UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 10-Q

(Mark One)

x 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

o 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: 001-39748

PUBMATIC, INC.

(Exact name of registrant as specified in its charter)

Delaware	**20-5863224**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
Not applicable	**Not applicable**
(Address of principal executive offices)	(Zip Code)

Not applicable
(Registrant's telephone number, including area code)

Not applicable
(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Class A common stock, $0.0001 par value per share	PUBM	The Nasdaq Global 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 o

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 o

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 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	o
Non-accelerated filer	o	Smaller reporting company	o
		Emerging growth company	o

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 to Section 7(a)(2)(B) of the Securities Act. o

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

As of November 1, 2022, the registrant had 43,171,740 shares of Class A common stock outstanding and 9,394,402 shares of Class B common stock outstanding.

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PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

PUBMATIC, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except par values and share data)
(Unaudited)

	September 30, 2022	December 31, 2021
ASSETS		
Current Assets		
Cash and cash equivalents	$ 52,177	$ 82,505
Marketable securities	113,914	77,121
Accounts receivable, net	277,265	286,916
Prepaid expenses and other current assets	14,885	14,207
Total Current Assets	458,241	460,749
Property, equipment and software, net	74,975	50,140
Operating lease right-of-use assets	27,733	21,613
Acquisition-related intangible assets, net	8,819	—
Goodwill	29,832	6,250
Deferred tax assets	469	515
Other assets, non-current	2,095	10,948
TOTAL ASSETS	$ 602,164	$ 550,215
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Accounts payable	$ 258,478	$ 244,321
Accrued liabilities	14,819	18,780
Operating lease liabilities, current	5,668	3,864
Total Current Liabilities	278,965	266,965
Operating lease liabilities, non-current	22,465	17,842
Deferred tax liabilities	3,212	6,067
Other liabilities, non-current	4,919	2,161
TOTAL LIABILITIES	309,561	293,035
Commitments and contingencies (Note 8)		
Stockholders' Equity		
Preferred stock, $0.0001 par value per share, 10,000,000 shares authorized as of September 30, 2022 and December 31, 2021; No shares issued and outstanding as of September 30, 2022 and December 31, 2021	—	—
Common stock, par value $0.0001 per share; 1,000,000,000 Class A shares authorized as of September 30, 2022 and December 31, 2021; 43,034,577 and 40,695,140 shares issued and outstanding as of September 30, 2022 and December 31, 2021, respectively; 1,000,000,000 Class B shares authorized as of September 30, 2022 and December 31, 2021; 9,474,402 and 11,159,609 shares issued and outstanding as of September 30, 2022 and December 31, 2021, respectively.	6	6
Treasury stock, at cost; 3,140,437 shares as of September 30, 2022 and December 31, 2021	(11,486)	(11,486)
Additional paid-in capital	189,085	169,401
Accumulated other comprehensive loss	(221)	(36)
Retained earnings	115,219	99,295
TOTAL STOCKHOLDERS’ EQUITY	292,603	257,180
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 602,164	$ 550,215

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

PUBMATIC, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except share and per share data)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Revenue	$ 64,500	$ 58,086	$ 182,084	$ 151,352
Cost of revenue	21,591	16,020	58,557	41,408
Gross profit	42,909	42,066	123,527	109,944
Operating expenses:				
Technology and development	5,080	4,139	14,928	11,738
Sales and marketing	16,087	15,004	50,755	41,790
General and administrative	12,120	8,875	33,847	25,593
Total operating expenses	33,287	28,018	99,530	79,121
Operating income	9,622	14,048	23,997	30,823
Total other income (expense), net	(4,898)	277	(3,345)	237
Income before income taxes	4,724	14,325	20,652	31,060
Provision for income taxes	1,398	799	4,728	2,695
Net income	$ 3,326	$ 13,526	$ 15,924	$ 28,365
Net income per share attributable to common stockholders:				
Basic	$ 0.06	$ 0.27	$ 0.31	$ 0.57
Diluted	$ 0.06	$ 0.24	$ 0.28	$ 0.50
Weighted-average shares used to compute net income per share attributable to common stockholders:				
Basic	52,435,601	50,559,636	52,168,853	49,754,449
Diluted	56,944,230	56,498,891	56,895,162	56,575,867

