1,869,084

[(1)] As of September 30, 2022, subsequent to adopting ASU 2020-06 as of January 1, 2022, the Company used the if-converted method to calculate the dilutive impact of the 2026 Convertible Notes and 2028 Convertible Notes on diluted income per share, if applicable. The Company expected to settle the principal amount of these notes in cash and any excess in shares of the Company's Class A common stock. The diluted shares were calculated based on the initial conversion rate of 10.9857 and 5.5781 shares per $0.001 of the aggregate principal amount for the 2026 Convertible Notes and 2028 Convertible Notes, respectively. See Note 2, "Summary of Significant Accounting Policies" to the condensed consolidated financial statements, for additional details on the adoption of ASU 2020-06 and Note 8, "Debt" to the condensed consolidated financial statements, for additional details on the Company's Convertible Notes.

[(2)] As of September 30, 2021, the Company used the treasury stock method to calculate the dilutive impact of the 2026 Convertible Notes and the 2028 Convertible Notes because at that time the Company expected to settle the principal amount of these notes in cash and any excess in shares of the Company's Class A common stock. As of September 30, 2021, the conversion spread, calculated using the average market price of Class A common stock during the period consistent with the treasury stock method, had a dilutive impact for the 2026 Convertible Notes on diluted net income per share of Class A common stock when the average market price of the Company's Class A common stock for a given period exceeded the conversion price of $91.03 per share. As of September 30, 2021, the conversion spread for the 2028 Convertible Notes was anti-dilutive as the average market price of the Company's Class A common stock for a given period did not exceed the conversion price of $179.27 per share.

17. Subsequent Event

Repurchase of 2026 Convertible Notes

On November 1, 2022, the Company announced that it has entered into separate, privately negotiated transactions with a limited number of holders of its outstanding 2026 Convertible Notes to repurchase (collectively, the "Repurchases") approximately $160.0 million aggregate principal amount of the 2026 Convertible Notes at approximately a 29 percent discount to par value.

The repurchase price payable by the Company will be paid in cash and will be based in part on the daily volume-weighted average price per share of the Company's Class A common stock over a 15 consecutive trading day measurement period beginning on, and including, November 2, 2022.

The Company previously entered into the 2026 Capped Calls with certain financial institutions in connection with the 2026 Convertible Notes. All of these transactions are expected to remain in effect notwithstanding the Repurchases.

The Repurchases are expected to close on November 28, 2022, subject to the satisfaction of customary closing conditions. Following such closings, approximately $240.0 million principal amount of the 2026 Convertible Notes will remain outstanding.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our 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" in this Quarterly Report on Form 10-Q. Our fiscal year ends on December 31.

Overview

We are a leading global enterprise cloud communications company. Our solutions include a broad range of software Application Programming Interfaces ("APIs") for voice, messaging and emergency services. Our sophisticated and easy-to-use software APIs allow enterprises to enhance their products and services by incorporating advanced, global connectivity for voice, messaging and emergency services communications capabilities. Companies use our platform to more frequently and seamlessly connect with their end users, add voice calling capabilities to applications and devices, transition from on-premise to cloud-based communication tools and applications, integrate messaging capabilities into applications or software, build interactive voice response systems for contact centers, and offer end users new mobile application experiences including emergency services and improve employee productivity, among other use cases. We have established a reputation as a leader in the Communications Platform-as-a-Service ("CPaaS") space through our innovation-rich culture and focus on empowering enterprises with end-to-end communications solutions.

We are the only CPaaS provider in the industry that owns and operates a nationwide IP voice network in the United States. In 2020, we acquired Voxbone, a leading European-based communications platform with its own IP voice network assembled by building relationships with local carriers around the globe. Our deep U.S. presence and global platform extending across more than 60 countries serves enterprises in countries representing more than 90% of global gross domestic product. We believe that our current and future customers will benefit from using a unified software platform, network and team to serve people around the world.

Our voice software APIs allow enterprises to make and receive phone calls and create advanced voice experiences. Integration with our purpose-built IP voice network ensures enterprise-grade functionality and secure, high-quality connections. Our messaging software APIs provide enterprises with advanced tools to connect with end users via messaging. Our customers also use our solutions to enable 911 response capabilities, real-time provisioning and activation of phone numbers and toll-free number messaging.

We believe our network is capital-efficient and supports the applications and experiences that make a difference in the way enterprises communicate. Since a communications platform is only as strong as the network that backs it, we believe our network provides a significant competitive advantage in the control, quality, pricing power and scalability of our offering. We are able to control the quality and provide the support our customers expect, while meeting regulatory, scalability and cost requirements more efficiently.

For the three months ended September 30, 2022 and 2021, total revenue was $148 million, and $131 million, respectively, representing an increase of 14%. For the three months ended September 30, 2022 and 2021, net loss was $1 million and $7 million, respectively. As of September 30, 2022 and 2021, the number of active customer accounts was 3,380 and 3,220, respectively, representing a year-over-year increase of 5%.

Segment Reporting Update and Cost Alignment

As a result of certain changes in our business during the quarter ended March 31, 2022, we re-evaluated our segment reporting and determined that one segment was appropriate, rather than the previously reported segments comprising "CPaaS" and "Other". The primary drivers for this change were the strategic alignment of our operating departments and the sale of certain immaterial legacy businesses.

Additionally, during the quarter ended March 31, 2022, we changed our presentation of certain costs to align with benchmarked definitions of cost of revenue, research and development, sales and marketing and general and administrative expenses. See Note 2, "Summary of Significant Accounting Policies," to the condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for additional information. For both matters, prior period information has been conformed to the current period presentation.

The following is a comparison of the change in costs to the prior period:

	Three months ended September 30, 2021		Nine months ended September 30, 2021	
	As reported	As previously reported	As reported	As previously reported
	(In thousands)			
Statement of Operations				
Cost of revenue	$ 73,573	$ 72,395	$ 203,071	$ 199,782
Research and development	16,857	13,359	50,036	39,509
Sales and marketing	21,143	13,592	60,458	38,168
General and administrative	18,127	30,354	49,375	85,481

COVID-19 Update

We believe the novel coronavirus ("COVID-19") has reduced to endemic levels globally however, while its persistent nature has diminished in the present period, it is possible it could potentially impact areas of the United States or the rest of the world to varying degrees in the future. During the COVID-19 pandemic, its adverse effects were prevalent in the locations where we, our customers, suppliers and third-party business partners conduct business. We acknowledge there may be additional impacts to the economy and our business going forward as a result of COVID-19 and that there is uncertainty regarding potentially broad or unknown implications of COVID-19 on our results of operations and overall financial performance remain uncertain. If the COVID-19 infection rate were to return to pandemic levels in the United States or in other global territories where we operate, we may experience curtailed customer demand that could materially adversely impact our business, results of operations and overall financial performance in future periods. Specifically, this could result in enterprises reducing usage of our services or delaying decisions to implement our services. See "Item 1A. Risk Factors" for further discussion of the possible impact of COVID-19 on our business.

DDoS Attack

Beginning on September 25, 2021, our communications network was subjected to a distributed denial of service attack (the "DDoS Attack") initially causing intermittent communications services disruptions affecting certain of our markets and customers. A DDoS attack is a malicious attempt to disrupt the normal traffic of a targeted server, service or network by overwhelming the target or its surrounding infrastructure with a flood of unwanted internet traffic from multiple sources, resulting in the slowdown or blockage of legitimate traffic. Our mitigation efforts, in conjunction with our partners from leading cybersecurity firms, have proven successful. Our network has been largely stable and operating at normal service levels since the evening of September 29, 2021, although there have been some continued intermittent disruptions.

Key Performance Indicators

We monitor the following key performance indicators ("KPIs") to help us evaluate our business, identify trends affecting our business, formulate business plans, and make strategic decisions. We believe the following KPIs are useful in evaluating our business:

	Three months ended September 30,	
	2022	2021
Number of active customers (as of period end) [1]	3,380	3,220
Dollar-based net retention rate [1]	109 %	125 %

[1] As a result of the change in revenue segment reporting, our KPIs of active customers and dollar-based net retention rates disclosed in previous SEC filings, press releases and presentations prior to reporting periods ending March 31, 2022, will not be directly comparable to our KPIs reported going forward. To facilitate comparison between the periods presented in the table above, number of active customers and dollar-based net retention rate have been conformed to the current period methodology.

Number of Active Customer Accounts

We define an active customer account at the end of any period as an individual account, as identified by a unique account identifier, for which we have recognized at least $100 of revenue in the last month of the period. We believe usage of our platform by an active customer at or above the $100 per month threshold is a stronger indicator of potential future engagement than trial usage at levels below $100 per month. A single organization may constitute multiple unique active customer accounts if it has multiple unique account identifiers, each of which is treated as a separate active customer account. Customers who pay after using our platform and customers that have credit balances are included in the number of active customer accounts. For comparative purposes, the number of active customers presented in the table above has been updated to reflect the change in our reporting segments.

Dollar-Based Net Retention Rate

Our ability to drive growth and generate incremental revenue depends, in part, on our ability to maintain and grow our relationships with our existing customers that generate revenue and seek to increase their use of our platform. We track our performance in this area by measuring the dollar-based net retention rate for our customers who generate revenue. To calculate the dollar-based net retention rate, we first identify the cohort of customers that generate revenue and that were customers in the same quarter of the prior year. The dollar-based net retention rate is obtained by dividing the revenue generated from that cohort in a quarter, by the revenue generated from that same cohort in the corresponding quarter in the prior year. The dollar-based net retention rate reported in a quarter is then obtained by averaging the result from that quarter, by the corresponding results from each of the prior three quarters. Customers of acquired businesses are included in the subsequent year's calendar quarter of acquisition. Our dollar-based net retention rate increases when such customers increase usage of a product, extend usage of a product to new applications or adopt a new product. Our dollar-based net retention rate decreases when such customers cease or reduce usage of a product or when we lower prices on our solutions.

As our customers grow their businesses and increase usage of our platform, they sometimes create multiple customer accounts with us for operational or other reasons. As such, when we identify a significant customer organization (defined as a single customer organization generating more than 1% of revenue in a quarterly reporting period) that has created a new customer, this new customer is tied to, and revenue from this new customer is included with, the original customer for the purposes of calculating this metric. For comparative purposes, the dollar-based net retention rate presented in the table above has been updated to reflect the change in our reporting segments.

Key Components of Statements of Operations

Revenue

Revenue is derived from reoccurring sources such as per minute voice usage and voice calling, per text message usage and other usage services and fees, from monthly recurring charges arising from phone number services, 911-enabled phone number services, messaging services and other services, and from other various communications services and products, indirect revenue and messaging surcharge revenue.

For the three months ended September 30, 2022 and 2021, we generated 79% and 76%, respectively, of our revenue from reoccurring sources. The large bulk of our remaining revenue is generated from recurring monthly charges.

We recognize accounts receivable at the time the customer is invoiced. Additionally, we record a receivable for unbilled revenue if services have been delivered and are billable in subsequent periods. Unbilled revenue made up 53% and 43% of outstanding accounts receivable, net of allowance for doubtful accounts, as of September 30, 2022 and 2021, respectively.

Cost of Revenue and Gross Margin

Cost of revenue consists of fees paid to other network service providers, network operations costs, personnel costs, allocated costs of facilities and information technology, amortization of acquired technology intangibles and depreciation.

Fees paid to other network service providers arise when we purchase services such as minutes of use, phone numbers, messages, porting of customer numbers and network circuits.

Network operations costs are incurred for web services and cloud infrastructure, capacity planning and management, software licenses, hardware and software maintenance fees, customer support and network-related facility rents.

Personnel costs (including non-cash stock-based compensation expenses) arise for employees who are responsible for the delivery of services, and operations and maintenance of, the communications network.

Gross margin is calculated by subtracting cost of revenue from revenue, divided by revenue, expressed as a percentage. Our cost of revenue and gross margin have been, and will continue to be, affected by several factors, including the timing and extent of our investments in our network, our ability to manage off-network minutes of use and messaging costs, changes to the mix or amount of personnel-related costs included in our cost of revenue, the product mix of revenue, the timing of amortization of capitalized software development costs and fluctuations in the price we charge our customers for services.

Operating Expenses

The most significant components of operating expenses are personnel costs, which consist of salaries, benefits, bonuses, and stock-based compensation expenses. We also incur other non-personnel costs related to our general overhead expenses, including facility expenses, software licenses, web services, depreciation and amortization of assets unrelated to delivery of our services. We expect that our operating expenses will increase in absolute dollars.

Research and Development

Research and development expenses consist of salaries and related personnel costs for the design, development, testing and enhancement of our cloud network and software products. Research and development expenses include depreciation and allocated costs of facilities and information technology utilized by our research and development staff.

Sales and Marketing

Sales and marketing expenses consist of salaries and related personnel costs, commissions, and costs related to advertising, marketing, brand awareness activities, sales support and professional services fees, and customer billing and collections functions. Sales and marketing expenses include depreciation, amortization of acquired customer relationship intangible assets, and allocated costs of facilities and information technology utilized by our sales and marketing staff.

General and Administrative

General and administrative expenses consist of salaries and related personnel costs for accounting, legal, human resources, corporate, and other administrative and compliance functions. General and administrative expenses include depreciation, expenditures for third party professional services, and allocated costs of facilities and information technology utilized by our corporate and administrative staff.

Income Taxes

For the three months ended September 30, 2022 and 2021 our effective tax rate was 53.5% and (4.8)%, respectively. For the nine months ended September 30, 2022 and 2021, our effective tax rate was 7.7% and (1.3)%, respectively. The favorable changes in our effective tax rates compared with the respective prior periods are primarily due to an increase in tax benefit resulting from additional operating losses outside the U.S., which are not offset by a valuation allowance.

Judgment is required in determining whether deferred tax assets will be realized in full or in part. Management assesses the available positive and negative evidence on a jurisdictional basis to estimate if deferred tax assets will be recognized and when it is more likely than not that all or some deferred tax assets will not be realized, and a valuation allowance must be established. As of September 30, 2022, we continue to maintain a valuation allowance for our U.S. federal and state net deferred tax assets.

Results of Operations

Consolidated Results of Operations

The following table sets forth the consolidated statements of operations for the periods indicated.

	Three months ended September 30, 2022	Three months ended September 30, 2021	Nine months ended September 30, 2022	Nine months ended September 30, 2021
	(In thousands)			
Revenue	$ 148,325	$ 130,638	$ 416,178	$ 364,775
Cost of revenue	84,861	73,573	241,896	203,071
Gross profit	63,464	57,065	174,282	161,704
Operating expenses:				
Research and development	25,044	16,857	71,735	50,036
Sales and marketing	23,184	21,143	69,663	60,458
General and administrative	16,623	18,127	50,191	49,375
Total operating expenses	64,851	56,127	191,589	159,869
Operating (loss) income	(1,387)	938	(17,307)	1,835
Other (expense) income, net				
Interest expense, net	(737)	(7,715)	(2,861)	(20,824)
Other income, net	399	148	5,143	56
Total other (expense) income, net	(338)	(7,567)	2,282	(20,768)
Loss before income taxes	(1,725)	(6,629)	(15,025)	(18,933)
Income tax benefit (provision)	923	(315)	1,161	(255)
Net loss	$ (802)	$ (6,944)	$ (13,864)	$ (19,188)

The following table sets forth our results of operations as a percentage of our total revenue for the periods presented. *

	Three months ended September 30, 2022	Three months ended September 30, 2021	Nine months ended September 30, 2022	Nine months ended September 30, 2021
Revenue	100 %	100 %	100 %	100 %
Cost of revenue	57 %	56 %	58 %	56 %
Gross profit	43 %	44 %	42 %	44 %
Operating expenses:				
Research and development	17 %	13 %	17 %	14 %
Sales and marketing	16 %	16 %	17 %	17 %
General and administrative	11 %	14 %	12 %	14 %
Total operating expenses	44 %	43 %	46 %	44 %
Operating (loss) income	(1)%	1 %	(4)%	1 %
Other (expense) income, net				
Interest expense, net	— %	(6)%	(1)%	(6)%
Other income, net	— %	— %	1 %	— %
Total other (expense) income, net	— %	(6)%	1 %	(6)%
Loss before income taxes	(1)%	(5)%	(4)%	(5)%
Income tax benefit (provision)	1 %	— %	— %	— %
Net loss	(1)%	(5)%	(3)%	(5)%

(*) Columns may not foot due to rounding.

Comparison of the three months ended September 30, 2022 and 2021,

Revenue

	Three months ended September 30,		Change	
	2022	2021		
	(Dollars in thousands)			
Revenue	$ 148,325	$ 130,638	$ 17,687	14 %

For the three months ended September 30, 2022, our total revenue increased by $18 million, or 14%, compared with the same period in 2021 comprised mainly from growth in pass-through messaging surcharge revenue of $13 million. This growth was the result of higher usage of our core messaging offering and additional A2P pass-through messaging surcharges imposed by certain carriers. Growth in our revenue other than from pass-through messaging surcharges, compared with the same period last year, was led by our core messaging offerings, which grew 50%, and phone number and 911-enabled phone number services, mostly offset by lower revenue from voice offerings. The growth in our core messaging offering was aided by higher messaging volumes from certain customers leading up to the U.S. midterm elections in November 2022. Compared with the same period last year, our voice offerings revenue for the three months ended September 30, 2022 remained affected by lower usage arising from last year's DDoS incident as well as the absence of revenue from businesses divested earlier in 2022.

Active customer accounts increased 5% to 3,380 as of September 30, 2022, as compared with 3,220 active accounts as of September 30, 2021. Our dollar-based net retention rate as of September 30, 2022 was 109%.

Cost of Revenue and Gross Margin

	Three months ended September 30,		Change	
	2022	2021		
	(Dollars in thousands)			
Cost of revenue	$ 84,861	$ 73,573	$ 11,288	15 %
Gross profit	$ 63,464	$ 57,065	$ 6,399	11 %
Total gross margin	43 %	44 %		

For the three months ended September 30, 2022, total cost of revenue increased $11 million driven by higher pass-through messaging surcharges of $11 million. For the three months ended September 30, 2022, the combination of changes in total revenue and total cost of revenue yielded an increase in total gross profit of $6 million, or 11%, compared with the same period in 2021, driven by profit improvements from the combination of our revenue and cost of revenue derived other than from pass-through messaging surcharges.

Our total gross margin percentage of 43% for the three months ended September 30, 2022 declined one percentage point as operating and product mix improvements were more than offset by the inclusion of higher pass-through messaging surcharges within total revenue.

Operating Expenses

	Three months ended September 30, 2022	2021	Change	
	(Dollars in thousands)			
Research and development	$ 25,044	$ 16,857	$ 8,187	49 %
Sales and marketing	23,184	21,143	2,041	10 %
General and administrative	16,623	18,127	(1,504)	(8)%
Total operating expenses	$ 64,851	$ 56,127	$ 8,724	16 %

As a percentage of revenue, total operating expenses for the three months ended September 30, 2022 and 2021, were 44% and 43%, respectively.

For the three months ended September 30, 2022, research and development expenses increased by approximately $8 million, or 49%, compared with the same period in 2021. This increase was primarily due to increased personnel costs from greater numbers of employed staff of $6 million. The increase in headcount also contributed to higher allocated facilities and IT expenses of $2 million.

For the three months ended September 30, 2022, sales and marketing expenses increased by $2 million, or 10%, compared with the same period in 2021, primarily due to an increase in sales personnel costs from a greater number of employed staff of $3 million and partially offset by a decrease in marketing expenses of $1 million.

For the three months ended September 30, 2022, general and administrative expenses decreased compared with the same period in 2021, primarily due to lower allocated facilities and IT expenses of $2 million.

Interest Expense, Net

For the three months ended September 30, 2022, interest expense, net of interest income, decreased by $7 million compared with the same period in 2021, primarily due to a $6 million decrease in interest expense related to the Convertible Notes. See Note 8, "Debt," to the condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for additional details.

Income Tax Benefit (Provision)

Our income tax provision or benefit for interim periods is determined using an estimate of our annual effective tax rate, adjusted for discrete items occurring in the quarter.

For the three months ended September 30, 2022, we recognized an income tax benefit of less than $1 million, an increase of $1 million compared with the same period in 2021. The resulting effective tax rate for the three months ended September 30, 2022 was 53.5% compared with (4.8)% in the same period in 2021. For the three months ended September 30, 2022, the favorable change to the effective tax rate was primarily due to an increase in tax benefit resulting from operating losses outside the U.S. which were not offset by a valuation allowance.

For the three months ended September 30, 2022 and 2021, the effective tax rate of 53.5% differed from the federal statutory tax rate of 21% in the U.S. primarily due to a permanent research tax deduction in a foreign jurisdiction and foreign tax rate differentials. For the three months ended September 30, 2021, the effective tax rate of (4.8)% differed from the federal statutory tax rate of 21% in the U.S. primarily due to the valuation allowance recognized against federal and state deferred tax assets in the U.S.