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

PUBMATIC, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In thousands)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Net income	$ 3,326	$ 13,526	$ 15,924	$ 28,365
Other comprehensive income (loss):				
Unrealized gain (loss) on marketable securities, net of tax	166	—	(185)	(1)
Comprehensive income	$ 3,492	$ 13,526	$ 15,739	$ 28,364

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

PUBMATIC, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands, except share data)
(Unaudited)

	Common Stock		Treasury Stock	Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total Stockholders' Equity
	Shares	Amount					
Balance — December 31, 2021	51,854,749	$ 6	$ (11,486)	$ 169,401	$ (36)	$ 99,295	$ 257,180
Stock-based compensation	—	—	—	5,469	—	—	5,469
Exercise of stock options	130,958	—	—	481	—	—	481
Issuance of common stock related to RSU vesting	25,033	—	—	—	—	—	—
Other comprehensive loss	—	—	—	—	(203)	—	(203)
Net income	—	—	—	—	—	4,779	4,779
Balance — March 31, 2022	52,010,740	6	(11,486)	175,351	(239)	104,074	267,706
Stock-based compensation	—	—	—	5,780	—	—	5,780
Exercise of stock options	96,276	—	—	357	—	—	357
Issuance of common stock related to employee stock purchase plan	141,709	—	—	2,402	—	—	2,402
Issuance of common stock related to RSU vesting	89,623	—	—	—	—	—	—
Other comprehensive loss	—	—	—	—	(148)	—	(148)
Net income	—	—	—	—	—	7,819	7,819
Balance — June 30, 2022	52,338,348	6	(11,486)	183,890	(387)	111,893	283,916
Stock-based compensation	—	—	—	4,973	—	—	4,973
Exercise of stock options	77,754	—	—	222	—	—	222
Issuance of common stock related to RSU vesting	92,877	—	—	—	—	—	—
Other comprehensive income	—	—	—	—	166	—	166
Net income	—	—	—	—	—	3,326	3,326
Balance — September 30, 2022	52,508,979	$ 6	$ (11,486)	$ 189,085	$ (221)	$ 115,219	$ 292,603

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

PUBMATIC, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS’ EQUITY
(In thousands, except share data)
(Unaudited)

	Common Stock		Treasury Stock	Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total Stockholders’ Equity
	Shares	Amount					
Balance — December 31, 2020	48,988,142	$ 6	$ (11,434)	$ 144,163	$ 1	$ 42,691	$ 175,427
Stock-based compensation	—	—	—	3,318	—	—	3,318
Exercise of stock options	278,412	—	—	451	—	—	451
Repurchase of treasury stock, at cost	(693)	—	(27)	—	—	—	(27)
Other comprehensive loss	—	—	—	—	(1)	—	(1)
Net income	—	—	—	—	—	4,918	4,918
Balance — March 31, 2021	49,265,861	6	(11,461)	147,932	—	47,609	184,086
Stock-based compensation	—	—	—	3,837	—	—	3,837
Exercise of stock options	800,426	—	—	1,627	—	—	1,627
Repurchase of treasury stock, at cost	(449)	—	(25)	—	—	—	(25)
Issuance of common stock related to employee stock purchase plan	155,015	—	—	2,635	—	—	2,635
Issuance of common stock related to RSU vesting	21,973	—	—	—	—	—	—
Net income	—	—	—	—	—	9,921	9,921
Balance — June 30, 2021	50,242,826	6	(11,486)	156,031	—	57,530	202,081
Stock-based compensation	—	—	—	3,981	—	—	3,981
Exercise of stock options	615,673	—	—	1,249	—	—	1,249
Issuance of common stock related to RSU vesting	21,839	—	—	—	—	—	—
Net income	—	—	—	—	—	13,526	13,526
Balance — September 30, 2021	50,880,338	$ 6	$ (11,486)	$ 161,261	$ —	$ 71,056	$ 220,837