Most of the permanent tax adjustments within our effective tax rate are offset by a valuation allowance. These adjustments include state taxes, federal research tax credits under Internal Revenue Code Section 41, equity compensation in the U.S. and other non-deductible expenditures in the U.S. Excluding the impact of the valuation allowance, we realize an estimated state effective tax rate of 4.2%. In addition, exclusive of the valuation allowance, we continue to generate income tax benefits in the current period related to income tax credits recognized for qualified research activities in the U.S. The applicable federal tax law and regulations define qualified research activities as research and development activities conducted in the U.S. that involve a process of experimentation designed to discover new information intended to develop a new or improved business component. Absent the valuation allowance, equity compensation also impacts the effective tax rate to the extent the income tax deduction exceeds or is below the related book expense, as required under ASC 718-740-35-2. Other U.S. non-deductible expenses that are offset by the valuation allowance consist primarily of non-deductible executive compensation under Internal Revenue Code 162(m).

Permanent tax adjustments within our effective tax rate that are not offset by the valuation allowance included minimum state taxes, foreign tax benefits and foreign rate differentials. As we continue to scale our international business any changes to foreign business activity may impact our effective tax rate in the future.

We continue to expect recurring changes to the valuation allowance as deferred tax assets within the U.S. increase or decrease in subsequent periods. We will maintain a valuation allowance against all U.S. federal and state deferred tax assets until it becomes more likely than not that the benefit of our federal and state deferred tax assets will be realized.

Comparison of the nine months ended September 30, 2022 and 2021.

Revenue

	Nine months ended September 30,		Change	
	2022	2021		
	(Dollars in thousands)			
Revenue	$ 416,178	$ 364,775	$ 51,403	14 %

For the nine months ended September 30, 2022, total revenue increased by $51 million, or 14%, compared with the same period in 2021, comprised mainly from growth in pass-through messaging surcharge revenue of $41 million. This growth was the result of higher usage of our core messaging offering and additional A2P pass-through messaging surcharges imposed by certain carriers. Growth in our revenue other than from pass-through messaging surcharges, compared with the same period last year, was led by our core messaging offerings, which grew 40%, and phone number and 911-enabled phone number services, mostly offset by lower revenue from voice offerings. Compared with the same period last year, our voice offerings revenue for the nine months ended September 30, 2022, remained affected by lower usage arising from last year's DDoS incident as well as the absence of revenue from businesses divested earlier in 2022.

These increases in usage volume period-over-period yielded our dollar-based net retention rate of 109%.

Cost of Revenue and Gross Margin

	Nine months ended September 30,					
	2022		2021		Change	
			(Dollars in thousands)			
Cost of revenue	$	241,896	$	203,071	$ 38,825	19 %
Gross profit	$	174,282	$	161,704	$ 12,578	8 %
Total gross margin		42 %		44 %		

For the nine months ended September 30, 2022, total cost of revenue increased $39 million driven by higher pass-through messaging surcharges of $40 million, partially offset by lower cost of revenue other than from pass-through messaging surcharges of $1 million. For the nine months ended September 30, 2022, the combination of changes in total revenue and total cost of revenue yielded an increase in total gross profit of $13 million, or 8%, compared with the same period in 2021, driven by profit improvements from the combination of our revenue and cost of revenue derived other than from pass-through messaging surcharges.

Our total gross margin percentage of 42% for the nine months ended September 30, 2022, declined two percentage points as operating and product mix improvements were more than offset by the inclusion of higher pass-through messaging surcharges within total revenue.

Operating Expenses

	Nine months ended September 30,					
	2022		2021		Change	
			(Dollars in thousands)			
Research and development	$	71,735	$	50,036	$ 21,699	43 %
Sales and marketing		69,663		60,458	9,205	15 %
General and administrative		50,191		49,375	816	2 %
Total operating expenses	$	191,589	$	159,869	$ 31,720	20 %

As a percentage of revenue, total operating expenses for the nine months ended September 30, 2022 and 2021, were 46% and 44%, respectively.

For the nine months ended September 30, 2022, research and development expenses increased by approximately $22 million, or 43%, compared with the same period in 2021. This increase was primarily due to increased personnel costs from greater numbers of employed staff of $16 million. The increase in headcount also contributed to higher allocated facilities and IT expenses of $6 million.

For the nine months ended September 30, 2022, sales and marketing expenses increased by $9 million, or 15%, compared with the same period in 2021, primarily due to an increase in sales personnel costs from a greater number of employed staff of $8 million.

For the nine months ended September 30, 2022, general and administrative expenses increased by approximately $1 million, or 2%, compared with the same period in 2021, mainly from higher headcount costs of $3 million, offset by lower non-headcount, allocated facilities and IT expenses of $2 million.

Interest Expense, Net

For the nine months ended September 30, 2022, interest expense, net of interest income, decreased by $18 million compared with the same period in 2021, primarily due to a $17 million decrease in interest expense related to the Convertible Notes. See Note 8, "Debt," to the condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for additional details.

Income Tax Benefit (Provision)

Our income tax provision or benefit for interim periods is determined using an estimate of our annual effective tax rate, adjusted for discrete items occurring in the quarter.

For the nine months ended September 30, 2022, we recognized an income tax benefit of $1 million, an increase of $1 million compared with the same period in 2021. The resulting effective tax rate for the nine months ended September 30, 2022, was 7.7%, compared with (1.3)% in the same period in 2021. For the nine months ended September 30, 2022, the favorable change to the effective tax rate was primarily due to an increase in tax benefit resulting from operating losses outside of the U.S. which were not offset by a valuation allowance.

For the nine months ended September 30, 2022 and 2021, the effective tax rates of 7.7% and (1.3)%, respectively, differed from the federal statutory tax rate of 21% in the U.S. primarily due to the valuation allowance recognized against federal and state deferred tax assets in the U.S.

Most of the permanent tax adjustments within our effective tax rate are offset by a valuation allowance. These adjustments include state taxes, federal research tax credits under Internal Revenue Code Section 41, equity compensation in the U.S. and other non-deductible expenditures in the U.S. Excluding the impact of the valuation allowance, we realize an estimated state effective tax rate of 4.2%. In addition, exclusive of the valuation allowance, we continue to generate income tax benefits in the current period related to income tax credits recognized for qualified research activities in the U.S. The applicable federal tax law and regulations define qualified research activities as research and development activities conducted in the U.S. that involve a process of experimentation designed to discover new information intended to develop a new or improved business component. Absent the valuation allowance, equity compensation also impacts the effective tax rate to the extent the income tax deduction exceeds or is below the related book expense, as required under ASC 718-740-35-2. Other U.S. non-deductible expenses that are offset by the valuation allowance consist primarily of non-deductible executive compensation under Internal Revenue Code 162(m).

Permanent tax adjustments within our effective tax rate that are not offset by the valuation allowance included minimum state taxes, foreign tax benefits and foreign rate differentials. As we continue to scale our international business any changes to foreign business activity may impact our effective tax rate in the future.

We continue to expect recurring changes to the valuation allowance as deferred tax assets within the U.S. increase or decrease in subsequent periods. We will maintain a valuation allowance against all U.S. federal and state deferred tax assets until it becomes more likely than not that the benefit of our federal and state deferred tax assets will be realized.

Liquidity and Capital Resources

Our liquidity is provided by free cash flow, derived from our cash flow from operations less expenditures for capital equipment, and supplemented by financing activities from time to time. Our cash flow from operations is driven by monthly payments from customers for communication services consumed during the period. Our primary uses of cash included operating costs, such as fees paid to other network service providers, network operations costs, personnel costs and facility expenses, as well as the purchase of property plant and equipment to support growth on our communications platform and the purchase of land for our new corporate headquarters.

On June 6, 2022, we entered into a credit agreement (the "Credit Agreement") among us, as borrower, the lenders from time to time party thereto, and Silicon Valley Bank as administrative agent, issuing lender and swingline lender. The Credit Agreement provides for a $50 million revolving credit facility (the "Credit Facility"), including a $20 million sublimit for the issuance of letters of credit and a swingline subfacility of up to $5 million. The Credit Facility matures on June 6, 2025. As of September 30, 2022, there were no borrowings under the Credit Facility.

Additionally, in the last three years we have supplemented our liquidity with proceeds from our issuance of the 2026 Convertible Notes and the 2028 Convertible Notes in February 2020 and March 2021, respectively. We used a majority of the proceeds from the issuance of our 2026 Convertible Notes to consummate the acquisition of Voxbone. On November 2, 2022, we entered into agreements to repurchase $160 million of our 2026 Convertible Notes as further described in Note 17, "Subsequent Event," to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q. We believe that our cash and cash equivalents balances 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. However, our belief may prove to be incorrect, and we could utilize our available financial resources sooner than we currently expect. Our future capital requirements and the adequacy of available funds will depend on many factors, including those set forth in the section "Item 1A. Risk Factors." We may be required to seek additional equity or debt financing in order to meet these future capital requirements. In the event that additional financing is required from outside sources, we may not be able to raise it on terms acceptable to us, or at all. If we are unable to raise additional capital when desired, our business, results of operations and financial condition would be adversely affected.

Our principal future commitments consist of (i) an aggregate of $650 million in Convertible Notes (see Note 8, "Debt" to the condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q, for a discussion of our 2026 Convertible Notes and our 2028 Convertible Notes), (ii) a $496 million non-cancelable lease for our future office headquarters, which is anticipated to commence in June 2023 and continue for an initial twenty (20) year term (the "Headquarters Lease") (see Note 5, "Right-of-Use Asset and Lease Liabilities" to the condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q, for a discussion of our Headquarters Lease), (iii) $15 million in non-cancelable purchase obligations and future minimum payments under contracts to various service providers, and (iv) $13 million in future minimum rent payments for our current office space. See Note 12, "Commitments and Contingencies," to the condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for future lease commitments.

Statement of Cash Flows

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

	Nine months ended September 30,	
	2022	2021
	(In thousands)	
Net cash provided by operating activities	$ 24,340	$ 23,688
Net cash (used in) provided by investing activities	(180,386)	11,681
Net cash (used in) provided by financing activities	(2,600)	213,961
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(6,341)	291
Net (decrease) increase in cash, cash equivalents, and restricted cash	$ (164,987)	$ 249,621

For the nine months ended September 30, 2022, our cash flow provided by operating activities was $24 million and was generated by our aggregate results of $30 million during the period, net of non-cash items comprising depreciation and amortization, non-cash reduction to the right-of-use asset, stock-based compensation, deferred tax expense and other amounts, and a $26 million cash inflow from increased operating liabilities, partially offset by a net cash outflow from operating assets aggregating $32 million. Within operating liabilities, the cash provided as a result of higher accounts payable of $14 million for the nine months ended September 30, 2022 was primarily related to the timing and amounts of purchases of both services and tangible goods and their related payment arrangements. The cash provided as a result of higher accrued expenses and other liabilities of $17 million for the nine months ended September 30, 2022, primarily related to higher accruals for VAT payables, income tax payables, and lease incentives. Within operating assets, cash used as a result of higher accounts receivable of $18 million for the nine months ended September 30, 2022 was driven by higher unbilled receivables balances of $9 million arising from higher usage amounts in the last month of the nine-month period and $9 million from timing of collection of invoiced amounts. The cash used as a result of higher prepaid expenses and other assets of $13 million for the nine months ended September 30, 2022 was driven by higher VAT receivables and the timing of advance payments for software and other services.

For the nine months ended September 30, 2022, net cash used in investing activities was $180 million. Cash used in investing activities included the purchase of marketable securities of $178 million from balances previously held as cash and cash equivalents and reinvestment of the proceeds from the sales and maturities of marketable securities, purchase of property and equipment of $19 million, deposits for construction in progress of our Raleigh, NC headquarters of $15 million, and capitalized internally developed software costs of $2 million. Within investing activities, our $33 million purchases of marketable securities were for instruments with greater than 90 day original maturities.

For the nine months ended September 30, 2022, net cash used in financing activities was $3 million consisting primarily of $2 million in value of equity awards withheld for tax liabilities.

Off-Balance Sheet Arrangements

We do not have any holdings in variable interest entities. With the acquisition of Voxbone, we have off-balance sheet agreements for short-term office leases in the amount of less than $1 million ending prior to August 31, 2023.

Non-GAAP Financial Measures

We use Non-GAAP gross profit, Non-GAAP gross margin, Non-GAAP net income, Adjusted EBITDA and free cash flow for financial and operational decision making and to evaluate period-to-period differences in our performance. Non-GAAP gross profit, Non-GAAP gross margin, Non-GAAP net income, Adjusted EBITDA and free cash flow are non-GAAP financial measures, which we believe are useful for investors in evaluating our overall financial performance. We believe these measures provide useful information about operating results, enhance the overall understanding of past financial performance and future prospects and allow for greater transparency with respect to key performance indicators used by management in its financial and operational decision making. See below for a reconciliation of each of the non-GAAP financial measures described below.

Non-GAAP Gross Profit and Non-GAAP Gross Margin

GAAP defines gross profit as revenue less cost of revenue. Cost of revenue includes all expenses associated with our various service offerings as more fully described under the caption "Key Components of Statements of Operations-Cost of Revenue and Gross Margin." We define Non-GAAP gross profit as gross profit after adding back the following items:

- depreciation and amortization;
- amortization of acquired intangible assets related to acquisitions; and
- stock-based compensation

We calculate Non-GAAP gross margin by dividing Non-GAAP gross profit by revenue less pass-through messaging surcharges, expressed as a percentage of revenue.

In our calculation of Non-GAAP gross profit and Non-GAAP gross margin, we eliminate the impact of depreciation and amortization, amortization of acquired intangible assets related to acquisitions, and stock-based compensation, pass through messaging surcharges, and all non-cash items, because we do not consider them indicative of our core operating performance. The exclusion of these items facilitates comparisons of our operating performance on a period-to-period basis. Management uses Non-GAAP gross profit and Non-GAAP gross margin to evaluate operating performance and to determine resource allocation among our various service offerings. We believe Non-GAAP gross profit and Non-GAAP gross margin provide useful information to investors and others to understand and evaluate our operating results in the same manner as our management and board of directors and allows for better comparison of financial results among our competitors. Non-GAAP gross profit and Non-GAAP gross margin may not be comparable to similarly titled measures of other companies because other companies may not calculate Non-GAAP gross profit and Non-GAAP gross margin or similarly titled measures in the same manner we do.

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Gross Profit	$ 63,464	$ 57,065	$ 174,282	$ 161,704
Gross Profit Margin %	43 %	44 %	42 %	44 %
Depreciation	3,403	3,138	10,141	9,345
Amortization of acquired intangible assets	1,831	2,128	5,797	6,479
Stock-based compensation	93	80	283	275
Non-GAAP Gross Profit	**$ 68,791**	**$ 62,411**	**$ 190,503**	**$ 177,803**
Non-GAAP Gross Margin % [1]	**57 %**	**54 %**	**54 %**	**52 %**

[1] Calculated by dividing Non-GAAP gross profit by revenue less pass-through messaging surcharges of $26.9 million and $14.3 million for the three months ended September 30, 2022 and 2021, respectively, and $65.3 million and $24.5 million for the nine months ended September 30, 2022 and 2021, respectively.

Non-GAAP Net Income

We define Non-GAAP net income as net income or loss adjusted for certain items affecting period-to-period comparability. Non-GAAP net income excludes:

- stock-based compensation;
- amortization of acquired intangible assets related to acquisitions;
- amortization of debt discount and issuance costs for convertible debt;
- acquisition related expenses;
- impairment charges of intangibles assets, if any;
- loss (gain) on disposal of property and equipment;
- net cost associated with early lease terminations and leases without economic benefit;
- estimated tax impact of above adjustments, net of valuation allowances; and
- loss (gain) on sale of business;

We calculate Non-GAAP basic and diluted shares by adding the weighted average of outstanding Series A redeemable convertible preferred stock, if any, to the weighted average number of outstanding basic and diluted shares, respectively. The tax-effect of Non-GAAP adjustments is determined by recalculating the tax provision on a Non-GAAP basis. When we have a valuation allowance recorded and no tax benefits will be recognized, the rate is considered to be zero.

We believe Non-GAAP net income is a meaningful measure because by removing certain non-cash and other expenses, we are able to evaluate our operating results in a manner we believe is more indicative of the current period's performance. We believe the use of Non-GAAP net income may be helpful to investors because it provides consistency and comparability with past financial performance, facilitates period-to-period comparisons of results of operations and assists in comparisons with other companies, many of which may use similar Non-GAAP financial information to supplement their GAAP results. In connection with the adoption of ASU No. 2020-06 on January 1, 2022, we add back cash interest expense on the Convertible Notes, as if converted at the beginning of the period, if the impact is dilutive for the purposes of calculating diluted Non-GAAP net income or loss per Non-GAAP share.

	Three months ended September 30, 2022	Three months ended September 30, 2021	Nine months ended September 30, 2022	Nine months ended September 30, 2021
	(In thousands, except share and per share amounts)			
Net loss	$ (802)	$ (6,944)	$ (13,864)	$ (19,188)
Stock-based compensation	4,892	3,825	15,059	11,592
Amortization of acquired intangibles	4,118	4,764	13,018	14,495
Amortization of debt discount and issuance costs for convertible debt	763	7,168	2,284	19,393
Loss on disposal of property and equipment	101	21	290	357
Gain on sale of business	—	—	(3,777)	—
Estimated tax effects of adjustments [1]	(1,074)	(2,348)	(3,360)	(3,287)
Non-GAAP net income	**$ 7,998**	**$ 6,486**	**$ 9,650**	**$ 23,362**
Cash interest expense on Convertible Notes [2]	563	—	1,688	—
Numerator used to compute Non-GAAP diluted net income per share	**$ 8,561**	**$ 6,486**	**$ 11,338**	**$ 23,362**
Net loss per share, basic and diluted	$ (0.03)	$ (0.28)	$ (0.55)	$ (0.77)
Non-GAAP net income per Non-GAAP share				
Basic	$ 0.32	$ 0.26	$ 0.38	$ 0.93
Diluted	$ 0.27	$ 0.25	$ 0.36	$ 0.87
Weighted average number of shares outstanding				
Basic and diluted shares	**25,304,057**	**25,114,762**	**25,268,216**	**25,075,941**
Non-GAAP basic shares	**25,304,057**	**25,114,762**	**25,268,216**	**25,075,941**
Convertible debt conversion	5,788,805	929,971	5,788,805	1,316,199
Stock options issued and outstanding	64,905	171,623	107,215	186,665
Nonvested RSUs outstanding	—	159,888	—	214,562
Non-GAAP diluted shares	**31,157,767**	**26,376,244**	**31,164,236**	**26,793,367**

[1] The estimated tax-effect of adjustments is determined by recalculating the tax provision on a Non-GAAP basis. The Non-GAAP effective income tax rate was 18.6% and 13.2% for the nine months ended September 30, 2022 and 2021, respectively. These rates differ from the federal statutory tax rate of 21% in the U.S. primarily due to the valuation allowance recognized against federal and state deferred tax assets in the U.S. We analyze the Non-GAAP valuation allowance position on a quarterly basis. As of September 30, 2022 we continue to maintain a valuation allowance against all U.S. deferred tax assets for Non-GAAP purposes.

[2] Upon the adoption of ASU 2020-06, net income is increased for cash interest expense as part of the calculation for diluted Non-GAAP earnings per share. See Note 2, "Summary of Significant Accounting Policies," to the condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for additional details on the adoption of ASU 2020-06.

Adjusted EBITDA

We define Adjusted EBITDA as net income or losses from continuing operations, adjusted to reflect the addition or elimination of certain income statement items including, but not limited to:

- income tax provision (benefit);
- interest (income) expense, net;
- depreciation and amortization expense;
- acquisition related expenses;
- stock-based compensation expense;
- impairment of intangible assets, if any;
- loss (gain) on sale of business;
- loss (gain) on disposal of property and equipment, if any; and
- net cost associated with early lease terminations and leases without economic benefit

Adjusted EBITDA is a key measure used by management to understand and evaluate our core operating performance and trends, to generate future operating plans and to make strategic decisions regarding the allocation of capital. In particular, the exclusion of certain expenses in calculating Adjusted EBITDA facilitates comparisons of our operating performance on a period-to-period basis.

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Net loss	$ (802)	$ (6,944)	$ (13,864)	$ (19,188)
Income tax (benefit) provision	(923)	315	(1,161)	255
Interest expense, net	737	7,715	2,861	20,824
Depreciation	4,661	4,469	13,848	12,983
Amortization	4,118	4,764	13,018	14,495
Stock-based compensation	4,892	3,825	15,059	11,592
Loss on disposal of property and equipment	101	21	290	357
Gain on sale of business	—	—	(3,777)	—
Adjusted EBITDA	**$ 12,784**	**$ 14,165**	**$ 26,274**	**$ 41,318**

Free Cash Flow

Free cash flow represents net cash provided by or used in operating activities less net cash used in the acquisition of property and equipment and capitalized development costs of software for internal use. We believe free cash flow is a useful indicator of liquidity and provides information to management and investors about the amount of cash generated from our core operations that can be used to invest in our business. Free cash flow has certain limitations because it does not represent the total increase or decrease in the cash balance for the period, it does not take into consideration investment in long-term securities, nor does it represent residual cash flows available for discretionary expenditures. Therefore, it is important to evaluate free cash flow along with our condensed consolidated statements of cash flows.

	Three months ended September 30, 2022	Three months ended September 30, 2021	Nine months ended September 30, 2022	Nine months ended September 30, 2021
	(In thousands)			
Net cash provided by operating activities	$ 24,016	$ 14,843	$ 24,340	$ 23,688
Net cash used in investing in capital assets [1] [2]	(10,524)	(2,657)	(20,790)	(28,319)
Free cash flow	**$ 13,492**	**$ 12,186**	**$ 3,550**	**$ (4,631)**

[1] Represents the acquisition cost of property, equipment and capitalized development costs for software for internal use.

[2] Includes the net cash used from the purchase of land of $(30.0) million offset by the proceeds from the sale of land of $17.5 million from investing activities of the statement of cash flows for the nine months ended September 30, 2021.

Critical Accounting Policies and Significant Judgments and Estimates

Our condensed consolidated financial statements are prepared in accordance with GAAP. The preparation of these financial statements requires our management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs, and expenses and related disclosures. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these judgments and estimates under different assumptions or conditions, and any such differences may be material.

We believe that the assumptions and estimates associated with revenue recognition and deferred revenue, stock-based compensation, the valuation of goodwill and intangible assets, internal-use software development costs, income taxes and other contingencies have the greatest potential impact on our condensed consolidated financial statements. Therefore, we consider these to be our critical accounting policies and estimates.

There have been no material changes to our critical accounting policies and significant judgments and estimates as compared to the critical accounting policies and significant judgments and estimates disclosed in our Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission ("SEC") on February 25, 2022.

Recently Issued Accounting Guidance

See Note 2, "Summary of Significant Accounting Policies," to the condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for a summary of recently adopted accounting standards and recent accounting pronouncements not yet adopted.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to certain market risks in the ordinary course of our business. Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily the result of fluctuations in interest rates and foreign currency exchange rates.

Interest Rate Risk

Our primary exposure to market risk relates to interest rate changes. We had cash and cash equivalents of $166.4 million and marketable securities of $145.2 million as of September 30, 2022, which were held for working capital purposes. Our cash and cash equivalents are comprised primarily of interest bearing checking and direct deposit accounts, and money market accounts. Marketable securities consist of corporate debt securities, U.S. treasury securities, and commercial paper not otherwise classified as cash equivalents.

Such interest-earning instruments carry a degree of interest rate risk. To date, fluctuations in interest income have not been significant. The primary objective of our investment activities is to preserve principal while maximizing 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. A hypothetical 10% change in interest rates would not have had a material impact on our financial results included in this Quarterly Report on Form 10-Q.

On June 6, 2022, we entered into the Credit Agreement, which provides for a $50.0 million Credit Facility. Interest on borrowings accrues at an annual rate tied to a base rate or the Secured Overnight Financing Rate (“SOFR”), at our election. Loans based on SOFR bear interest at a rate equal to SOFR plus an applicable margin between 1.50% and 2.00% depending upon our consolidated adjusted quick ratio for the immediately preceding quarter and loans based on the base rate bear interest at a rate equal to the base rate plus an applicable margin between 0.50% and 1.00% depending upon our consolidated adjusted quick ratio for the immediately preceding quarter. As a result, we are exposed to interest rate risk as we make draws on the Credit Facility. As of September 30, 2022, there were no outstanding borrowings.

In February 2020 and March 2021, we issued $400.0 million and $250.0 million aggregate principal amount of the 2026 Convertible Notes and the 2028 Convertible Notes, respectively. As the Convertible Notes have a fixed annual interest rate, we have no financial or economic interest exposure associated with changes in interest rates. However, the fair value of fixed rate debt instruments fluctuates when interest rates change. Additionally, the fair value can be affected when the market price of our common stock fluctuates. We carry the Convertible Notes at face value less unamortized discount on our balance sheet, and we present the fair value for required disclosure purposes only.

Foreign Currency Risk

The functional currencies of our foreign subsidiaries are the respective local currencies of the jurisdictions in which they operate, which are primarily the Euro and the British Pound. Approximately 11% of our total revenue was generated outside the United States for the nine months ended September 30, 2022. The majority of our revenues and operating expenses are denominated in U.S. dollars, and therefore are not currently subject to significant foreign currency risk. 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 year. Foreign currency translation adjustments are accounted for as a component of accumulated other comprehensive loss within stockholders' equity. Gains or losses due to transactions in foreign currencies are included in other (expense) income, net 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. To the extent the U.S. dollar weakens against foreign currencies, the translation of these foreign currencies result in increased revenue and operating expenses for our non-U.S. operations. Similarly, our revenue and operating expenses for our non-U.S. operations decrease if the U.S. dollar strengthens against foreign currencies. We do not believe that a hypothetical 10% change in foreign currency exchange rates would have had a material impact on our financial results included in this Quarterly Report on Form 10-Q.

Item 4. Controls and Procedures

Evaluation of disclosure controls and procedures

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, have evaluated our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that, as of the end of the period covered by this Quarterly Report on Form 10-Q, our disclosure controls and procedures are designed at a reasonable assurance level and are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in internal control over financial reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act during the quarter ended September 30, 2022, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent limitation on the effectiveness of internal control

The effectiveness of any system of internal control over financial reporting, including ours, is subject to inherent limitations, including the exercise of judgment in designing, implementing, operating, and evaluating the controls and procedures, and the inability to eliminate misconduct completely. Accordingly, any system of internal control over financial reporting, including ours, no matter how well designed and operated, can only provide reasonable, not absolute assurances. In addition, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. We intend to continue to monitor and upgrade our internal controls as necessary or appropriate for our business, but cannot assure you that such improvements will be sufficient to provide us with effective internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

Phone Recovery Services, LLC and Phone Administrative Services, Inc. acting or purporting to act on behalf of applicable jurisdictions, or the applicable county or city itself, have filed multiple lawsuits against us and/or one of our subsidiaries alleging that we failed to bill, collect and remit certain taxes and surcharges associated with the provision of 911 services.

The following county or municipal governments have named us in lawsuits that remain unresolved and are associated with the collection and remittance of 911 taxes and surcharges: (a) the City and County of San Francisco, California; (b) the following Illinois jurisdictions, collectively: Cook and Kane Counties, Illinois, the City of Chicago, Illinois, and the State of Illinois; and (c) the State of New York. The complaints allege that we failed to bill, collect and remit certain taxes and surcharges associated with 911 service pursuant to applicable laws.

On November 30, 2020, we were named as a defendant in a Second Amended Class Action Complaint in a putative class action captioned Diana Mey v. All Access Telecom, Inc., et al. pending in the United States District Court, Northern District of West Virginia, relating to the alleged failure to block unsolicited phone calls to the plaintiff and putative class members.

We intend to vigorously defend these lawsuits and believe we have meritorious defenses to each. However, litigation is inherently uncertain, and any judgment or injunctive relief entered against us or any adverse settlement could negatively affect our business, results of operations and financial condition.

In addition to the litigation discussed above, from time to time, we may be subject to legal actions and claims in the ordinary course of business. We have received, and may in the future continue to receive, claims from third parties relating to number management, and claims 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

A description of the risks and uncertainties associated with our business is set forth below. You should carefully consider the risks and uncertainties described below, together with all of the other information 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 condensed consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q. The risks and uncertainties described below may not be the only ones we face. If any of the risks actually occur, our business, financial condition, results of operations and prospects could be materially and adversely affected. In that event, the market price of our Class A common stock could decline.

Risk Factors Summary

The following is a summary of the principal risks that could adversely affect our business, results of operations and financial condition.

Risks Related to Our Business

- Our future growth and the success of our expansion plans depend on a number of factors that are beyond our control.
- Our growth and financial health are subject to a number of economic risks.
- The market in which we participate is highly competitive, and we may not compete effectively.
- We may not be able to attract new customers in a cost-effective manner.
- Our business and financial results may be adversely impacted by a rising rate of inflation.
- The market for some of our services is new and unproven, and may decline or experience limited growth.
- We must increase the network traffic and revenue to meet our growth targets.
- Our business depends on customers increasing their use of our services.
- We may not be able to increase the revenue that we derive from enterprises.
- We may not be able to develop service enhancements or new services that achieve market acceptance.
- We have grown rapidly, and may not be able to manage the growth effectively.
- Our pricing and billing systems are complex, and errors could adversely affect our results of operations.
- We must continue to develop effective systems to support our business.
- We may not be able to maintain and enhance our brand and increase market awareness.
- Failure to deliver high-quality support may adversely affect our customer relationships.
- We operate internationally, which exposes us to significant risks.
- The military conflict between Russia and Ukraine, including an expansion of that conflict to other areas, may adversely affect our business.
- If the COVID-19 infection rate returns to pandemic levels, it may harm our business and results of operations.
- Our revenue is concentrated in a limited number of enterprise customers.
- Attacks on or breaches of our networks or systems, or on those of third parties on which we rely, including denial-of-service and other cyberattacks, may result in disruption to our services, which could harm our business.
- We are currently subject to litigation, including litigation related to taxes and charges associated with our provision of 911 services and litigation related to our alleged failure to block unsolicited phone calls.
- Customer misuse of our services and software could result in litigation and harm our business.
- We are subject to litigation in the ordinary course of business, which may harm our business.
- The communications industry faces significant regulatory uncertainties.
- The effects of increased regulation of IP-based service providers are unknown.
- We must obtain and maintain numerous licenses and permits, in the United States and internationally, to operate our network.
- If we violate regulatory requirements that apply to our operations, we may not be able to conduct our business.
- The FCC's repeal of its Network Neutrality Rules could harm our business.
- Our business is subject to complex and evolving laws, commercial standards, contractual obligations and other requirements regarding privacy and data protection.
- Our business may be harmed if we cannot obtain, retain and distribute local or toll-free numbers.
- We may be exposed to liabilities under anti-corruption, export control and economic sanction regulations.
- Third party intellectual property rights could prevent us from using technologies needed to provide our services.
- Our use of open source software could negatively affect our ability to sell our services and subject us to litigation.
- Indemnity provisions in various agreements potentially expose us to substantial liability.

- We may fail to protect our internally developed systems, technology and software and our intellectual property.
- We may be liable for the information that content owners or distributors distribute over our network.
- Third parties may use our services to commit fraud or steal our services.
- We may lose customers if our platform or network fails or is disrupted.
- Defects or errors in our services could harm our business.
- If our emergency services do not function properly, we may be exposed to significant liability.
- Termination of relationships with key suppliers could cause delay and additional costs.
- Our customer churn rate may increase.
- The prices for some of our services have decreased in the past and may do so again in the future.
- The need to obtain additional IP circuits or interconnect with other networks could increases our costs.
- The loss of any member of our senior management team or key employees could harm our business.
- If we are unable to hire, retain and motivate qualified personnel, our business will suffer.
- We could be subject to liability for historic and future sales, use and similar taxes.
- We may be subject to significant tax-related liabilities and indemnity obligations if the Spin-Off (as defined below) is taxable.
- Our estimates or judgments relating to our critical accounting policies may prove to be incorrect.
- We may be unable to maintain an effective system of disclosure controls and internal control over financial reporting.
- If our goodwill or intangible assets become impaired, we may be required to record a significant charge.
- Foreign currency exchange rate fluctuations may harm our business.
- Natural disasters, pandemics, power outages, terrorist attacks, acts of war, civilian unrest and similar events could harm our business.
- We may acquire other businesses, which may divert our management's attention and impact our stock price.

Risks Related to the Acquisition of Voxbone

- The Voxbone acquisition may not yield the synergies and other benefits that we anticipated.

Risks Related to the Convertible Notes

- Servicing our future indebtedness may require a significant amount of cash, which we may not have.
- We may not have the ability to raise the funds necessary for cash settlement of the Convertible Notes.
- The accounting method for our Convertible Notes could have a material effect on our financial results.
- The capped call transactions may affect the value of the Convertible Notes and our Class A common stock.

Risks Related to Ownership of Our Class A Common Stock

- The trading price of our Class A common stock may be volatile and you could lose all or part of your investment.
- Substantial future sales of shares of our Class A common stock could cause the price of our Class A to decline.
- Our dual class capital structure concentrates voting control.
- We cannot predict the impact our capital structure may have on our stock price.
- Our stock price and trading volume could decline if securities or industry analysts stop covering our Class A Common Stock.
- Anti-takeover provisions in our organizational documents and Delaware law, could impair a takeover attempt.
- Our certificate of incorporation and bylaws include super-majority voting provisions.
- Our bylaws provide that Delaware will be the sole and exclusive forum for certain stockholder litigation.
- We may need additional capital in the future and such capital may be limited or unavailable.
- We do not intend to pay dividends for the foreseeable future.

The following is a more complete discussion of the material risks facing our business.

Risks Related to Our Business

Our future growth and the success of our expansion plans depend on a number of factors that are beyond our control.

We have grown our business considerably over the last several years. We cannot guarantee that we will be able to maintain our growth or that we will choose to target the same pace of growth in the future. Our success in achieving continued growth depends upon several factors including:

- our ability to hire and retain qualified and effective personnel, including, but not limited to, those with the expertise required to develop and maintain our service offerings, to sell those offerings and to operate our business effectively;
- the overall economic health of new and existing markets;
- the number and effectiveness of competitors;
- the pricing structure under which we will be able to purchase services required to serve our customers;
- our ability to introduce new service offerings and maintain or enhance existing offerings;
- the availability to us of technologies needed to remain competitive;
- federal, state and international regulatory conditions, including the maintenance of regulation that protects us from unfair business practices by traditional network service providers or others with greater market power who have relationships with us as both competitors and suppliers; and
- changes in industry standards, laws, regulations, or regulatory enforcement in the United States and internationally.

Our growth and financial health are subject to a number of economic risks.

The financial markets in the United States have experienced substantial uncertainty during recent years, particularly following the COVID-19 outbreak. This uncertainty has included, among other things, extreme volatility in securities prices, reduced liquidity and credit availability, rating downgrades of certain investments and declining values with respect to others. If capital and credit markets continue to experience uncertainty and available funds remain limited, we may not be able to obtain debt or equity financing or to refinance our existing indebtedness on favorable terms or at all, which could affect our strategic operations and our financial performance and force modifications to our operations. These conditions currently have not precluded us from accessing credit markets or financing our operations, but there can be no assurance that financial markets and confidence in major economies will not deteriorate.

In addition, we are vulnerable to changes in market preferences or other market changes, such as general economic conditions, recession and fears of recession, interest rates, tax rates and policies, and inflation. The U.S. is currently experiencing higher rates of inflation than in previous years, and we may experience a compression in our margins as a result. The U.S. and global economies have in the past, and will in the future, experience recessionary periods and periods of economic instability. During such periods, our existing and potential customers may choose not to expend the amounts that we anticipate based on our expectations with respect to the addressable market for the services we

offer. There could also be a number of other effects from adverse general business and economic conditions on our business, including insolvency of any of our third-party suppliers or contractors, decreased market confidence, decreased interest in communications solutions, decreased discretionary spending and reduced customer demand for the services we offer, any of which could have a material adverse effect on our business, financial condition and results of operations and exacerbate some of the other risk factors contained in this Quarterly Report on Form 10-Q.

Key vendors upon which we rely also could be unwilling or unable to provide us with the materials or services that we need to operate our communications platform or otherwise on a timely basis or on terms that we find acceptable. Our financial counterparties, insurance providers or others also may default on their contractual obligations to us. If any of our key vendors fail, we may not be able to replace them without disruptions to, or deterioration of, our services and we also may incur higher costs associated with new vendors. Transitioning to new vendors also may result in the loss of the value of assets associated with our integration of third-party services into our network or service offerings.

The market in which we participate is highly competitive, and if we do not compete effectively, our business, results of operations and financial condition could be adversely affected.

The market for cloud communications is rapidly evolving, significantly fragmented and highly competitive, with relatively low barriers to entry in some segments. The principal competitive factors in our market include completeness of our suite of service offerings, credibility with enterprises and developers, global reach, ease of integration and programmability, product features, platform scalability, reliability, deliverability, security and performance, brand awareness and reputation, the strength of sales and marketing efforts and customer support, as well as the cost of deploying and using our services. Our competitors fall into two primary categories:

- CPaaS companies that offer software APIs, less robust customer support and fewer other features, while relying on third-party networks and physical infrastructure; and
- network service providers that offer limited developer functionality on top of their own networks and physical infrastructure.

Some of our competitors and potential competitors are larger and have greater name recognition, longer operating histories, more established customer relationships, a larger global reach, larger budgets and significantly greater resources than we do. In addition, they have the operating flexibility to bundle competing products and services at little or no incremental cost, including offering them at a lower price as part of a larger sales transaction. As a result, our competitors may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards or customer requirements. In addition, some competitors may offer services that address one or a limited number of functions at lower prices, with greater depth than our services or in different geographies. Our current and potential competitors may develop and market new services with comparable functionality to our services, and this could lead to us having to decrease prices in order to remain competitive. In addition, some of our competitors have lower list prices than us, which may be attractive to certain customers even if those services have different or lesser functionality. If we are unable to maintain our current pricing due to competitive pressures, our revenue and margins will be reduced and our business, results of operations and financial condition would be adversely affected. Customers utilize our services in many ways and use varying levels of functionality that our services offer or are capable of supporting or enabling within their applications. Customers that use many of the features of our services or use our services to support or enable core functionality for their applications may have difficulty or find it impractical to replace our services with a competitor’s services, while customers that use only limited functionality may be able to more easily replace our services with competitive offerings.

With the introduction of new services and new market entrants, we expect competition to intensify in the future. In addition, some of our customers choose to use our services and our competitors’ services at the same time in order to provide redundancy in their ability to deliver their own product offerings. Moreover, as we expand the scope of our services, we may face additional competition.

If one or more of our competitors were to merge or partner with another of our competitors, this change in the competitive landscape could further adversely affect our ability to compete effectively. In addition, pricing pressures and increased competition generally could result in reduced revenue, reduced margins, increased losses or the failure of our services to achieve or maintain widespread market acceptance, any of which could harm our business, results of operations and financial condition.

Our current and potential competitors have developed and may develop in the future service offerings that are available internationally, as well as domestically. To the extent that customers seek service offerings that include support and scaling internationally, they may choose to use other service providers to fill their communication service needs before we can fully develop and integrate our international offerings. Each of these factors could lead to reduced revenue, slower growth and lower brand name recognition amongst our industry competitors, any or all of which could harm our business, results of operations and financial condition.

If we are unable to attract new customers in a cost-effective manner, then our business, results of operations and financial condition would be adversely affected.

In order to grow our business, we must continue to attract new customers in a cost-effective manner. We use a variety of marketing channels to promote our services and our communications platform, and we periodically adjust the mix of our marketing programs. If the costs of the marketing channels we use increase dramatically, then we may choose to use alternative and less expensive channels, which may not be as effective as the channels we currently use. As we add to or change the mix of our marketing strategies, we may need to expand into more expensive channels than those we are currently in, which could adversely affect our business, results of operations and financial condition. We also cannot predict the extent to which COVID-19 may cause us to adjust how we promote our services. We will incur marketing expenses before we are able to recognize any revenue that the marketing initiatives may generate, and these expenses may not result in increased revenue or brand awareness. We have made in the past, and may make in the future, significant expenditures and investments in new marketing campaigns. We cannot assure you that any new investments in sales and marketing, including any increased focus on enterprise sales efforts, will lead to the cost-effective acquisition of additional customers or increased sales or that our sales and marketing efficiency will be consistent with prior periods. If we are unable to maintain effective marketing programs, then our ability to attract new customers could be materially and adversely affected, our advertising and marketing expenses could increase substantially and our results of operations may suffer.

Our business, operating results and cash flows may be adversely affected by a rising rate of inflation.

A combination of circumstances, including governmental fiscal and monetary policies, regional armed conflicts, supply chain constraints, and labor and/or energy shortages, including as a result of the lagging economic impacts of COVID-19, has resulted in significant inflationary trends in the cost of components, labor and freight costs, and other expenses. These inflationary pressures could affect wages, the cost and our ability to obtain components, the price of our products and services, our ability to meet customer demand, and our gross margins and operating profit. Inflation may further exacerbate other risks discussed in this “Risk Factors” section, such as risks related to our sales and marketing efforts and our ability to attract, motivate and retain sales, engineering and other key personnel. If we are unable to successfully manage the effects of inflation, our business, operating results, cash flows and financial condition may be adversely affected.