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

PUBMATIC, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Nine Months Ended September 30, 2022	Nine Months Ended September 30, 2021
CASH FLOW FROM OPERATING ACTIVITIES:		
Net income	$ 15,924	$ 28,365
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	23,587	15,992
Unrealized loss and impairment of equity investment	5,948	—
Stock-based compensation	15,182	10,508
Deferred income taxes	(3,949)	1,404
Accretion of discount on marketable securities	(170)	(46)
Non-cash operating lease expense	4,292	1,355
Other	98	(2)
Changes in operating assets and liabilities:		
Accounts receivable	12,626	(8,876)
Prepaid expenses and other current assets	(1,354)	(6,620)
Accounts payable	4,013	16,648
Accrued liabilities	(4,806)	3,386
Operating lease liabilities	(3,985)	(1,546)
Other liabilities, non-current	448	(366)
Net cash provided by operating activities	67,854	60,202
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(26,961)	(22,846)
Capitalized software development costs	(9,597)	(6,755)
Purchases of marketable securities	(100,113)	(53,118)
Proceeds from maturities of marketable securities	63,200	25,600
Business combination, net of cash acquired	(28,085)	—
Net cash used in investing activities	(101,556)	(57,119)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from issuance of common stock for employee stock purchase plan	2,402	2,635
Proceeds from exercise of stock options	1,060	3,327
Principal payments on finance lease obligations	(88)	—
Payments for offering costs	—	(805)
Payments to acquire treasury stock	—	(52)
Net cash provided by financing activities	3,374	5,105
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(30,328)	8,188
CASH AND CASH EQUIVALENTS - Beginning of period	82,505	81,188
CASH AND CASH EQUIVALENTS - End of period	$ 52,177	$ 89,376
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:		
Income taxes paid	$ 7,564	$ 4,445
SUPPLEMENTAL DISCLOSURES OF NON-CASH INVESTING AND FINANCING INFORMATION:		
Stock-based compensation capitalized as internal-use software costs	$ 1,040	$ 628
Property and equipment included in accounts payable and accrued expenses	$ 7,550	$ 2,712
Capitalized software costs included in accounts payable and accrued expenses	$ 1,491	$ 1,115
Operating lease right-of-use assets obtained in exchange for new lease obligations	$ 10,412	$ —
Business combination purchase consideration - indemnification claims holdback	$ 2,597	$ —

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

PUBMATIC, INC. AND SUBSIDIARIES
Notes to Condensed Consolidated Financial Statements
(Unaudited)

Note 1 – Organization and Description of Business

PubMatic, Inc. (together with its subsidiaries, “the Company” or “PubMatic”) was founded in 2006. The Company has offices in California, New York, Europe, Asia, and Australia. The Company provides a specialized cloud infrastructure platform that enables real-time programmatic advertising transactions. The purpose-built technology and infrastructure provides superior outcomes for both publishers and advertisers leveraging an efficient design, machine learning, and data processing capabilities, with customer alignment and global omnichannel reach.

Note 2 – Basis of Presentation and Summary of Significant Accounting Policies

Fiscal Year

The Company’s fiscal year ends on December 31, and its fiscal quarters end on March 31, June 30, September 30, and December 31. References to fiscal year 2022, for example, refer to the fiscal year ended December 31, 2022.

Unaudited Interim Condensed Consolidated Financial Information

The unaudited condensed consolidated financial statements include the accounts of PubMatic, Inc. and its wholly owned subsidiaries, and have been prepared in accordance with generally accepted accounting principles in the United States (“GAAP”) and following the requirements of the Securities and Exchange Commission (“SEC”) for interim reporting. As permitted under those rules, certain footnotes or other financial information that are normally required by GAAP can be condensed or omitted. These financial statements have been prepared on the same basis as the Company’s annual financial statements and, in the opinion of management, reflect all adjustments, consisting only of normal recurring adjustments, which are necessary for the fair statement of the Company’s financial information. These interim results are not necessarily indicative of the results to be expected for the fiscal year ending December 31, 2022 or for any other interim period or for any other future year. The accompanying unaudited condensed consolidated financial statements and related financial information should be read in conjunction with the audited consolidated financial statements and the related notes contained in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2021, as filed with the SEC on March 1, 2022 (the “Annual Report”).