The market for some of our services is new and unproven, may decline or experience limited growth and is dependent in part on enterprises and developers continuing to adopt our platform and use our services.

We have been developing and providing a cloud-based platform that enables developers and organizations to integrate voice and messaging communications capabilities into their software applications. This market is relatively new and unproven and is subject to a number of risks and uncertainties. We believe that our future success will depend in large part on the growth, if any, of this market. For example, the utilization of software APIs by developers and organizations to build communications functionality into their applications is still relatively new, and developers and organizations may not recognize the need for, or benefits of, our services and platform. If they do not recognize the need for and benefits of our services and platform, they may decide to adopt alternative services and/or develop the necessary services in-house to satisfy their business needs. In order to grow our business and expand our market position, we intend to focus on educating enterprise customers about the benefits of our services and platform, expanding the functionality of our services and bringing new technologies to market to increase market acceptance and use of our platform. Our ability to expand the market that our services and platform address depends upon a number of factors, including the cost, performance and perceived value associated with such services and platform. The market for our services and platform could fail to grow significantly or there could be a reduction in demand for our services and platform as a result of a lack of customer acceptance, technological changes or challenges, our inability to successfully introduce new product offerings, competing services and platforms, decreases in spending by current and prospective customers, weakening economic conditions, geopolitical developments, global pandemics, adverse regulatory developments or other causes. If our market does not experience significant growth or demand for our services and platform decreases, then our business, results of operations and financial condition could be adversely affected.

We must increase the network traffic and resulting revenue from the services that we offer to realize our targets for anticipated revenue growth, cash flow and operating performance.

We must increase the network traffic and resulting revenue from our inbound and outbound voice calling, messaging, emergency voice functions, telephone numbers and related services at acceptable margins to realize our targets for anticipated revenue growth, cash flow and operating performance. If:

- we do not maintain or improve our current relationships with existing key customers;
- we are not able to expand the available capacity on our network to meet our customers' demands in a timely manner;
- we do not develop and maintain relationships with new large enterprise customers; or
- our customers choose to obtain these services from either their own network or from one of our competitors,

then we may be unable to increase or maintain our revenue at acceptable margins.

Our business depends on customers increasing their use of our services, and any loss of customers or decline in their use of our services could materially and adversely affect our business, results of operations and financial condition.

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 communications platform. If our customers do not increase their use of our services, then our revenue may decline and our results of operations may be harmed. Customers generally are charged based on the usage of our services. 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 services at any time without penalty or termination charges. We cannot accurately predict customers' usage levels and the loss of customers or reductions in their usage levels of our services may each have a negative impact on our business, results of operations and financial condition and may cause our dollar-based net retention rate to decline in the future if our customers are not satisfied with our services. If a significant number of customers cease using, or reduce their usage of, our services, then we may be required to spend significantly more on sales and marketing than we currently plan to spend in order to maintain or increase revenue from customers. Such additional sales and marketing expenditures could adversely affect our business, results of operations and financial condition.

If we are unable to increase the revenue that we derive from enterprises, our business, results of operations and financial condition may be adversely affected.

Our ability to expand our sales to enterprise customers will depend, in part, on our ability to effectively organize, focus and train our sales and marketing personnel and to attract and retain sales personnel with experience selling to enterprises. We believe that there is significant competition for experienced sales professionals with the skills and technical knowledge that we require. Our ability to achieve significant revenue growth in the future will depend, in part, on our ability to recruit, train and retain a sufficient number of experienced sales professionals, particularly those with experience selling to enterprises. In addition, even if we are successful in hiring qualified sales personnel, new hires require significant training and experience before they achieve full productivity, particularly for sales efforts targeted at enterprises and new territories. Our recent hires and planned hires may not become as productive as quickly as we expect and we may be unable to hire or retain sufficient numbers of qualified individuals in the future in the markets where we do business.

With respect to enterprise customers, the decision to adopt our services may require the approval of multiple technical and business decision makers, including security, compliance, procurement, operations and IT. In addition, while enterprise customers may quickly deploy our services on a limited basis, before they will commit to deploying our services at scale, they often require extensive education about our services and significant customer support time, engage in protracted pricing negotiations and seek to secure readily available development resources.

In addition, sales cycles for enterprises are inherently complex and lengthy, and some enterprise customers may not generate revenue that justifies the cost to obtain such customers. In addition, these complex and resource-intensive sales efforts could place additional strain on our limited product and engineering resources. Further, enterprises, including some of our customers, may choose to develop their own solutions that do not include our services. They also may demand reductions in pricing as their usage of our services increases, which could have an adverse impact on our gross margin. Our efforts to sell to these potential customers may not be successful. If we are unable to increase the revenue that we derive from enterprises, then our business, results of operations and financial condition may be adversely affected.

If we do not develop enhancements to our services and introduce new services that achieve market acceptance, our business, results of operations and financial condition could be adversely affected.

Our ability to attract new customers and increase revenue from existing customers depends in part on our ability to enhance and improve our existing services, increase adoption and usage of our services and introduce new services. The success of any enhancements or new services depends on several factors, including timely completion, adequate quality testing, actual performance quality, market-accepted pricing levels and overall market acceptance. Enhancements and new services that we develop may not be introduced in a timely or cost-effective manner, may contain errors or defects, may have interoperability difficulties with our communications platform, network or other services or may not achieve the broad market acceptance necessary to generate significant revenue. We also must integrate with a variety of network, hardware, mobile and software platforms and technologies, which requires us to enhance and modify our products and our communications platform to adapt to changes and innovation in these technologies. Wireline and wireless telephone providers or cell-phone operating system providers such as Apple and Google have developed and may in the future develop new applications, functions or technologies intended to filter illegal robocalls or other unwanted phone calls or messages. Such applications, functions or technologies may inadvertently filter legal and desired calls or messages to or from our customers. In certain instances, we may need to update our services and technology to work with these applications, functions or technologies. Any failure to operate effectively with evolving or new technologies could reduce the demand for our services. If we cannot respond to these changes in a cost-effective manner, our services may become less competitive or obsolete, and our business, results of operations and financial condition could be adversely affected. To the extent that upgrades of existing products, services and technology are required for the introduction of new services, the success of these upgrades also may be dependent on reaching mutually acceptable terms with vendors and on vendors meeting their obligations in a timely manner.

Furthermore, our ability to increase the usage of our services depends, in part, on the development of new use cases for our services, which may be outside of our control. Our ability to generate usage of additional services by our customers may also require increasingly sophisticated and more costly sales efforts and result in a longer sales cycle. If we are unable to successfully enhance our existing services to meet evolving customer requirements, increase adoption and usage of our services or develop new services, or if our efforts to increase the usage of our services are more expensive than we expect, then our business, results of operations and financial condition would be adversely affected.

Our rapid growth may impact our corporate culture, operational infrastructure and management, and if we fail to effectively manage our continuing growth, then our business, results of operations and financial condition could be adversely affected.

We have experienced substantial growth in our business, including internationally through our acquisition of Voxbone in late 2020, which has placed and may continue to place significant demands on our corporate culture, operational infrastructure and management. We believe that our corporate culture has been a critical component of our success. We have invested substantial time and resources in building our team and nurturing our culture. As we expand our business and grow internationally, we may find it difficult to maintain our corporate culture. Any failure to manage our anticipated growth and organizational changes in a manner that preserves the key aspects of our culture could hurt our chance for future success, including our ability to recruit and retain personnel, and effectively focus on and pursue our corporate objectives. This, in turn, could adversely affect our business, results of operations and financial condition.

In addition, as we have rapidly grown, our organizational structure has become more complex. In order to manage these increasing complexities, we will need to continue to scale and adapt the way in which we are organized, our operational, financial and management controls, and our reporting systems and procedures. The expansion of our systems and infrastructure will require us to commit substantial financial, operational and management resources before our revenue increases and without any assurances that our revenue will increase.

This growth could strain our ability to maintain reliable service levels for our customers. If we fail to achieve the necessary level of efficiency in our organization as we grow, then our business, results of operations and financial condition could be adversely affected.

Our pricing and billing systems are complex, and errors could adversely affect our results of operations.

Our pricing and billing systems are complex to develop and challenging to implement. To be profitable, we must have accurate and complete information about the costs associated with voice and messaging, and properly incorporate such information into our pricing model. Our pricing model must also reflect accurate and current information about the market for our services, including the pricing of competitive alternatives for our services, as well as reliable forecasts of traffic volume. We may determine pricing for our services based on data that is outdated or otherwise flawed. Even if we have complete and accurate market information, we may not set prices that optimize both revenue and profitability. If we price our services too high, the amount of traffic that our customers may route to our network may decrease and accordingly our revenue may decline. If we price our services too low, our margins may be adversely affected, which will reduce our ability to achieve and maintain profitability.

Additionally, we rely on third parties to provide us with key software and services for our billing. If these third parties cease to provide those services to us for any reason, or fail to perform billing services accurately and completely, we may not be able to deliver accurate invoices promptly. Delays in invoicing can lead to delays in revenue recognition, and inaccuracies in our billing could result in lost revenue. If we fail to adapt quickly and effectively to changes affecting our costs, pricing and billing, our profitability and cash flow will be adversely affected.

We must continue to develop effective business support systems to implement customer orders and to provide and bill our customers for services.

We depend on our ability to continue to develop effective business support systems. This complicated undertaking requires significant resources and expertise and support from third-party vendors. Following the development of the business support systems, the data migration must be completed for the full benefit of the systems to be realized. Business support systems are needed for:

- quoting, accepting and inputting customer orders for services;
- provisioning, installing and delivering services;
- providing customers with direct access to the information systems included in our communications platform so that they can manage the services they purchase from us, generally through web-based customer portals; and
- billing for services.

If we are not able to maintain and enhance our brand and increase market awareness of our company and services, then our business, results of operations and financial condition may be adversely affected.

We believe that maintaining and enhancing our brand identity and increasing market awareness of our company and services are critical to achieving widespread acceptance of our company and our communications platform, as well as to strengthen our relationships with our existing customers and to our ability to attract new customers. The successful promotion of our brand will depend largely on our continued marketing efforts, our ability to continue to offer high quality services that meet the evolving needs of our existing and prospective customers and our ability to successfully differentiate our services from competing products and services. Our brand promotion activities may not be successful or yield increased revenue. In addition, independent industry analysts often provide reviews of our services and competing products and services, which may significantly influence the perception of our services in the marketplace. If these reviews are negative or not as strong as reviews of our competitors' services, then our brand may be harmed.

From time to time, our customers have complained about our services, such as complaints about our pricing and customer support. Additionally, we sometimes experience customer complaints relating to disruption to, or outage of, our services. If we do not handle customer complaints effectively, then our brand and reputation may suffer, our customers may lose confidence in us and they may reduce or cease their use of our services. In addition, many of our customers post and discuss on social media about products and services, including our services and our communications platform. Our success depends, in part, on our ability to generate positive customer feedback and minimize negative feedback on social media channels where existing and potential customers seek and share information. If actions we take or changes we make to our services or our communications platform upset these customers, then their online commentary could negatively affect our brand and reputation. Complaints or negative publicity about us, our services or our communications platform could materially and adversely affect our ability to attract and retain customers, our business, results of operations and financial condition.

The promotion of our brand also requires us to make substantial expenditures, and we anticipate that these expenditures will increase as our market becomes more competitive and as we expand into new markets. To the extent that these activities increase revenue, this revenue still may not be enough to offset the increased expenses we incur. In addition, due to restrictions on travel and in-person meetings resulting from COVID-19, we have attended planned customer and industry events as virtual-only experiences and cancelled others. We may alter, postpone or cancel other events in the future. Virtual meetings, events and interactions may not be as successful and may constrain our marketing, promotional and sales activity. If we do not successfully maintain and enhance our brand, then our business may not grow, we may see our pricing power reduced relative to competitors and we may lose customers, all of which would adversely affect our business, results of operations and financial condition.

Any failure to deliver and maintain high-quality customer support may adversely affect our relationships with our customers and prospective customers and could adversely affect our reputation, business, results of operations and financial condition.

Many of our customers depend on our customer support team to assist them in deploying or using our services effectively, to help them resolve post-deployment issues quickly and to provide ongoing support. If we do not devote sufficient resources or are otherwise unsuccessful in assisting our customers effectively, it could adversely affect our ability to retain existing customers and could prevent prospective customers from adopting our services. We may be unable to respond quickly enough to accommodate short-term increases in demand for customer support. We also may be unable to modify the nature, scope and delivery of our customer support to compete with changes in the support services provided by our competitors. Increased demand for customer support, without corresponding revenue, could increase costs and adversely affect our business, results of operations and financial condition. Our sales are highly dependent on our business reputation and on positive recommendations from existing customers. Any failure to deliver and maintain high-quality customer support, or a market perception that we do not maintain high-quality customer support, could adversely affect our reputation, business, results of operations and financial condition.

We operate internationally, which exposes us to significant risks.

We have expanded our international operations, including through the deployment of data centers in certain European locations and our acquisition of Voxbone in late 2020. As part of our growth strategy, we will continue to evaluate potential opportunities for further international expansion.

Operating in international markets requires significant resources and management attention, and subjects us to legal, regulatory, economic and political risks in addition to those we face in the United States. We have limited experience with international operations, and further international expansion efforts may not be successful.

In addition, we face risks in doing business internationally that could adversely affect our business, including:

- exposure to political developments in the United Kingdom ("U.K.") as a result of the January 2020 departure of the U.K. from the European Union ("EU"), which has created an uncertain political and economic environment, instability for businesses and volatility in global financial markets and the value of foreign currencies, all of which could disrupt trade, the sale of our services and the mobility of our employees and contractors between the U.K., EU and other jurisdictions;
- difficulties in managing and staffing international operations, including difficulties related to the increased operations, travel, infrastructure, employee attrition and legal compliance costs associated with numerous international locations;
- our ability to effectively price our products in competitive international markets;
- new and different sources of competition;
- costs associated with network service providers outside of the United States;
- the need to adapt and localize our products for specific countries;
- challenges in understanding and complying with local laws, regulations and customs in foreign jurisdictions, particularly in the areas of telecommunications, data privacy and security;
- complexities related to differing technical standards, data privacy and telecommunications regulations and certification requirements outside the United States, which could prevent customers from deploying our products or limit their usage;
- export controls and economic sanctions administered by the Bureau of Industry and Security of the U.S. Department of Commerce and the Office of Foreign Assets Control of the U.S. Department of the Treasury;
- compliance with various anti-bribery and anti-corruption laws, such as the U.S. Foreign Corrupt Practices Act and U.K. Bribery Act 2010;
- international trade policies, tariffs and other non-tariff barriers, such as quotas;
- more limited protection for intellectual property rights in some countries;
- adverse consequences relating to the complexity of operating in multiple international jurisdictions with differing tax frameworks;
- fluctuations in currency exchange rates, which could increase the price of our products outside of the United States, increase the expenses of our international operations and expose us to foreign currency exchange rate risk;
- currency control regulations, which might restrict or prohibit our conversion of other currencies into U.S. dollars;
- restrictions on the transfer of funds;
- deterioration of political relations between the United States and other countries;

- public health epidemics, such as COVID-19, or natural disasters, which could have an adverse impact on our employees, contractors, customers, partners, travel and the global economy; and
- political or social unrest, acts of war or economic instability in a specific country or region in which we operate, which could have an adverse impact on our operations in that location.

In addition, due to potential costs from our international expansion efforts and network service provider fees outside of the United States, our gross margin for international customers may be lower than our gross margin for domestic customers. As a result, our overall gross margin may fluctuate as we further expand our operations and customer base internationally.

Our failure to manage any of these risks successfully could harm our international operations, and adversely affect our business, results of operations and financial condition.

The military conflict between Russia and Ukraine, and the global response to this conflict, may adversely affect our business and results of operations.

In response to the military conflict between Russia and Ukraine, the U.S., U.K., E.U. and others have imposed significant new sanctions and export controls against Russia and certain Russian individuals and entities. This conflict has also resulted in significant volatility and disruptions to the global markets. It is not possible to predict the short- or long-term implications of this conflict, which could include but are not limited to further sanctions, uncertainty about economic and political stability, increases in inflation rates and energy prices, supply chain challenges and adverse effects on currency exchange rates and financial markets. In addition, the U.S government has reported that U.S. sanctions against Russia in response to the conflict could lead to an increased threat of cyberattacks against U.S. companies. These increased threats could pose risks to the security of our information technology systems, our network and our service offerings, as well as the confidentiality, availability and integrity of our data.

We have operations, as well as current and potential new customers, in several locations in Europe, including an office in Romania. If the conflict extends beyond Ukraine or further intensifies, it could have an adverse impact on our operations in Romania or other affected areas. Due to the complexity and operational burden required to provide services in compliance with imposed sanctions related to the conflict, we terminated our service offerings in Russia and Belarus. Although neither Russia nor Belarus constituted a material portion of our business, a significant escalation or further expansion of the conflict's current scope or related disruptions to the global markets could have a material adverse effect on our results of operations. And while we do not offer any services in Ukraine, we continue to monitor the situation in that country and globally, and assess its potential impact on our business.

If the COVID-19 infection rate returns to pandemic levels, it may harm our business and results of operations.

The global spread of novel coronavirus disease (“COVID-19”) and efforts to manage its impact created significant volatility, uncertainty and economic disruption in locations where we, our customers, suppliers and third-party business partners conduct business. COVID-19 is generally believed to have reduced to endemic levels globally, and its persistent nature has diminished in the present period. However, a return of COVID-19 infection rates to pandemic levels could result in decreased business spending by our customers and prospective customers, lower renewal rates by our customers, longer or delayed sales cycles, or reduced budgets or minimum commitments for the services that we offer, any of which could have an adverse impact on our financial condition and results of operations. Specifically, we may experience impact from enterprises reducing usage of our services or delaying decisions to implement our services. We cannot predict whether and to what extent COVID-19 infection rates may increase in the future, or what the short- or long-term impact of any such increase might be on our business, financial condition or results of operations.

Our revenue is concentrated in a limited number of customers.

A significant portion of our revenue is concentrated among a limited number of customers. If we lost one or more of our top ten customers, or, if one or more of these major customers significantly decreased orders for our services, our business would be materially and adversely affected.

Attacks on or breaches of our networks or systems, or those of third parties upon which we rely, could degrade our ability to conduct our business, compromise the integrity of our services and our communications platform, result in service degradation or outages, significant data losses, the theft of our intellectual property, investigations by government agencies and damage to our reputation, and could expose us to liability to third parties and require us to incur significant additional costs to maintain the security of our networks and data.

We depend upon our IT systems to conduct virtually all of our business operations, ranging from our internal operations and R&D activities to our marketing and sales efforts and communications with our customers and business partners. Cyber-attacks, including through the use of malware, computer viruses, distributed denial of services ("DDoS") attacks, credential harvesting and other means for obtaining unauthorized access to or disrupting the operation of our networks and systems and those of our suppliers, vendors and other service providers, could cause harm to our business, including by misappropriating our proprietary information or that of our customers, employees and business partners or to cause interruptions of our services and our communications platform. Cyber-attacks may cause service degradation or outages, equipment failures, loss of information, including sensitive personal information of customers or employees or valuable technical and marketing information, as well as disruptions to our or our customers' operations. Cyber-attacks against companies have increased in frequency, scope and potential harm in recent years. Further, the perpetrators of cyber-attacks are not restricted to particular groups or persons. These attacks may be committed by company employees or external actors operating in any geography, including jurisdictions where law enforcement measures to address such attacks are unavailable or ineffective, and may even be launched by or at the behest of nation states.

Despite our efforts to reduce the risks associated with cyber-attacks, including the implementation of a number of defensive measures and protocols designed to protect our systems and networks, such efforts may be insufficient to repel or mitigate the effects of a major cyber-attack. For example, beginning on September 25, 2021, our communications network was subjected to a DDoS attack that caused intermittent service disruptions affecting certain of our markets and customers. A DDoS attack is a malicious attempt to disrupt the normal traffic of a targeted server, service or network by overwhelming the target or its surrounding infrastructure with a flood of unwanted internet traffic from multiple sources, resulting in the slowdown or blockage of legitimate traffic. The techniques employed by the DDoS attackers continued to evolve, and we implemented a number of additional DDoS mitigation techniques as the incident unfolded. We will continue to deploy security enhancements in an effort to further secure our network, and while we believe we have remediated the immediate consequences of this incident, cybersecurity events may have cascading effects that unfold over time and result in additional costs, including costs associated with defensive measures, investigations, contractual claims, performance penalties, litigation, the loss of future business and other losses and liabilities that may be difficult to foresee. Any perception by existing and prospective customers that our network and systems are not secure could result in a material loss of business and revenue and damage our reputation. Moreover, while we currently have no indication that our systems were breached or that data was exfiltrated in the DDoS attack, we cannot guarantee we will not uncover evidence of exfiltration or misuse of data or systems as a result of this incident. In addition, we cannot guarantee we will not experience a future cyber-attack or incident resulting in exfiltration or misuse of data or systems.

The techniques used by individuals or entities to access, disrupt or sabotage devices, systems and networks change frequently and may not be recognized until launched against a target. We may be unable to anticipate these techniques, and we may not become aware in a timely manner of a security breach, which could exacerbate the negative impact of such an event on our business or that of our customers. Additionally, we depend upon our employees and contractors to appropriately handle confidential and sensitive data, including customer data and customer proprietary network information pursuant to applicable federal law, and to deploy our IT resources in a safe and secure manner that does not expose our network systems to security breaches or the loss of data. Any data security incidents, including inadvertent disclosure or internal malfeasance by our employees, unauthorized access or usage, virus or similar breach or disruption of us or our services providers, could result in a loss of confidential information, theft of our intellectual property, damage to our reputation, loss of customers, litigation, regulatory investigations, fines, penalties and other liabilities.

Our existing general liability and cyber liability insurance policies may not cover, or may cover only a portion of, any potential claims related to cyber incidents or security breaches that we experience or may not be adequate to indemnify us for all or any portion of liabilities that may be imposed. We also cannot be certain that our existing insurance coverage will continue to be available on acceptable terms or in amounts sufficient to cover the potentially significant losses that may result from a security incident or breach or that the insurer will not deny coverage of any future claim. At least one prominent global insurance carrier has announced that, beginning in 2023, it will exclude from its cyber insurance policies coverage for attacks carried out by nation-states. Accordingly, if our cybersecurity measures and those of our service providers fail to protect against unauthorized access, attacks (which may include sophisticated cyber-attacks) and the mishandling of data by our employees and contractors, then our reputation, business, results of operations and financial condition could be adversely affected.

We are currently subject to litigation related to taxes and charges associated with our provision of 911 services, which could divert management's attention and adversely affect our results of operations.

We, along with many other telecommunications companies and similar service providers, currently are subject to litigation regarding our billing, collection and remittance of non-income-based taxes and other similar charges regarding 911 services alleged to apply in certain states, counties, and municipalities located in California, Illinois and New York. See "Part II, Item 1. Legal Proceedings," in this Quarterly Report on Form 10-Q. We may face similar litigation in other jurisdictions in the future. While we are vigorously defending these lawsuits, litigation is inherently uncertain. Tax assessments, penalties and interest or future requirements arising from these lawsuits, the settlement of any such lawsuit or any other lawsuits that may arise in other jurisdictions, may adversely affect our business, results of operations and financial condition.

We face a risk of litigation resulting from customer misuse of our services and software to make or send unauthorized and/or unsolicited calls and/or messages, including those in violation of the Telephone Consumer Protection Act. Customer misuse of our services and software also could damage our reputation.

Calls and/or text messages originated or passed to us by our customers may subject us to potential risks, including litigation, regulatory enforcement, fines, and reputational damage. For example, the Telephone Consumer Protection Act of 1991 (the "TCPA") restricts telemarketing and the use of technologies that enable automatic calling and/or messaging without proper customer consent. This may result in civil claims against us, including those arising due to our customers' use of our platform, and requests for information through third-party subpoenas or regulatory investigations. For example, we, along with other telecommunications companies, have been named as a defendant in a TCPA action relating to our alleged failure to block unsolicited phone calls to the plaintiff and putative class members. See the section titled "Part II, Item 1. Legal Proceedings." Internationally, we also may become subject to similar laws imposing limitations on marketing calls to wireline and wireless numbers. The scope and interpretation of the laws that are or may be applicable to the making and/or delivery of calls and/or messages are continuously evolving and developing. 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 by taking mandatory actions such as obtaining proper customer consent, we could become subject to lawsuits, fines, civil penalties, potentially significant statutory damages, consent decrees, injunctions, adverse publicity, loss of user confidence in our services, loss of users and other adverse consequences, which could materially harm our business.

Some of our customers may use our platform to transmit illegal, offensive, unsolicited and/or unauthorized calls and messages, including spam, phishing scams, and links to harmful applications. Some of our customers also may reproduce and distribute copyrighted material or the trademarks of others without permission. Such actions violate our practices and policies, including our Acceptable Use Policy, which applies to all customers. We generally complete considerable "know-your-customer" reviews before a customer, and in certain jurisdictions, an end user, can use our platform, although we cannot always conduct proactive audits of our customers thereafter to confirm compliance with our practices and policies, including our Acceptable Use Policy. We generally rely on our customers' contractual representations to us that their use of our platform will comply with applicable law and our practices and policies. In cases where our customers are reselling our services, we are relying on a contractual pass-through by our customers of similar contractual representations from their end users. We also generally evaluate complaints that we receive regarding our customers' use of our platform. Our substantial efforts will not prevent all illegal robocalls and other fraudulent activity. The unlawful or fraudulent use of our platform could subject us to claims for damages, copyright or trademark infringement, regulatory enforcement, fraud, or negligence or damage our reputation. Even if claims asserted against us do not result in liability, we may incur substantial costs to investigate and defend such claims. If we are liable for our customers' activities, we could be required to pay fines or penalties, redesign our business methods, limit our provision of certain services or otherwise expend resources to remedy any damages caused by such actions and avoid future liability.

We are also subject to litigation in the ordinary course of business, and uninsured judgments or a rise in insurance premiums may adversely affect our results of operations.

In the ordinary course of business, we are subject to various claims and litigation. Any such claims, regardless of merit, could be time-consuming and expensive to defend and could divert management's attention and resources. In accordance with customary practice, we maintain insurance against some, but not all, of these potential claims. We may elect not to obtain insurance if we believe that the cost of available insurance is excessive relative to the risks presented. The levels of insurance we maintain may not be adequate to fully cover any and all losses or liabilities. Further, we may not be able to maintain insurance at commercially acceptable premium levels or at all. If any significant judgment, claim (or a series of claims), a settlement or other event is not fully insured or indemnified against, it could have a material adverse impact on our business, financial condition and results of operations. There can be no assurance as to the actual amount of these liabilities or the timing thereof. We cannot be certain that the outcome of current or future litigation will not have a material adverse impact on our business and results of operations.

The communications industry faces significant regulatory uncertainties and the resolution of these uncertainties could harm our business, results of operations and financial condition.

If current or future regulations change, the Federal Communications Commission (the "FCC"), state regulators or regulators in other jurisdictions may not grant us required regulatory authorizations or may take action against us if we are found to have provided services without obtaining the necessary authorizations, or to have violated other requirements of their rules and orders. Delays in receiving required regulatory approvals or the enactment of new adverse regulation or regulatory requirements may slow our growth and have a material adverse effect on our business, results of operations and financial condition.

Proceedings before the FCC or regulators from international jurisdictions could limit our access to various network services or further increase the rates we must pay for such services. For example, proceedings before the FCC could result in an increase in the amount we pay to other carriers or a reduction in the revenue we derive from other carriers in, or retroactive liability for, access charges and reciprocal compensation. On December 17, 2019, the FCC issued an order that revised its interpretation of the Voice-over Internet Protocol ("VoIP") symmetry rule. The FCC now concludes that LECs may assess end office switched access charges only if the LEC or its VoIP partner provides a physical connection to the last-mile facilities used to serve an end user. If neither the LEC nor its VoIP partner provides such a physical connection, the LEC may not assess end office switched access charges. The FCC also decided to give its order retroactive effect. We cannot predict the impact this FCC order may have on our business, including whether other carriers will agree with our legal interpretations and treatments, at this time. Other proceedings before the FCC could also result in increases in the cost of regulatory compliance. For example, the FCC has opened a proceeding to examine how to improve the delivery of emergency 911 services and whether to expand requirements to include communications services not currently subject to emergency calling obligations. A number of states also have proceedings pending that could impact our access to and the rates we pay for network services. Other state proceedings could limit our pricing and billing flexibility. Our business would be substantially impaired if the FCC, the courts or state commissions eliminated our access to the facilities and services we use to serve our customers, substantially increased the rates we pay for facilities and services, increased the costs or complexity associated with providing emergency 911 services or adversely affected the revenue we receive from other carriers or our customers. In addition, congressional legislative efforts to rewrite the Telecommunications Act of 1996 or enact other telecommunications legislation, as well as various state legislative initiatives, may cause major industry and regulatory changes. We cannot predict the outcome of these proceedings or legislative initiatives or the effects, if any, that these proceedings or legislative initiatives may have on our business and operations.

While we believe we are currently in compliance in all material respects with all material federal, state, local and international rules and regulations, these regulations are subject to interpretation and the relevant regulators may determine that our application of these rules and regulations is not consistent with their interpretation. Additionally, in certain instances, third parties or government agencies may bring action with federal, state, local or international regulators if they believe a provider has breached applicable rules and regulations.

The effects of increased regulation of IP-based service providers are unknown.

While the FCC has to date generally subjected IP-based service providers in the United States to less stringent regulatory oversight than traditional common carriers, the FCC has imposed certain regulatory obligations on providers of interconnected and non-interconnected VoIP services, including the obligations to contribute to the Universal Service Fund, to provide 911 services, and to comply with the Communications Assistance for Law Enforcement Act. The recently enacted TRACED Act aims to mitigate illegal robocalls by directing the FCC to conduct certain rulemaking proceedings that include adopting rules that require participation in the technical standard known as the Secure Telephone Identity Revisited (“STIR”) and Signature-based Handling of Asserted Information Using toKENs (“SHAKEN”) (together, “STIR/SHAKEN”), among other requirements. For large carriers, IP-based network equipment and the IP services that operate on such equipment were required to support the STIR/SHAKEN framework as of June 30, 2021. Bandwidth has had a small sub-set of services and customer accounts that operate on legacy IP equipment that is not STIR/SHAKEN capable. Bandwidth is working to retire such equipment. There may be regulatory activity related to the timing of Bandwidth’s efforts to retire such non-STIR/SHAKEN capable equipment. Failure to comply with existing regulations, or the imposition of additional regulations could have a material adverse effect on our business.

Our operations are subject to significant regulation and require us to obtain and maintain numerous governmental licenses and permits in the United States and internationally. If we fail to obtain and maintain those licenses and permits, we may not be able to conduct our business. Moreover, changes in regulatory requirements could significantly increase our costs or otherwise adversely affect our operations.

In the ordinary course of operating our network and providing our services, we must obtain and maintain a variety of telecommunications and other licenses, permits and authorizations. We also must comply with a variety of ongoing regulatory obligations. If we are unable to obtain and maintain the licenses and permits needed to operate and expand our network on acceptable terms and on a timely basis, our business could be materially adversely affected. In addition, the cancellation or non-renewal of the licenses or permits we hold could materially adversely affect our business. Our failure to comply with the obligations imposed upon license and permit holders, including the payment of fees, may cause sanctions or additional costs, including the revocation of authority to provide services.

Our operations are subject to regulation at the national, state and local levels. Our operations are also subject to additional regulation by other countries in our international markets. Changes to existing regulations or rules, or the failure of regulatory agencies to regulate in areas historically regulated on matters such as network neutrality, licensing fees, environmental, health and safety, privacy, intercarrier compensation, emergency services, interconnection, illegal robocalling, extra-territorial use of telephone numbers, and other areas, in general or particular to our industry, may increase uncertainty, increase costs, restrict operations or decrease revenue.

Our inability or failure to comply with telecommunications and other laws and regulations could cause the temporary or permanent suspension of our operations. In addition, if we cannot provide emergency calling functionality through our communications platform to meet any applicable federal, state or international requirements, the competitive advantages that we currently have may not persist, adversely affecting our ability to obtain and to retain enterprise customers which could have an adverse impact on our business.

We are subject to telecommunications laws and regulations in the non-U.S. countries where we offer our services. Numerous country-specific laws and governmental regulations apply to our business and may increase our costs, impact our products and communications platform or prevent us from offering or providing our products in certain countries. Many existing non-U.S. laws and regulations may not fully contemplate CPaaS solutions and the interpretation and enforcement of non-U.S. laws and regulations may involve significant uncertainties. For example, several European countries have adopted “know your customer” requirements regarding end users and have mandated the real-time provisioning of data to national law enforcement authorities’ systems.

In January 2018, the FCC repealed its Network Neutrality Rules. Our business could suffer with respect to the quality of the services we offer, our ability to maintain our internet-based services and our services offered through our communications platform, a reduction in our profitability or an increase in the price of our services making our offerings less competitive in the marketplace.

In January 2018, the FCC adopted an order largely repealing its network neutrality rules (the “Order”). Among other things, the pre-existing network neutrality rules prevented providers of broadband internet access services—like cable and telephone companies—from blocking, impairing and degrading service offerings from non-affiliated third parties like us. In 2019, the U.S. Court of Appeals for the District of Columbia Circuit largely affirmed the Order, but vacated the portion of the Order that would bar states from imposing any rule or requirement inconsistent with the FCC’s order. Various companies appealed the federal court of appeals decision in December 2019. We cannot predict whether the FCC will reverse the Order, whether the appeal will be successful or whether any states will adopt legislation that results in restoring the pre-existing network neutrality rules. If broadband providers were to block, impair or degrade our internet-based services or services we offer through our communications platform, or were to charge us or our customers to access and use our internet-based services or services offered through our communications platform, we could lose customers and our business could be materially adversely affected. Most major broadband internet access providers have publicly stated they will not block, impair or degrade third party offerings. We cannot predict the potential impact of the Order or future legal and regulatory developments that may occur.

Our business is subject to complex and evolving laws and regulations, commercial standards, contractual obligations and other requirements related to information collection.

We are subject to various federal, state, local and foreign laws and regulations, contractual commitments and industry standards that create obligations and impose restrictions with respect to the collection, storage, retention, use, processing, transmission, sharing, disclosure and protection of personal data and other customer data, including “customer proprietary network information” under applicable U.S. laws. We must comply with these obligations and restrictions and may be subject to significant consequences, including penalties and fines, if we fail to comply. These obligations and restrictions continue to develop and evolve rapidly, and it is possible that we may not be, or may not have been, compliant with each such obligation and restriction.

The complexity and evolving nature of these obligations and restrictions subject us to the risk of differing interpretations, inconsistency or conflicts among countries or rules, and creates uncertainty regarding their application to our business. Uncertainty and changes in the requirements of multiple jurisdictions may increase the cost of compliance, delay or reduce demand for our services, restrict our ability to offer services in certain locations, impact our customers’ ability to utilize our services in certain jurisdictions, or subject us to sanctions by national data protection regulators, all of which could harm our business, financial condition and results of operations.

These obligations and restrictions may limit our ability to collect, store, process, use, transmit and share data with our customers, employees, consultants and third-party providers, which may result in our inability in certain cases to provide services to our customers or to offer a global customer experience. These obligations may also limit the ability of our customers to collect, store, retain, protect, use, process, transmit, share and disclose data with others through our services. Compliance with, and other burdens imposed by, such obligations and restrictions could increase the cost of our operations and adversely impact our business.

Any failure to comply with these obligations and restrictions or our own posted privacy policies and notices, or any security incident that results in a personal data breach or the unauthorized access to, or the acquisition, release or transfer of, other customer data, could subject us to investigations, proceedings or actions against us by governmental entities or others, lawsuits, fines, criminal penalties, statutory damages, consent decrees, injunctions, adverse publicity, contractual liability, civil liabilities, loss of customer confidence, damage to our brand and reputation or a loss of customers, any of which could materially harm our business.

If we were to suffer or if one of our customers or vendors were to suffer a personal data breach or other security incident, we may be subject to the jurisdiction of a variety of governmental agencies. We may have to comply with a variety of data breach requirements at the national and state levels in the United States and in other countries, comply with any resulting investigations, as well as offer mitigation to customers and potential end users of certain customers to which we provide services. We could also be subject to fines, forfeitures and other penalties that may adversely impact our business.

From time to time, various federal, state and foreign legislative or regulatory bodies may enact new or additional laws and regulations concerning data-protection issues. For example, certain laws or regulations may mandate disclosure of customer information to domestic or international law enforcement bodies, which could adversely impact our business, our brand or our reputation with customers and may not always provide a level of protection for such information that is required by other laws or regulations. In other cases, some countries may limit the transfer of personal data or require that that personal data regarding customers in their country be maintained solely in their country. Having to maintain local data centers and redesign product, service and business operations to limit the processing of personal data to within individual countries could increase our operating costs significantly.

Additionally, some of our third-party vendors may have access to customer, end user or employee data. If these third-party vendors violate obligations and restrictions related to applicable data protection laws or our policies or contractual commitments, such violations may also put us, or data relating to our customers, end users or employees, at risk and could in turn have a material and adverse effect on our business.

Our business could suffer if we cannot obtain or retain local or toll-free numbers, are prohibited from obtaining local or toll-free numbers, or are limited to distributing local or toll-free numbers to only certain customers.

Our future success depends on our ability to procure large quantities of local and toll-free numbers to meet customer demands at reasonable cost and without undue restrictions. Our ability to procure and distribute numbers depends on factors outside of our control, such as applicable regulations, the practices of the communications carriers that provide numbers to us in certain jurisdictions, the cost of obtaining and managing numbers and the level of demand for new numbers. Due to their limited availability, there are certain popular area code prefixes and specialized numbers that we may not be able to obtain in desired quantities or at all. Our inability to acquire or retain numbers for our operations would make our services, including our communications platform, less attractive to potential customers that desire assignments of particular numbering resources. In addition, future growth of our customer base, together with growth of customer bases of other providers of communications services, has increased, which increases our dependence on needing large quantities of local and toll-free numbers associated with desirable area codes or specific toll-free numbering resources at a reasonable cost and without undue restriction. If we are not able to obtain or retain adequate local and toll-free numbers, or attractive subsets of such resources, our business, results of operations and financial condition could be materially adversely affected.

In addition, in order to procure, distribute and retain telephone numbers in certain foreign jurisdictions, we will be required to register with the local telecommunications regulatory authorities, some of which have been increasingly monitoring and regulating the categories of phone numbers that are eligible for provisioning to our customers, including geographical, regional, local and toll-free phone numbers. We have registered or obtained licenses, or are in the process of registering or obtaining licenses, in various countries in which we do business, but in some countries, the regulatory regime around provisioning of phone numbers is unclear, subject to change over time, and sometimes may conflict from jurisdiction to jurisdiction. Furthermore, these regulations and governments' approach to their enforcement, as well as our products and services, are still evolving and we may be unable to maintain compliance with applicable regulations, or enforce compliance by our customers, on a timely basis or without significant cost. Also, compliance with these types of regulations may require changes in products or business practices that result in reduced revenue. If we or our customers use or assign phone numbers in these countries in a manner that violates applicable rules and regulations, we may also be subject to significant penalties or governmental action, including government-initiated audits and, in extreme cases, may be precluded from doing business in that particular country. In the event of such non-compliance, we may be forced to reclaim phone numbers from our customers, which could result in loss of customers, breach of contract claims, loss of revenue and reputational harm, all of which could have a material adverse effect on our business, results of operations and financial condition.

We may be exposed to liabilities under anti-corruption, export control and economic sanction regulations, and similar laws and regulations, and any determination that we violated any of these laws or regulations could have a material adverse effect on our business.

We are subject to the Foreign Corrupt Practices Act ("FCPA"), the U.K. Bribery Act and other laws that prohibit improper payments or offers of payments to foreign governments and their officials, political parties, and/or private parties by persons and entities for the purpose of obtaining or retaining business. Our international activities create the risk of unauthorized payments or offers of payments by one of our employees or consultants, even though these parties are not always subject to our control. Our policies prohibit these practices by our employees and consultants, although our existing safeguards and any future improvements may prove to be less than effective, and our employees or consultants may engage in conduct for which we might be held responsible. Violations of the FCPA, the U.K. Bribery Act or other laws may result in severe criminal or civil sanctions, and we may be subject to other liabilities, which could negatively affect our business, operating results, and financial condition.

Our products and services may be subject to export control and economic sanctions regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations and various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Control. Our products and services must be offered and sold in compliance with these laws and regulations. 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 by obtaining proper consent, we could face liability. In addition, changes in our products or services, changes in applicable regulations, or change in the target of such regulations, could also result in decreased use of our products and services, or in our decreased ability to sell our products or provide our services to existing or prospective customers with international operations. Any decreased use of our products and services or limitation on our ability to export our products and provide our services could adversely affect our business, results of operations and financial condition.