Basis of Presentation

The accompanying condensed consolidated financial statements have been prepared in accordance with GAAP. The accompanying condensed consolidated financial statements include the accounts of PubMatic, Inc. and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation. Certain prior period amounts reported in our condensed consolidated financial statements and notes thereto have been reclassified to conform to the current period presentation.

Use of Estimates

The preparation of the condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts of assets and liabilities reported, disclosures about contingent assets and liabilities, and reported amounts of revenue and expenses.

The Company evaluates its estimates and assumptions on an ongoing basis using historical experience and other factors and adjusts those estimates and assumptions when facts and circumstances dictate. Actual results could materially differ from those estimates and assumptions. Due to the inherent uncertainty involved in making assumptions and estimates, events and changes in circumstances arising after September 30, 2022, including those resulting from the impacts of the COVID-19 pandemic, may result in actual outcomes that differ from those contemplated by the Company’s assumptions and estimates.

Business Combinations

The Company allocates the purchase consideration for acquired companies to tangible and intangible assets acquired and liabilities assumed based on their estimated fair values as of the acquisition date, with the excess recorded to goodwill. These estimates are inherently uncertain and subject to refinement. During the measurement period, which may be up to one year from the acquisition date, the Company may record adjustments to the fair value of these tangible and intangible assets acquired and liabilities assumed with the corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the fair value of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to the condensed consolidated statements of operations.

Acquisition-related Intangible Assets and Goodwill

Acquisition-related intangible assets with finite lives are amortized over their estimated useful lives on a straight-line basis. Goodwill amounts are not amortized. Acquisition-related intangible assets and goodwill are tested for impairment at least annually, and more frequently upon the occurrence of certain events.

Impairment of Equity Investment

During the three months ended September 30, 2022, the Company concluded there was no longer a readily determinable fair value for its equity investment because the shares of the issuer were no longer publicly quoted pursuant to SEC Rule 15c2-11. The Company evaluated the measurement guidance for non-marketable equity securities and performed a qualitative assessment of various impairment indicators and concluded the equity investment was impaired as of September 30, 2022. As a result, the Company recognized an impairment loss equal to the difference between the fair value of the investment and its carrying amount. An impairment charge of $6.4 million was recorded within other income (expense), net in the condensed consolidated statements of operations for the three and nine months ended September 30, 2022.

Stock-based Compensation

The Company recognizes and measures compensation expense for all stock-based payment awards granted to employees, directors, and nonemployees, including stock options, restricted stock units (“RSUs”), and purchases under the employee stock purchase plan (the “ESPP”) based on the fair value of the awards on the date of grant. The fair value of stock options and shares of common stock to be issued under the ESPP is estimated using the Black-Scholes option pricing model. The grant date fair value of RSUs is based on the closing market price of the Company’s Class A common stock on the date of grant. The Black-Scholes option pricing model is impacted by the fair value of the Company’s common stock, as well as changes in assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to, the expected common stock price volatility over the term of the stock options, the expected term of the stock options, risk-free interest rates, and the expected dividend yield.

For additional information regarding stock-based compensation and the assumptions used for determining the fair value of stock options and ESPP awards, refer to Note 9 — “Stockholders’ Equity and Stock Option Plans.”

Concentration of Revenue and Accounts Receivable

The Company defines its revenue concentration based on revenue recognized from individual publishers. For the three months ended September 30, 2022 and 2021, one publisher represented 13% and 17%, respectively, and 13% and 18% for the nine months ended September 30, 2022 and 2021, respectively, of the Company’s revenue. As of September 30, 2022, two buyers accounted for 36% and 14%, respectively, of accounts receivable. As of December 31, 2021, two buyers accounted for 29% and 19%, respectively, of accounts receivable.

Adoption of Topic 842

In February 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2016-02, Leases (Topic 842) which, along with other ASU's containing minor amendments and technical corrections, provides for a comprehensive overhaul of the lease accounting model and changes the definition of a lease within US GAAP. Topic 842 supersedes the legacy Topic 840 lease accounting guidance and is intended to increase transparency and comparability among organizations by recognizing right-of-use lease assets and lease liabilities on the balance sheet and requiring disclosure of key information about leasing arrangements. Lease expense continues to be recognized in a manner similar to legacy GAAP.