Intellectual property and proprietary rights of others could prevent us from using necessary technology to provide our services or subject us to expensive intellectual property litigation.

If technology that we require to provide our services, including our communications platform, was determined by a court to infringe a patent held by another entity that will not grant us a license on terms acceptable to us, we could be precluded by a court order from using that technology and we would likely be required to pay significant monetary damages to the patent holder. The successful enforcement of these patents, or our inability to negotiate a license for these patents on acceptable terms, could force us to cease (i) using the relevant technology and (ii) offering services incorporating the technology. If a claim of infringement was brought against us based on the use of our technology or against our customers based on their use of our services for which we are obligated to indemnify, we could be subject to litigation to determine whether such use or sale is, in fact, infringing. This litigation could be expensive and distracting, regardless of the outcome.

While our own limited patent portfolio may deter other operating companies from bringing such actions, patent infringement claims may also be asserted by patent holding companies, which do not use technology and whose sole business is to enforce patents against operators, such as us, for monetary gain. Because such patent holding companies, commonly referred to as patent "trolls," do not provide services or use technology, the assertion of our own patents by way of counter-claim would be largely ineffective.

Our use of open source software could negatively affect our ability to sell our services and subject us to possible litigation.

Our services, including our communications platform, incorporate open source software, and we expect to continue to incorporate open source software in our services in the future. Few of the licenses applicable to open source software have been interpreted by courts, and there is a risk that these licenses could be construed in a manner that could impose unanticipated conditions or restrictions on our ability to commercialize our services, including our communications platform. Moreover, although we have implemented policies to regulate the use and incorporation of open source software into our services, we cannot be certain that we have not incorporated open source software in our services in a manner that is inconsistent with such policies. If we fail to comply with open source licenses, we may be subject to certain requirements, including requirements that we offer our services that incorporate the open source software for no cost, that we make available source code for modifications or derivative works we create based upon, incorporating or using the open source software and that we license such modifications or derivative works under the terms of applicable open source licenses. If an author or other third-party that distributes such open source software were to allege that we had not complied with the conditions of one or more of these licenses, we could be required to incur significant legal expenses defending against such allegations and could be subject to significant damages, enjoined from generating revenue from customers using services that contained the open source software and required to comply with onerous conditions or restrictions on these services. In any of these events, we and our customers could be required to seek licenses from third parties in order to continue offering our services and to re-engineer our services or discontinue offering our services to customers in the event re-engineering cannot be accomplished on a timely basis. Any of the foregoing could require us to devote additional R&D resources to re-engineer our services, could result in customer dissatisfaction and may adversely affect our business, results of operations and financial condition.

Indemnity provisions in various agreements potentially expose us to substantial liability for intellectual property infringement and other losses.

Our agreements with customers and other third parties typically include indemnification or other provisions under which we agree to indemnify or are otherwise liable to them for losses suffered or incurred as a result of claims of intellectual property infringement, damages caused by us to property or persons or other liabilities relating to or arising from our services or platform or other acts or omissions. The term of these contractual provisions often survives termination or expiration of the applicable agreement. Large indemnity payments or damage claims from contractual breach 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. Any dispute with a customer with respect to such obligations could have adverse effects on our relationship with that customer and other current and prospective customers, reduce demand for our services and adversely affect our business, results of operations and financial condition.

If we fail to protect our internally developed systems, technology and software and our patents and trademarks, we may become involved in costly litigation or our business or brand may be harmed.

Our ability to compete effectively is dependent in large part upon the maintenance and protection of systems and software that we have developed internally, including some systems and software based on open standards. We cannot patent much of the technology that is important to our business. In addition, any pending patent applications may not be granted, and any issued patent that we own may be challenged, narrowed, invalidated or circumvented. To date, we have relied on patent, copyright and trade secret laws, as well as confidentiality procedures and licensing arrangements, to establish and protect our rights to our technology. While we typically enter into confidentiality agreements with our employees, consultants, customers, and vendors in an effort to control access to and distribution of technology, software, documentation and other information, these agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. Despite these precautions, it may be possible for a third party to copy or otherwise obtain and use our technology without authorization. In addition, others may independently discover trade secrets and proprietary information, and in such cases we could not assert any rights against such party. Policing unauthorized use of our technology is difficult. The steps we take may not prevent misappropriation of the technology we rely on. In addition, effective protection may be unavailable or limited in some jurisdictions outside the United States. Litigation may be necessary in the future to enforce or protect our rights or to determine the validity and scope of the rights of others. That litigation could cause us to incur substantial costs and divert resources away from our daily business, which in turn could adversely affect our business, results of operations and financial condition.

The unlicensed use of our brands by third parties could harm our reputation, cause confusion among our customers or impair our ability to market our services. Accordingly, we have registered trademarks and service marks and have applied for registration of our trademarks and service marks in the United States and certain jurisdictions outside the United States to establish and protect our brand names as part of our intellectual property strategy. The laws of some countries do not protect intellectual property and other proprietary rights to the same extent as the laws of the United States. Our exposure to unauthorized copying, transfer and use of our proprietary technology or information may increase as we expand our international operations. We cannot assure you that our pending or future trademark applications will be approved. Although we anticipate that we would be given an opportunity to respond to any such rejections, we may be unable to overcome any such rejections. In addition, in proceedings before the U.S. Patent and Trademark Office third parties are given an opportunity to oppose pending trademark applications and seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings. In the event that our trademarks are successfully challenged, we could be forced to rebrand our services, which could result in loss of brand name recognition. Moreover, successful opposition to our applications might encourage third parties to make additional oppositions or commence trademark infringement proceedings against us, which could be costly and time consuming to defend against. If we decide to take limited or no action to protect our trademarks, our trademark rights may be diluted and subject to challenge or invalidation, which could materially and adversely affect our brand in the marketplace. Certain of the trademarks we may use may become so well known by the public that their use becomes generic and they lose trademark protection. Over the long term, if we are unable to establish name recognition based on our trademark and tradenames, then we may not be able to compete effectively and our business may be adversely affected. Further, we cannot assure you that competitors will not infringe our trademarks or that we will have adequate resources to enforce our trademarks.

We may be liable for the information that content owners or distributors distribute over our network.

The law relating to the liability of private network operators for information carried on or disseminated through their networks remains unsettled. While we disclaim any liability for third-party content in our services agreements, we may become subject to legal claims relating to the content disseminated on our network, even though such content is owned or distributed by our customers or a customer of our customers. For example, lawsuits may be brought against us claiming that material distributed using our network was inaccurate, offensive or violated the law or the rights of others. Claims could also involve matters such as defamation, invasion of privacy and copyright infringement. In addition, the law remains unclear over whether content may be distributed from one jurisdiction, where the content is legal, into another jurisdiction, where it is not. Companies operating private networks have been sued in the past, sometimes successfully, based on the nature of material distributed, even if the content is not owned by the network operator and the network operator has no knowledge of the content or its legality. It is not practical for us to monitor all of the content distributed using our network. We may need to take costly measures to reduce our exposure to these risks or to defend ourselves against such claims, which could adversely affect our results of operations and financial condition.

Third parties may fraudulently use our name to obtain access to customer accounts and other personal information, use our services to commit fraud or steal our services, which could damage our reputation, limit our growth or cause us to incur additional expenses.

Our customers may have been subject to "phishing," which occurs when a third party calls or sends an email or pop-up message to a customer that claims to be from a business or organization that provides services to the customer. The purpose of the inquiry is typically to encourage the customer to visit a bogus website designed to look like a website operated by the legitimate business or organization or provide information to the operator. At the bogus website, the operator attempts to trick the customer into divulging customer account or other personal information such as credit card information or to introduce viruses through "Trojan horse" programs to the customers' computers. This could result in identity theft from our customers and the unauthorized use of our services. Third parties also have used our communications services to commit fraud. If we are unable to detect and prevent "phishing" and other similar methods, use of our services for fraud and similar activities, our brand reputation and growth may suffer and we may incur additional costs, including costs to increase security, or be required to credit significant amounts to customers.

Third parties also have used our communications services without paying, including by submitting fraudulent credit information and fraudulent credit card information. This has resulted in our incurring the cost of providing the services, including incurring call termination fees, without any corresponding revenue. We have implemented anti-fraud procedures in order to limit the expenses resulting from theft of service. If our procedures are not effective, theft of service could significantly increase our expenses and adversely affect our business, results of operations and financial condition.

If our customers or their end users do not accept the differences between our service and traditional telephone service, they may choose to remain with their current telephone service provider or may choose to return to service provided by traditional network service providers.

Aspects of our services based on VoIP, including our communications platform, are not the same as traditional network service providers. Our continued growth is dependent on the adoption of our services by mainstream customers and their end users, so these differences are important. For example:

- Our 911 calling and other emergency calling services are different, in significant respects, from the 911 and other emergency calling services associated with traditional wireline and wireless telephone providers and, in certain cases, with other VoIP providers.
- In the event of a power loss or Internet access interruption experienced by a customer, our service may be interrupted.
- Our customers' end users may experience lower call quality than they are used to from traditional wireline or wireless telephone companies, including static, echoes and delays in transmissions.
- Our customers' end users may not be able to call premium-rate telephone numbers such as 1-900 numbers and 976 numbers.

We may lose customers if we experience failures of our system or communications platform that significantly disrupt the availability and quality of the services that we provide. Such failures may also cause interruptions to service delivery and the completion of other corporate functions.

Our operations depend on our ability to limit and mitigate interruptions or degradation in service for customers. Interruptions in service or performance problems, for whatever reason, could undermine our customers' confidence in our services and cause us to lose customers or make it more difficult to attract new ones. Because many of our services are critical to the businesses or daily lives of many of our customers or our customers' end users, any significant interruption or degradation in service also could result in lost profits or other losses to customers. Although our service agreements generally limit our liability for service failures and generally exclude any liability for "consequential" damages such as lost profits, a court might not enforce these limitations on liability, which could expose us to financial loss. We also sometimes provide our customers with committed service levels. If we fail to meet these committed service levels, we could be required to provide service credits or other compensation to our customers, which could adversely affect our results of operations.

The failure of any equipment or facility on our network, including our network operations control centers and network data storage locations, could interrupt customer service and other corporate functions until we complete necessary repairs or install replacement equipment. Our business continuity plans also may be inadequate to address a particular failure that we experience. Delays, errors or network equipment or facility failures could result from natural disasters, pandemics such as COVID-19, disease, accidents, terrorist acts, acts of war, power losses, security breaches, vandalism or other illegal acts, computer viruses or other causes. These delays, errors or failures could significantly impair our business due to:

- service interruptions;
- malfunction of our communications platform on which our enterprise users rely for voice, messaging or emergency service functionality;
- exposure to customer liability;
- the inability to install new service;
- the unavailability of employees necessary to provide services;
- the delay in the completion of other corporate functions such as issuing bills and the preparation of financial statements; or
- the need for expensive modifications to our systems and infrastructure.

Defects or errors in our services could diminish demand for our services, harm our business and results of operations and subject us to liability.

Our customers use our services for important aspects of their businesses, and any errors, defects or disruptions to our services and any other performance problems with our services could damage our customers' businesses and, in turn, hurt our brand and reputation. We provide regular updates to our services, which have in the past contained, and may in the future contain, undetected errors, failures, vulnerabilities and bugs when first introduced or released. Real or perceived errors, failures or bugs in our services could result in negative publicity, loss of or delay in market acceptance of our platform, loss of competitive position, lower customer retention or claims by customers for losses sustained by them. In such an event, we may be required, or may choose, for customer relations or other reasons, to expend additional resources in order to help correct the problem. In addition, we may not carry insurance sufficient to compensate us for any losses that may result from claims arising from defects or disruptions in our services. As a result, our brand and reputation could be harmed, and our business, results of operations and financial condition may be adversely affected.

If our emergency services do not function properly, we may be exposed to significant liability from our users.

Certain of our IP telephony offerings, as well as the 911 and other emergency services solutions that we offer are subject to FCC and other rules governing the delivery of emergency calling services. The rules and laws that govern emergency calling services are subject to change as communications technologies and consumer use of emergency services change. Similar to other providers of IP telephony services, our 911 and other emergency services are different from those associated with traditional local telecommunications services. These differences may lead to an inability to make and complete calls that would not occur for users of traditional telephony services. For example, to provide the emergency calling services required by the FCC's rules to our IP telephony consumers, we may use components of both the wireline and wireless infrastructure in unique ways that can result in failed connections and calls routed to incorrect emergency call centers. Routing emergency calls over the Internet may be adversely affected by power outages and network congestion that may not occur for users of traditional telephony services. Emergency call centers may not be equipped with appropriate hardware or software to accurately process and respond to emergency calls initiated by consumers of our IP telephony services, and calls routed to the incorrect emergency call center can significantly delay response times for first responders. Users of our interconnected VoIP telephony services from a fixed address in the United States are required to manually update their location information for use when calling 911, and failure to do so may result in dispatching of assistance to the wrong location. Even manual updates made appropriately require a certain amount of time before the updated address appears in the relevant databases which could result in misrouting emergency calls to the wrong emergency calling center, dispatching first responders to the wrong address, or both. Similar requirements and delays applicable to relevant databases also apply to local emergency services provided outside the United States. Moreover, the relevant rules with respect to what address information should be provided to emergency call centers when the call originates from a mobile application are unsettled and evolving. As a result, we could be subject to enforcement action by the FCC or other entities — possibly exposing us to significant monetary penalties, cease and desist orders, civil liability, loss of user confidence in our services, loss of users, and other adverse consequences, which could materially harm our business. The FCC's rules, and some states, also impose other obligations on us, such as properly recording our customers' registered locations, obtaining affirmative acknowledgement from customers that they are aware of the differences between emergency calling services associated with IP telephony as compared with traditional telecommunications services, and distribution of appropriate warning labels to place on or near hardware used to place IP telephony calls. Similar obligations apply to local emergency services provided outside the United States. Failure to comply with these requirements, or failure of our communications platform such that 911 and other emergency calls did not complete or were misrouted, may result in FCC, foreign regulatory or other enforcement action, state attorneys' general investigations, potential exposure to significant monetary penalties, cease and desist orders, civil liability to our users and their customers, loss of user confidence in our services, loss of users, and other adverse consequences, which could materially harm our business.

National regulations, including the FCC's rules, also require that we timely report certain 911 and other emergency service outages. The FCC or other applicable regulatory authorities may make inquiries regarding matters related to any reported 911 or other emergency service outage. Any inquiry could result in regulatory enforcement action, potential monetary penalties and other adverse consequences.

Any disruption to or termination of arrangements with key suppliers could cause delay and additional costs and could harm our relationships with current and prospective customers.

Our business is dependent on third-party suppliers for fiber, computers, software, transmission electronics and related network components, as well as providers of network colocation facilities that are integrated into our network, some of which are critical to the operation of our business. If any of these critical relationships is terminated, a supplier either exits or curtails its business as a result of economic conditions, a supplier fails to provide critical services or equipment, or the supplier is forced to stop providing equipment or services due to supply chain issues or legal constraints, such as patent infringement, and we are unable to reach suitable alternative arrangements quickly, we may experience significant additional costs or we may not be able to provide certain services to customers. If that happens, our business, results of operations and financial condition could be materially adversely affected. There can be no assurance that alternative components or equipment will be available when required or on terms that are commercially reasonable, which could extend our lead times, increase the cost of maintaining our network, result in service outages and otherwise harm our business, operating results and financial condition. We may not be able to continue to procure components at reasonable prices, which may require us to enter into longer-term contracts with component suppliers to obtain components at competitive prices. Any of the foregoing disruptions could exacerbate other risk factors and increase our costs and decrease our gross margins, harming our business, operating results and financial condition.

Many of our third-party suppliers do not have long-term committed contracts with us and may interrupt services or terminate their agreements with us without notice or by providing 30 days prior written notice. Although we expect that we could receive similar services from other third-party suppliers, if any of our arrangements with our third-party suppliers are terminated or interrupted, we could experience interruptions in our ability to make our services available to customers, as well as delays and additional expenses in arranging alternative providers. If a significant portion of our third-party suppliers fail to provide these services to us on a cost-effective basis or otherwise terminate or interrupt these services, the delay caused by qualifying and switching to other providers could be time consuming and costly and could adversely affect our business, results of operations and financial condition.

One of our third-party suppliers, Level 3, provides us with certain 911 call routing and termination services. Level 3 is our preferred provider for these services pursuant to an agreement that automatically renews for consecutive one-year periods, unless terminated by either Level 3 or us. Level 3 may cancel the agreement upon two years' notice and we may cancel the agreement upon one year's notice. If our agreement with Level 3 terminates for any reason other than our default, Level 3 must continue to provide these services to us for at least two years to allow us to transition to another provider. We are obligated to pay Level 3 a minimum of $100,000 per month for as long as the agreement continues. Additionally, Level 3 has a right of first refusal to provide these 911 call routing and termination services to us in additional geographic areas.

Our customer churn rate may increase.

Customer churn occurs when a customer reduces usage or discontinues service with us, whether voluntarily or involuntarily, such as a customer switching some or all of its usage to a competitor or going out of business. Changes in the economy, increased competition from other providers, cyber incidents such as the DDoS attack or issues with the quality of service we deliver can impact our customer churn rate. We cannot predict future pricing by our competitors, but we anticipate that price competition will continue. Lower prices offered by our competitors could contribute to an increase in customer churn. We cannot predict the timing, duration or magnitude of any deteriorated economic conditions or its impact on our target of customers. Higher customer churn rates could adversely affect our revenue growth. Higher customer churn rates could cause our dollar-based net retention rate to decline. A sustained and significant growth in the churn rate could have a material adverse effect on our business.

The market prices for certain of our services have decreased in the past and may decrease in the future, resulting in lower revenue than we anticipate.

Market prices for certain of our services have decreased over recent years. These decreases resulted from downward market pressure and other factors including:

- technological changes and network expansions, which have resulted in increased transmission capacity available for sale by us and by our competitors; and
- some of our competitors have been willing to accept smaller operating margins in the short term in an attempt to increase long-term revenue.

To retain customers and revenue, we must sometimes reduce prices in response to market conditions and trends. We cannot predict to what extent we may need to reduce our prices to remain competitive or whether we will be able to sustain future pricing levels as our competitors introduce competing services or similar services at lower prices. Our ability to meet price competition may depend on our ability to operate at costs equal to or lower than our competitors or potential competitors. As our prices for some of our services decrease, our operating results may suffer unless we are able to either reduce our operating expenses or increase traffic volume from which we can derive additional revenue.

The need to obtain additional IP circuits from other providers increases our costs. In addition, the need to interconnect our network to networks that are controlled by others could increase our costs.

We lease all of our IP circuits from third parties. We could incur material expenses if we were required to locate alternative IP circuits. We may not be able to obtain reasonable alternative IP circuits if needed. Failure to obtain usage of alternative IP circuits, if necessary, could have a material adverse effect on our ability to carry on business operations. In addition, some of our agreements with other providers require the payment of amounts for services whether or not those services are used. Our reliance on third-party providers may reduce our operating flexibility, ability to make timely service changes and ability to control quality of service.

In the normal course of business, we need to enter into interconnection agreements with many local telephone companies, as well as the owners of networks that our customers desire to access to deliver their services. We are not always able to secure these interconnection agreements on favorable terms. In some jurisdictions, we rely on third party access and networks for local connectivity. We are not always able to secure this access and local connectivity on favorable terms. Costs of obtaining service from other communications carriers comprise a significant proportion of the operating expenses of long distance carriers. Changes in regulation, particularly the regulation of telecommunication carriers and local access network owners, could indirectly, but significantly, affect our competitive position. These changes could increase or decrease the costs of providing our services. Further, if problems occur with our third-party providers or local telephone companies, it may cause errors or poor quality communications, and we could encounter difficulties identifying the source of the problem. The occurrence of errors or poor quality communications on our services, whether caused by our platform or a third-party provider, may result in the loss of our existing customers or the delay of adoption of our services by potential customers and may adversely affect our business, results of operations and financial condition.

Network providers also may institute additional fees due to regulatory, competitive or other industry-related changes that increase our costs. For example, in February 2020, a major U.S. cellular carrier introduced a new service offering for Application to Person (“A2P”) messages that adds a new fee for A2P messages delivered to its subscribers. Other cellular carriers may introduce similar fees. While we may be able to negotiate with network providers, absorb the increased costs, or charge these costs to our customers, we cannot assure you that we will be able to do so. In the case of new A2P fees, we currently pass, and expect to continue to pass, these fees on to our customers who send A2P messages to the carrier's subscribers. This is expected to increase our revenue and cost of goods sold, but is not expected to impact the gross profit received for sending these messages. However, these changes may still have a negative impact on our gross margins mathematically. We also may not be able to effectively respond to any new fees if all network providers in a particular market impose equivalent fee structures, if the magnitude of the fees is disproportionately large when compared to the underlying prices paid by our customers, or if the market conditions limit our ability to increase the prices we charge our customers.

We depend largely on the continued services of our senior management and other key employees, the loss of any of whom could adversely affect our business, results of operations and financial condition.

Our future performance depends on the continued services and contributions of our senior management and other key employees to execute on our business plan, to develop our platform, to deliver our services to customers, to attract and retain customers and to identify and pursue opportunities. The loss of services of senior management or other key employees, such as those who develop and maintain our service offerings, could significantly delay or prevent the achievement of our development and strategic objectives. In particular, we depend to a considerable degree on the vision, skills, experience and effort of our Chief Executive Officer, David A. Morken. The replacement of any of our senior management personnel or other key employees can involve significant time and costs, and such loss could significantly delay or prevent the achievement of our business objectives. The loss of the services of our senior management or other key employees for any reason could adversely affect our business, results of operations and financial condition.

If we are unable to hire, retain and motivate qualified personnel, our business will suffer.

Our future success depends, in part, on our ability to continue to attract and retain highly skilled personnel, and our inability to do so could adversely affect our business, results of operations and financial condition. Competition for talent in the technology industry has become increasingly intense. In the wake of the COVID-19 pandemic, the “great resignation” saw a dramatic increase in workers leaving their positions throughout the technology industry, and the market to recruit, retain and motivate talent has become even more competitive. Many key individual contributors, particularly in software development, sales and cloud computing and telecommunications infrastructure, are critical to our success and can attract very significant compensation packages. In addition, we believe that there is, and will continue to be, intense competition for highly skilled management, technical, sales and other personnel with experience in our industry in the Raleigh, North Carolina area, where our headquarters are located, and in other geographic locations where we maintain offices.

We have experienced and may continue to experience difficulties attracting, hiring and retaining highly-skilled personnel with appropriate qualifications, and may not be able to fill positions in desired geographic areas or at all. These difficulties may be exacerbated by the reactions of employees and prospective employees to our policies related to remote working flexibility. As a result, we have also experienced and may continue to experience increased compensation and training costs that may not be offset by either improved productivity or higher sales, which could reduce our profitability.

We seek to provide competitive compensation packages and a high-quality work environment to hire, retain and motivate employees. If we are unable to retain and motivate our existing employees and attract qualified personnel to fill key positions, we may be unable to manage our business effectively, including the development, marketing and sale of our services, which could adversely affect our business, results of operations and financial condition. To the extent we hire personnel from competitors, we also may be subject to allegations that they have been improperly solicited or hired, or that they divulged proprietary or other confidential information.

Volatility or declines in our stock price may also affect our ability to attract and retain key personnel. Employees may be more likely to terminate their employment with us if the shares they own or the shares underlying any restricted stock units have not significantly appreciated in value, or if the value of the shares underlying restricted stock units they hold has depreciated significantly. If we are unable to retain our employees, our business, results of operations and financial condition could be adversely affected.

In addition, we believe our corporate culture has been a key contributor to our success to date. However, in this period of the "great resignation," we have experienced and may continue to face higher than usual employee turnover rates. As we continue to grow and expand globally and navigate shifting workforce priorities, including the desire of many of our employees and prospective employees for a hybrid work model with the ability to work remotely for part of the week, and the increasing demand of employees and prospective employees for fully remote work, we may find it difficult to maintain important aspects of our corporate culture, which could negatively affect our ability to retain and recruit personnel who are essential to our future success and could ultimately have a negative impact on our ability to innovate our technology and our business. Further, as of September 30, 2022, approximately 35% of our employees have been employed by us for a year or less and we must be able to effectively integrate, develop and motivate a large number of new employees, while maintaining the effectiveness of our business execution and the beneficial aspects of our corporate culture.

We could be subject to liability for historic and future sales, use and similar taxes, which could adversely affect our results of operations.

We conduct operations in many tax jurisdictions throughout the United States and internationally. In many of these jurisdictions, non-income-based taxes such as sales, use and telecommunications taxes, including those associated with (or potentially associated with) VoIP telephony services or 911 services, are or may be assessed on our operations. We also face exposure to other non-income-based international taxes such as value added taxes that are or may be assessed on our operations. The systems and procedures necessary to comply in these jurisdictions are complex to develop and challenging to implement. Additionally, we rely heavily on third parties to provide us with key software and services for compliance. If these third parties cease to provide those services to us for any reason, or fail to perform services accurately and completely, we may not be able to accurately bill, collect or remit applicable non-income-based taxes. Historically, we have not billed or collected certain of these taxes and, in accordance with GAAP, we have recorded a provision for our tax exposure in these jurisdictions when it is both probable that a liability has been incurred and the amount of the exposure can be reasonably estimated. These estimates include several key assumptions including, but not limited to, the taxability of our services, the jurisdictions in which we believe we have nexus, and the sourcing of revenue to those jurisdictions. In the event these jurisdictions challenge our assumptions and analysis, our actual exposure could differ materially from our current estimates.

Taxing authorities also may periodically perform audits to verify compliance and include all periods that remain open under applicable law, which customarily range from three to four years. At any point in time, we may undergo audits that could result in significant assessments of past taxes, fines and interest if we were found to be non-compliant. During the course of an audit, a taxing authority may, as a matter of policy, question our interpretation and/or application of their rules in a manner that, if we were not successful in substantiating our position, could potentially result in a significant financial impact to us.

Furthermore, certain jurisdictions in which we do not collect sales, use and similar taxes may assert that such taxes are applicable, which could result in tax assessments, penalties and interest, and we may be required to collect such taxes in the future. Such tax assessments, penalties and interest or future requirements may adversely affect our business, results of operations and financial condition.

We conduct our international operations through subsidiaries and report our taxable income in various jurisdictions worldwide based upon our business operations in those jurisdictions. Our intercompany relationships are subject to complex transfer pricing regulations administered by taxing authorities in various jurisdictions. Also, our tax expense could be affected depending on the applicability of withholding and other taxes under the tax laws of certain jurisdictions in which we have business operations. The relevant revenue and taxing authorities may disagree with positions we have taken generally, or our determinations as to income and expenses attributable to specific jurisdictions. If such a disagreement were to occur, and our position were 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.

We may be subject to significant U.S. federal income tax-related liabilities and indemnity obligations if there is a determination that the Spin-Off is taxable for U.S. federal income tax purposes.

We may be subject to significant U.S. federal income tax-related liabilities with respect to our prior distribution of all of the issued and outstanding shares of the common stock of Relay, Inc. (f/k/a Republic Wireless, Inc.) (“Relay”), our former subsidiary, to our stockholders as of and on November 30, 2016 (the “Spin-Off”), if there is a determination that the Spin-Off is taxable for U.S. federal income tax purposes. In that regard, even if the Spin-Off otherwise qualified as a tax-free transaction to us and our stockholders under Section 355, Section 368(a)(1)(D) and related provisions of the U.S. Internal Revenue Code of 1986, as amended (the “Code”) at the time of the Spin-Off, we would be subject to corporate-level taxable gain under Section 355(e) of the Code (“Section 355(e)”) if there was a 50% or greater change in ownership, by vote or value, of shares of our stock or Relay’s stock that occurred after the Spin-Off as part of a plan or series of related transactions that included the Spin-Off. For purposes of Section 355(e), any acquisitions or issuances of our stock, including pursuant to our initial public offering and pursuant to the reorganizations undertaken and arrangements entered into in connection with our initial public offering, or Relay’s stock, in each case, that occurred within two years after the Spin-Off are generally presumed to be part of a plan or series of related transactions with respect to the Spin-Off.

In connection with the Spin-Off, we received an opinion from Skadden, Arps, Slate, Meagher & Flom LLP substantially to the effect that, among other things, the Spin-Off should qualify as a tax-free transaction for U.S. federal income tax purposes under Section 355 and Section 368(a)(1)(D) of the Code. In addition, in light of the implications that would arise for us if Section 355(e) applied to the Spin-Off, we received an opinion from Kilpatrick Townsend & Stockton LLP in connection with our initial public offering substantially to the effect that (i) as of the date of the initial public offering, we would not be required to recognize gain with respect to the Spin-Off pursuant to Section 355(e), and (ii) any increases in voting power attributable to conversions of our Class B common stock to Class A common stock by those who held our Class B common stock as of the date of the initial public offering would not cause us to recognize gain with respect to the Spin-Off pursuant to Section 355(e) (together with the opinion from Skadden, Arps, Slate, Meagher & Flom LLP with respect to the Spin-Off, the “Tax Opinions”). Neither of the Tax Opinions is binding on the Internal Revenue Service (the “IRS”) or the courts, however, and the IRS or the courts may not agree with the conclusions reached in the Tax Opinions. Moreover, the Tax Opinions were based upon, among other things, the laws in effect at the time of each of the Tax Opinions and certain assumptions and representations as to factual matters made by us. Any change in applicable law, which may be retroactive, or the failure of any such assumptions or representations to be true, could adversely affect the validity of the conclusions reached in the Tax Opinions.

If the conclusions of the Tax Opinions are not correct, or if the Spin-Off is otherwise ultimately determined to be a taxable transaction, we would be liable for significant U.S. federal income tax related liabilities. In addition, pursuant to the Tax Sharing Agreement, dated November 30, 2016, between us and Relay (the "Tax Sharing Agreement"), we must generally indemnify Relay for any taxes or losses incurred by it (or its respective subsidiaries) resulting from the Spin-Off failing to qualify as a tax-free transaction for U.S. federal income tax purposes (including due to the application of Section 355(e)) as a result of subsequent actions we take or fail to take. The amount of any indemnity obligations we may have under the Tax Sharing Agreement in such case may be material.

Even if Section 355(e) does not apply to the Spin-Off as of the date of our initial public offering or as a result of an increase in voting power attributable to conversions of our Class B common stock by those who held such stock as of our initial public offering, subsequent acquisitions or issuances of our stock could be treated as part of a plan or series of related transactions with respect to the Spin-Off. Accordingly, in light of the requirements of Section 355(e), we might forego share repurchases, stock issuances and other strategic transactions. Notwithstanding the foregoing, it is possible that we, Relay or the holders of our respective stock might inadvertently cause, permit or otherwise not prevent a change in the ownership of our stock or Relay's stock to occur, which would cause Section 355(e) to apply to the Spin-Off, thereby triggering significant U.S. federal income tax-related liabilities and indemnity obligations under the Tax Sharing Agreement of approximately $50 million. This approximation is based on our current expectations and the tax laws in effect as of our initial public offering. However, we cannot provide any assurance that this estimate will prove to be accurate in the event that Section 355(e) were to apply.

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 GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, as provided in "Management's Discussion and Analysis of Financial Condition and Results of Operations." The results of these estimates form the basis for making judgments about the carrying values of assets, liabilities and equity, and the amount of revenue and expenses that are not readily apparent from other sources. Significant assumptions and estimates used in preparing our consolidated financial statements include those related to revenue recognition, capitalized internal-use software costs, other non-income taxes, business combination and valuation of goodwill and purchased intangible assets and share-based compensation. 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.

If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, our ability to produce timely and accurate financial statements or comply with applicable regulations could be impaired.

We are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), and the rules and regulations of the applicable listing standards of the NASDAQ Global Select Market. We expect that the requirements of these rules and regulations will continue to increase our legal, accounting and financial compliance costs, make some activities more difficult, time-consuming and costly and place significant strain on our personnel, systems and resources.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. Our disclosure controls and other procedures are designed to ensure that information required to be disclosed by us in the reports that we will file with the SEC is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms and that information required to be disclosed in reports under the Exchange Act is accumulated and communicated to our principal executive and financial officers, and we continue to evaluate how to improve controls. We are also continuing to improve our internal control over financial reporting. In order to develop, maintain and improve the effectiveness of our disclosure controls and procedures and internal control over financial reporting, we have expended, and anticipate that we will continue to expend, significant resources, including accounting-related costs and significant management oversight.

Our current controls and any new controls that we develop may become inadequate because of changes in conditions in our business. Further, weaknesses in our disclosure controls and internal control over financial reporting may be discovered in the future. Any failure to develop or maintain effective controls or any difficulties encountered in their implementation or improvement could harm our results of operations or cause us to fail to meet our reporting obligations and may result in a restatement of our consolidated financial statements for prior periods. Any failure to implement and maintain effective internal control over financial reporting could also adversely affect the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting. Ineffective disclosure controls and procedures and internal control over financial reporting could also cause investors to lose confidence in our reported financial and other information, which would likely have a negative effect on the trading price of our Class A common stock. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed on the NASDAQ Global Select Market.

Our independent registered public accounting firm is required to attest to the effectiveness of our internal control over financial reporting. Our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our internal control over financial reporting is documented, designed or operating. Any failure to maintain effective disclosure controls and internal control over financial reporting could have a material and adverse effect on our business, results of operations and financial condition and could cause a decline in the trading price of our Class A common stock.

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

We review our intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Goodwill is required to be tested for impairment at least annually. An adverse change in market conditions, particularly if such change has the effect of changing one of our critical assumptions or estimates, could result in a change to the estimation of fair value that could result in an impairment charge to our goodwill or intangible assets. Any such charges may adversely affect our results of operations.

We face exposure to foreign currency exchange rate fluctuations, and such fluctuations could adversely affect our business, results of operations and financial condition.

We face exposure to the effects of fluctuations in currency exchange rates. While historically we have primarily transacted in U.S. dollars, we generally have transacted with customers and partners in Europe in British Pounds and Euros. We expect to expand the number of transactions with customers and partners that are denominated in foreign currencies in the future as we continue to expand our business internationally. We also incur expenses for some of our network service provider costs outside of the United States in local currencies and for employee compensation and other operating expenses in local currency. Fluctuations in the exchange rates between the U.S. dollar and other currencies could result in an increase to the U.S. dollar equivalent of such expenses.

In addition, our international subsidiaries maintain net assets denominated in currencies other than the functional operating currencies of these entities. As we expand our international operations, we will become more exposed to the effects of fluctuations in currency exchange rates. Accordingly, changes in the value of foreign currencies relative to the U.S. dollar may affect our results of operations due to transactional and translational re-measurements. Such foreign currency exchange rate fluctuations could make it more difficult to detect underlying trends in our business and results of operations. The trading price of our Class A common stock also could be adversely affected if fluctuations in currency exchange rates cause our results of operations to differ from our expectations or the expectations of our investors and securities analysts who follow our stock.

We do not currently maintain a program to hedge transactional exposures in foreign currencies. However, in the future, we may use derivative instruments, such as foreign currency forward and option contracts, to hedge certain exposures to fluctuations in foreign currency exchange rates. The use of such hedging activities may not offset any or more than a portion of the adverse financial effects of unfavorable movements in foreign exchange rates over the limited time the hedges are in place. Moreover, the use of hedging instruments may introduce additional risks if we are unable to structure effective hedges with such instruments.

Earthquakes, hurricanes, fires, floods, pandemics, power outages, terrorist attacks, acts of war, civilian unrest and other significant events could disrupt our business and ability to serve our clients.

A significant event, such as an earthquake, hurricane, a fire, a flood, a pandemic, a power outage, terrorist attack, act of war or civilian unrest could have a material adverse effect on our business, results of operations or financial condition. For example, the rapid and global spread of COVID-19 disrupted businesses and increased travel restrictions globally. Health concerns or governmental, legal, political or regulatory developments in the United States or other countries in which we or our customers, partners and service providers operate could cause economic, labor or social instability and could materially adversely affect our business and our results of operations and financial condition. Future developments, which are very uncertain, include evolving responses by governments and businesses. These future developments could materially adversely affect our business and our results of operations and financial condition. Our IP network is designed to be redundant and to offer seamless backup support in an emergency. While our network is designed to withstand the loss of any one data center at any point in time, the simultaneous failure of multiple data centers could disrupt our ability to serve our clients. Additionally, certain of our capabilities cannot be made redundant feasibly or cost-effectively. Acts of physical or cyber terrorism or other geopolitical unrest, including acts of war, also could cause disruptions in our business. The adverse impacts of these risks may increase if our disaster recovery plans prove to be inadequate.

We may acquire or invest in companies, which may divert our management's attention and result in debt or dilution to our stockholders. We may not be able to efficiently and effectively integrate acquired operations, and thus may not fully realize the anticipated benefits from such acquisitions.

We may evaluate and consider potential strategic transactions, including acquisitions of, or investments in, businesses, technologies, services, products and other assets in the future. We may also enter into relationships with other businesses to expand our products and platform, which could involve preferred or exclusive licenses, additional channels of distribution, discount pricing or investments in other companies.

Achieving the anticipated benefits of any acquisitions depends in part upon whether we can integrate new businesses in an efficient and effective manner. The integration of any acquired businesses involves a number of risks, including, but not limited to:

- demands on management related to any significant increase in size after the acquisition;
- the disruption of ongoing business and the diversion of management's attention from the management of daily operations to management of integration activities;
- failure to fully achieve expected synergies and costs savings;
- unanticipated impediments in the integration of departments, systems, including accounting systems, technologies, books and records and procedures, as well as in maintaining uniform standards, controls,

including internal control over financial reporting required by the Sarbanes-Oxley Act, procedures and policies;

- difficulty establishing and maintaining appropriate governance, reporting relationships, policies, controls, and procedures for the acquired business, particularly if it is based in a country or region where we did not previously operate;
- new or more stringent regulatory compliance obligations and costs by virtue of the acquisition, including risks related to international acquisitions that may operate in new jurisdictions or geographic areas where we may have no or limited experience;
- loss of customers or the failure of customers to order incremental services that we expect them to order;
- difficulty and delays in integrating the products, technology platforms, operations, systems, and personnel of the acquired business with our own, particularly if the acquired business is outside of our core competencies and current geographic markets;
- failure to provision services that are ordered by customers during the integration period;
- higher integration costs than anticipated;
- difficulties in the assimilation and retention of highly qualified, experienced employees, many of whom may be geographically dispersed;
- litigation, investigations, proceedings, fines, or penalties arising from or relating to the transaction or the acquired business, and any resulting liabilities may exceed our forecasts;
- acquisition of businesses with different revenue models, different contractual relationships, and increased customer concentration risks;
- assumption of long-term contractual obligations, commitments, or liabilities (for example, the costs associated with leased facilities), which could adversely impact our efforts to achieve and maintain profitability and impair our cash flow;
- failure to successfully evaluate or utilize the acquired business' technology and accurately forecast the financial impact of an acquisition, including accounting charges; and
- drag on our overall revenue growth rate or an increase of our net loss, which could cause analysts and investors to reduce their valuation of our company.

Successful integration of any acquired businesses or operations will depend on our ability to manage these operations, realize opportunities for revenue growth presented by strengthened service offerings and expanded geographic market coverage, obtain better terms from our vendors due to increased buying power, and eliminate redundant and excess costs to fully realize the expected synergies. Because of difficulties in combining geographically distant operations and systems which may not be fully compatible, we may not be able to achieve the financial strength and growth we anticipate from the acquisitions.

We may not realize our anticipated benefits from our acquisitions, if any, or may be unable to efficiently and effectively integrate acquired operations as planned. If we fail to integrate acquired businesses and operations efficiently and effectively or fail to realize the benefits we anticipate, we would be likely to experience material adverse effects on our business, financial condition, results of operations and future prospects.

Any acquisitions may also require us to issue debt or equity securities, use our cash resources, incur debt or contingent liabilities, amortize intangibles, or write-off acquisition-related expenses. In addition, we cannot predict market reactions to any acquisitions we may make or to any failure to announce any future acquisitions.

While we would conduct due diligence in connection with any acquisition opportunities, there may be risks or liabilities that such due diligence efforts fail to discover, that are not disclosed to us or that we inadequately assess. The failure to timely identify any material liabilities associated with any acquisitions could adversely affect our business, results of operations, and financial condition.

Risks Related to the Acquisition of Voxbone

Although we expect that the acquisition of Voxbone will result in synergies and other benefits to us, we may not realize those benefits because of difficulties related to integration, the achievement of synergies and other challenges.

On November 2, 2020, we acquired Voxbone. Prior to the completion of this acquisition, we and Voxbone operated independently, and there can be no assurances that our businesses can be combined in a manner that allows for the achievement of substantial benefits. The integration process is ongoing and continues to require significant time and resources, and we may not be able to manage the process successfully, as our ability to acquire and integrate larger or more complex companies, products, or technology in a successful manner is unproven. If we are not able to successfully integrate Voxbone's business with ours, fail to achieve the synergies we anticipated would result from the acquisition, such as cross-selling to our legacy customers in international markets in which we now operate, or fail to pursue a unified customer and product strategy successfully, the anticipated benefits of the acquisition may not be realized fully or may take longer than expected to be realized.

We have incurred, and may continue to incur, significant, non-recurring costs in connection with the acquisition and integrating our operations with those of Voxbone, including costs to consolidate business support systems and service offerings. Management cannot ensure that the elimination of duplicative costs or the realization of other efficiencies will offset the transaction and integration costs in the near term or at all.

Risks Related to the Convertible Notes

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

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

We may incur substantially more debt or take other actions which would intensify the risks discussed above.

We and our subsidiaries may be able to incur substantial additional debt in the future, some of which may be secured debt. We will not be restricted under the terms of the indentures governing the Convertible Notes from incurring additional debt, securing existing or future debt, recapitalizing our debt or taking a number of other actions that are not limited by the terms of the indenture governing the Convertible Notes that could have the effect of diminishing our ability to make payments on the Convertible Notes when due.

We may not have the ability to raise the funds necessary for cash settlement upon conversion of the Convertible Notes or to repurchase the Convertible Notes for cash following a fundamental change, and our future debt may

contain limitations on our ability to pay cash upon conversion of the Convertible Notes or to repurchase the Convertible Notes.

Subject to limited exceptions, holders of the Convertible Notes have the right to require us to repurchase their Convertible Notes upon the occurrence of a fundamental change at a cash repurchase price generally equal to 100% of the principal amount of the Convertible Notes to be repurchased, plus accrued and unpaid interest, if any, to, but excluding, the fundamental change repurchase date. In addition, upon conversion of the Convertible Notes, unless we elect to deliver solely shares of our Class A common stock to settle such conversion (other than paying cash in lieu of delivering any fractional share), we will be required to make cash payments in respect of the Convertible Notes being converted. However, we may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of Convertible Notes surrendered therefor or pay the cash amounts due upon conversion. In addition, our ability to repurchase the Convertible Notes or to pay cash upon conversions of the Convertible Notes may be limited by applicable law, by regulatory authorities or by agreements governing our future indebtedness. Our failure to repurchase the Convertible Notes at a time when such repurchase is required by the indentures governing the Convertible Notes or to pay the cash amounts due upon future conversions of the Convertible Notes as required by such indentures would constitute a default under such indentures. A default under the indentures governing the Convertible Notes or the fundamental change itself may also lead to a default under agreements governing our existing or future indebtedness, which may result in such existing or future indebtedness becoming immediately payable in full. We may not have sufficient funds to satisfy all amounts due under such existing or future indebtedness and repurchase the Convertible Notes or make cash payments upon conversions thereof.

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

In May 2008, the Financial Accounting Standards Board (“FASB”), issued FASB Staff Position No. APB 14-1, Accounting for Convertible Debt Instruments That May Be Settled in Cash Upon Conversion (Including Partial Cash Settlement), which has subsequently been codified as Accounting Standards Codification (“ASC”) 470-20, Debt with Conversion and Other Options. Under ASC 470-20, an entity must separately account for the liability and equity components of the convertible debt instruments (such as the Convertible Notes) that may be settled entirely or partially in cash upon conversion in a manner that reflects the issuer’s economic interest cost. The effect of ASC 470-20 on the accounting for the Convertible Notes is that the equity component is required to be included in the additional paid-in capital section of stockholders’ equity on our consolidated balance sheet, and the value attributed to the equity component would be treated as original issue discount for purposes of accounting for the debt component of the Convertible Notes. As a result, we will be required to record a greater amount of non-cash interest expense in current periods presented as a result of the amortization of the discounted carrying value of the Convertible Notes to their face amount over the term of the Convertible Notes. We will report lower net income in our financial results because ASC 470-20 will require interest to include both the current period’s amortization of the debt discount and the instrument’s coupon interest, which could adversely affect our reported or future financial results, the trading price of our Class A common stock and the trading price of the Convertible Notes.

In addition, under certain circumstances, convertible debt instruments (such as the Convertible Notes) that may be settled entirely or partly in cash are currently accounted for utilizing the treasury stock method, the effect of which is that the shares of Class A common stock issuable upon conversion of the Convertible Notes are not included in the calculation of diluted earnings per share except to the extent that the conversion value of the Convertible Notes exceeds their principal amount. Under the treasury stock method, for diluted earnings per share purposes, the transaction is accounted for as if the number of shares of Class A common stock that would be necessary to settle such excess, if we elected to settle such excess in shares, are issued.

However, in August 2020, the FASB published an accounting standards update 2020-06 (“ASU 2020-06”), which amends these accounting standards by reducing the number of accounting models for convertible instruments and limiting instances of separate accounting for the debt and equity or a derivative component of the convertible debt instruments. ASU 2020-06 also will no longer allow the use of the treasury stock method for convertible instruments for purposes of calculating diluted earnings per share and instead require application of the "if-converted" method. Under that method, diluted earnings per share will generally be calculated assuming that all the Convertible Notes were converted solely into shares of Class A common stock at the beginning of the reporting period, unless the result would be anti-dilutive, which could adversely affect our diluted earnings per share. However, if the principal amount of the convertible debt instrument being converted is required to be paid in cash and only the excess is permitted to be settled in shares, the if-converted method will produce a similar result as the treasury stock method prior to the adoption of ASU 2020-06 for such convertible debt instrument. These amendments will be effective for public companies for fiscal years beginning after December 15, 2021, with early adoption permitted, but no earlier than fiscal years beginning after December 15, 2020.

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

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

The Capped Calls may affect the value of the Convertible Notes and our Class A common stock.

In connection with the pricing of the 2026 Convertible Notes and the 2028 Convertible Notes, we entered into privately negotiated Capped Calls with certain financial institutions (the "option counterparties"). The Capped Calls are expected generally to reduce the potential dilution upon any conversion of the Convertible Notes and/or offset any cash payments we are required to make in excess of the principal amount of converted Convertible Notes, as the case may be, with such reduction and/or offset subject to a cap.

We have been advised that, in connection with establishing their initial hedges of the Capped Calls, the option counterparties or their respective affiliates entered into various derivative transactions with respect to our Class A common stock concurrently with or shortly after the pricing of the Convertible Notes.

In addition, the option counterparties or their respective affiliates may modify their hedge positions by entering into or unwinding various derivatives with respect to our Class A common stock and/or purchasing or selling our Class A common stock or other securities of ours in secondary market transactions from time to time prior to the maturity of the Convertible Notes (and are likely to do so during any observation period related to a conversion of Convertible Notes). This activity could also cause or avoid an increase or a decrease in the market price of our Class A common stock or the Convertible Notes, which could affect your ability to convert the Convertible Notes and, to the extent the activity occurs during any observation period related to a conversion of Convertible Notes, it could affect the number of shares and value of the consideration that you will receive upon conversion of such Convertible Notes.

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

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

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

Risks Related to Ownership of Our Class A Common Stock

The trading price of our Class A common stock may be volatile, and you could lose all or part of your investment.

Prior to our initial public offering, there was no public market for shares of our Class A common stock. On November 10, 2017, we sold shares of our Class A common stock to the public at $20.00 per share. From November 10, 2017, the date that our Class A common stock began trading on the NASDAQ Global Select Market, through March 31, 2022, the trading price of our Class A common stock has ranged from $18.05 per share to $198.61 per share. The trading price of our Class A common stock may continue to be volatile and could fluctuate significantly in response to numerous factors, many of which are beyond our control, including:

- general market volatility caused by pandemics such as COVID-19, acts of war, or other significant domestic or international events;
- price and volume fluctuations in the overall stock market from time to time;
- volatility in the trading prices and trading volumes of technology stocks;
- volatility in the trading volumes of our Class A common stock;
- changes in operating performance and stock market valuations of other technology companies generally, or those in our industry in particular;
- sales of shares of our Class A common stock by us or our stockholders;
- failure of securities analysts to maintain coverage of us, changes in financial estimates by securities analysts who follow our company, or our failure to meet these estimates or the expectations of investors;
- the financial projections we may provide to the public, any changes in those projections or our failure to meet those projections;
- announcements by us or our competitors of new products or services;
- the public's reaction to our press releases, other public announcements and filings with the SEC;
- rumors and market speculation involving us or other companies in our industry;
- actual or anticipated changes in our results of operations or fluctuations in our results of operations;
- actual or anticipated developments in our business, our competitors' businesses or the competitive landscape generally;
- litigation involving us, our industry or both;
- regulatory actions or developments affecting our operations, those of our competitors or our industry more broadly;
- developments or disputes concerning our intellectual property or other proprietary rights;

- announced or completed acquisitions of businesses, products, services or technologies by us or our competitors;
- new laws or regulations or new interpretations of existing laws or regulations applicable to our business;
- changes in accounting standards, policies, guidelines, interpretations or principles;
- new rules adopted by certain index providers, such as S&P Dow Jones, that limit or preclude inclusion of companies with multi-class capital structures in certain of their indices;
- any significant change in our management; and
- general economic conditions and slow or negative growth of our markets.

In addition, in the past, securities class action litigation has often been instituted following periods of volatility in the overall market and the market price of a particular company's securities. This litigation, if instituted against us, could result in substantial costs and a diversion of our management's attention and resources.

Substantial future sales of shares of our Class A common stock could cause the market price of our Class A common stock to decline.

The market price of our Class A common stock could decline as a result of substantial sales of our Class A common stock, particularly sales by our directors, executive officers and significant stockholders, or the perception in the market that holders of a large number of shares intend to sell their shares.

Additionally, the shares of Class A common stock subject to outstanding options and restricted stock unit awards under our equity incentive plans and the shares reserved for future issuance under our equity incentive plans will become eligible for sale in the public market upon issuance. Certain holders of our Class A common stock have rights, subject to some conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for our stockholders or ourselves.

The dual class structure of our common stock has the effect of concentrating voting control with those stockholders who held our capital stock prior to the completion of our initial public offering. This may limit or preclude stockholders' ability to influence corporate matters, including the election of directors, amendments to our organizational documents and any merger, consolidation, sale of all or substantially all of our assets, or other major corporate transaction requiring stockholder approval.

Our Class A common stock has one vote per share, and our Class B common stock has ten votes per share. Substantially all of our Class B common stock continues to be held by our current Chairman and CEO, David Morken, and our co-Founder Henry Kaestner. Because of the ten-to-one voting ratio between our Class B and Class A common stock, these holders of our Class B common stock collectively control approximately 46% of the combined voting power of our common stock and therefore would be able to exert significant influence over all matters submitted to our stockholders for approval. This concentrated voting control limits or precludes stockholders' ability to influence corporate matters for the foreseeable future, including the election of directors, amendments to our organizational documents, and any merger, consolidation, sale of all or substantially all of our assets, or other major corporate transaction requiring stockholder approval. In addition, this may prevent or discourage unsolicited acquisition proposals or offers for our capital stock that stockholders may feel are in their best interest as one of our stockholders.

Future transfers by holders of Class B common stock will generally result in those shares converting to Class A common stock, subject to limited exceptions, such as certain transfers effected for estate planning purposes. The conversion of Class B common stock to Class A common stock 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.

We cannot predict the impact our capital structure may have on our stock price.

In July 2017, S&P Dow Jones, a provider of widely followed stock indices, announced that companies with multiple share classes, such as ours, will not be eligible for inclusion in certain of their indices. As a result, our Class A common stock will likely not be eligible for these stock indices. Many investment funds are precluded from investing in companies that are not included in such indices, and these funds would be unable to purchase our Class A common stock if we were not included in such indices. We cannot assure you that other stock indices will not take a similar approach to S&P Dow Jones in the future. Exclusion from indices could make our Class A common stock less attractive to investors and, as a result, the market price of our Class A common stock could be adversely affected.

In addition, several stockholder advisory firms have announced their opposition to the use of multiple class structures. As a result, the dual class structure of our common stock may cause stockholder advisory firms to publish negative commentary about our corporate governance practices or otherwise seek to cause us to change our capital structure. Any actions or publications by stockholder advisory firms critical of our corporate governance practices or capital structure could also adversely affect the value of our Class A common stock.

We are effectively controlled by David A. Morken, our Co-Founder and Chief Executive Officer, whose interests may differ from other stockholders.

Mr. Morken has the ability to effectively control the appointment of our management, the entering into of mergers, sales of substantially all or all of our assets and other extraordinary transactions and influence amendments to our certificate of incorporation and bylaws. In any of these matters, the interests of Mr. Morken may differ from or conflict with your interests. Moreover, this concentration of ownership may also adversely affect the trading price for our Class A common stock to the extent investors perceive disadvantages in owning stock of a company with a controlling stockholder.

If securities or industry analysts cease publishing research or reports about us, our business or our market, or if they change their recommendations regarding our Class A common stock adversely, the trading price of our Class A common stock and trading volume could decline.

The trading market for our Class A common stock is influenced by the research and reports that securities or industry analysts may publish about us, our business, our market or our competitors. If any of the analysts who may cover us change their recommendation regarding our Class A common stock in an adverse manner, or provide more favorable recommendations about our competitors relative to us, the trading price of our Class A common stock would likely decline. If any analyst who covers us were to cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause the trading price of our Class A common stock or trading volume to decline.

Anti-takeover provisions contained in our second amended and restated certificate of incorporation and second amended and restated bylaws, as well as provisions of Delaware law, could impair a takeover attempt.

Our second amended and restated certificate of incorporation, second amended and restated bylaws and Delaware law contain provisions which could have the effect of rendering more difficult, delaying, or preventing an acquisition deemed undesirable by our board of directors. Among other things, our second amended and restated certificate of incorporation and second amended and restated bylaws include provisions:

- authorizing "blank check" preferred stock, which could be issued by our board of directors without stockholder approval and may contain voting, liquidation, dividend and other rights superior to our Class A and Class B common stock;
- limiting the liability of, and providing indemnification to, our directors and officers;
- limiting the ability of our stockholders to call and bring business before special meetings;
- providing for a dual class common stock structure in which holders of our Class B common stock have the ability to control the outcome of matters requiring stockholder approval, even if they own significantly less

than a majority of the outstanding shares of our Class A and Class B common stock, including the election of directors and significant corporate transactions, such as a merger or other sale of our company or its assets;

- providing that our board of directors is classified into three classes of directors with staggered three-year terms;
- prohibiting stockholder action by written consent, which requires all stockholder actions to be taken at a meeting of our stockholders;
- requiring super-majority voting to amend some provisions in our second amended and restated certificate of incorporation and second amended and restated bylaws;
- requiring advance notice of stockholder proposals for business to be conducted at meetings of our stockholders and for nominations of candidates for election to our board of directors; and
- controlling the procedures for the conduct and scheduling of board of directors and stockholder meetings.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management.

As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the Delaware General Corporation Law, which prevents certain stockholders holding more than 15% of our outstanding common stock from engaging in certain business combinations without approval of the holders of at least two-thirds of our outstanding common stock not held by such 15% or greater stockholder.

Any provision of our second amended and restated certificate of incorporation, second amended and restated bylaws or Delaware law that has the effect of delaying, preventing or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our Class A common stock and could also affect the price that some investors are willing to pay for our Class A common stock.

Our second amended and restated certificate of incorporation and our second amended and restated bylaws include super-majority voting provisions that will limit your ability to influence corporate matters.

Our second amended and restated certificate of incorporation and our second amended and restated bylaws include provisions that require the affirmative vote of two-thirds of all of the outstanding shares of our capital stock entitled to vote to effect certain changes. These changes include amending or repealing our second amended and restated bylaws or second amended and restated certificate of incorporation or removing a director from office for cause. If all or substantially all of the holders of our Class B common stock convert their shares into Class A common stock voluntarily or otherwise, Mr. Morken may control the majority of the voting power of our outstanding capital stock, and therefore he may have the ability to prevent any such changes, which will limit a stockholder’s ability to influence corporate matters.

Our second amended and restated bylaws provide, subject to certain exceptions, that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for certain stockholder litigation matters, which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or stockholders.

Our second amended and restated bylaws provide, subject to limited exceptions, that the Court of Chancery of the State of Delaware will, to the fullest extent permitted by law, be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf; (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or stockholder to us or our stockholders; (iii) any action asserting a claim against us that is governed by the internal affairs doctrine; or (iv) any action arising pursuant to any provision of the Delaware General Corporation Law, our second amended and restated certificate of incorporation or our second amended and restated bylaws. This exclusive forum provision does not apply to suits brought to enforce a duty or liability created by the Exchange Act, which provides for exclusive jurisdiction of the federal courts. It could apply, however, to a suit that asserts claims under the Securities Act and falls within one or more of the categories enumerated in our choice of forum provision, inasmuch as Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. There is uncertainty as to whether a court would enforce such provision with respect to claims under the Securities Act, and our stockholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder.

Our choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, other employees or stockholders, which may discourage lawsuits with respect to such claims. While Delaware courts have determined that choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than that designated in our exclusive forum provision. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provision of our second amended and restated bylaws. Alternatively, if a court were to find the choice of forum provision contained in our second amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could materially and adversely affect our business, financial condition and results of operations.

We may need additional capital in the future and such capital may be limited or unavailable. Failure to raise capital when needed could prevent us from growing in accordance with our plans.

We may require more capital in the future from equity or debt financings to fund our operations, finance investments in equipment and infrastructure, acquire complementary businesses and technologies, and respond to competitive pressures and potential strategic opportunities. If we are required to raise additional funds through further issuances of equity or other securities convertible into equity, our existing stockholders could suffer significant dilution, and any new shares we issue could have rights, preferences or privileges senior to those of the holders of our Class A common stock. The additional capital we may seek may not be available on favorable terms or at all. If we are unable to obtain capital on favorable terms or at all, we may have to reduce our operations or forego opportunities, and this may have a material adverse effect on our business, financial condition and results of operations.

We do not intend to pay dividends for the foreseeable future.

We have never declared or paid any cash dividends on our Class A common stock and do not intend to pay any cash dividends in the foreseeable future. We anticipate that we will retain all of our future earnings for use in the development of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our board of directors. 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.

If a large number of shares of our Class A common stock is sold in the public market, the sales could reduce the trading price of our Class A common stock and impede our ability to raise future capital.

We cannot predict what effect, if any, future issuances by us of our Class A common stock will have on the market price of our Class A common stock. In addition, shares of our Class A common stock that we issue in connection with an acquisition may not be subject to resale restrictions. The market price of our Class A common stock could drop significantly if certain large holders of our Class A common stock, or recipients of our Class A common stock in connection with an acquisition, sell all or a significant portion of their shares of Class A common stock or are perceived by the market as intending to sell these shares other than in an orderly manner. In addition, these sales could impair our ability to raise capital through the sale of additional Class A common stock in the capital markets.

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

None.

Item 6. Exhibits

Exhibit Index

Exhibit number	Description of Exhibit	Form	File No.	Exhibit	Filing Date
3.1	Second Amended and Restated Certificate of Incorporation.	10-Q	001-38285	3.1	12/14/2017
3.2	Second Amended and Restated Bylaws.	10-Q	001-38285	3.2	12/14/2017
31.1	Certificate of the Chief Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				Filed herewith
31.2	Certification of the Chief Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				Filed herewith
32.1*	Certification of the Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act 2002.				Furnished herewith
101.INS	XBRL Instance Document - the Instance Document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL Document.				Filed herewith
101.SCH	XBRL Taxonomy Schema Document.				Filed herewith
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.				Filed herewith
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.				Filed herewith
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.				Filed herewith
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.				Filed herewith

* The certifications furnished in Exhibit 32.1 hereto are deemed to accompany this Quarterly Report on Form 10-Q and will not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the registrant specifically incorporates it by reference.

SIGNATURES

Pursuant to the requirements of the Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Quarterly Report on Form 10-Q to be signed on its behalf by the undersigned, thereunto duly authorized.

			BANDWIDTH INC.
Date:	November 2, 2022	By:	/s/ David A. Morken
			David A. Morken Chief Executive Officer (Principal Executive Officer)
Date:	November 2, 2022	By:	/s/ Daryl E. Raiford
			Daryl E. Raiford Chief Financial Officer (Principal Accounting and Financial Officer)

Exhibit 31.1

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

I, David A. Morken, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Bandwidth Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a—15(e) and 15d—15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 2, 2022

/s/ David A. Morken

David A. Morken
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

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

I, Daryl E. Raiford certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Bandwidth Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a—15(e) and 15d—15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 2, 2022

/s/ Daryl E. Raiford

Daryl E. Raiford
Chief Financial Officer
(Principal Accounting and Financial Officer)

Exhibit 32.1

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

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), David A. Morken, Chief Executive Officer of Bandwidth Inc. (the "Company"), and Daryl E. Raiford, Chief Financial Officer of the Company, each hereby certifies that, to the best of his knowledge:

1. The Company's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2022, to which this Certification is attached as Exhibit 32.1 (the "Periodic Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and
2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 2, 2022

/s/ David A. Morken

David A. Morken
Chief Executive Officer
(Principal Executive Officer)

/s/ Daryl E. Raiford

Daryl E. Raiford
Chief Financial Officer
(Principal Accounting and Financial Officer)