The effect of adopting Topic 842 resulted in the recognition of operating right-of-use assets and corresponding lease liabilities on the Company’s consolidated balance sheet. The Company adopted Topic 842 in the fourth quarter of our fiscal 2021 reflecting an initial application date of January 1, 2021 using the modified retrospective transition approach under which the adoption date of Topic 842 became the application date, with the comparative periods presented and disclosed under the Topic 840 requirements.

Interim financial data for the comparable prior-year quarter ended September 30, 2021 has been revised to reflect the adoption of Topic 842 and differs from what was disclosed in the prior year Form 10-Q filed on November 10, 2021. The standard did not affect the Company’s consolidated statements of operations, comprehensive income, and stockholders’ equity for the three and nine months ended September 30, 2021. Though net cash provided by operating, investing, and financing activities were unchanged, the standard did affect certain operating cash flow line items within the Company’s consolidated statements of cash flows for the nine months ended September 30, 2021.

Select condensed consolidated cash flow items, which reflects the adoption of the new standard as reported for the nine months ended September 30, 2021, are as follows (in thousands):

	Nine Months Ended September 30, 2021		
	As Reported	Balances Without Adoption of Topic 842 (As Previously Reported in the Prior Year 10-Q)	Effect of Change Higher (Lower)
Non-cash operating lease expense	$ 1,355	$ —	$ 1,355
Operating lease liabilities	$ (1,546)	$ —	$ (1,546)
Accrued liabilities	$ 3,386	$ 3,195	$ 191
Net cash provided by operating activities	$ 60,202	$ 60,202	$ —

Recent Accounting Pronouncements Not Yet Adopted

In October 2021, the FASB issued ASU No. 2021-08, Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers, which requires contract assets and contract liabilities acquired in a business combination to be recognized and measured in accordance with Topic 606, Revenue from Contracts with Customers, as if the acquirer had originated the contracts. Under current GAAP, such assets and liabilities are recognized by the acquirer at fair value on the acquisition date. ASU 2021-08 is effective for the Company in fiscal year 2023 and the adoption, including the impact and required disclosures, will be included in its 2023 Form 10-K. The Company does not expect the adoption of this guidance to have a material impact on its consolidated financial statements, however, any financial impact will depend on the magnitude and nature of future business combinations.

Note 3 – Fair Value Measurements

The following tables set forth the fair value of the Company's financial assets and liabilities measured on a recurring basis by level within the fair value hierarchy (in thousands):

	September 30, 2022			
	Level 1	Level 2	Level 3	Total
Financial Assets				
Money market funds	$ 37,859	$ —	$ —	$ 37,859
Certificates of deposit	—	4,534	—	4,534
Cash equivalents	37,859	4,534	—	42,393
Commercial paper	—	57,146	—	57,146
U.S. Treasury and government debt securities	—	56,768	—	56,768
Marketable securities	—	113,914	—	113,914
Total Financial Assets	$ 37,859	$ 118,448	$ —	$ 156,307

	December 31, 2021			
	Level 1	Level 2	Level 3	Total
Financial Assets				
Money market funds	$ 65,311	$ —	$ —	$ 65,311
Certificates of deposit	—	5,942	—	5,942
Cash equivalents	65,311	5,942	—	71,253
Commercial paper	—	50,954	—	50,954
U.S. Treasury and government debt securities	—	26,167	—	26,167
Marketable securities	—	77,121	—	77,121
Equity investment	5,948	—	—	5,948
Non-current assets	5,948	—	—	5,948
Total Financial Assets	$ 71,259	$ 83,063	$ —	$ 154,322

The Company's financial assets consist of Level 1 and 2 assets. The Company had no Level 3 assets or liabilities for the periods presented. The Company classifies its cash equivalents and marketable securities within Level 1 or Level 2 because they are valued using either quoted market prices or inputs other than quoted prices which are directly or indirectly observable in the market, including readily-available pricing sources for the identical underlying security which may not be actively traded. The Company's fixed income available-for-sale securities consist of high quality, investment grade securities from diverse issuers. The valuation techniques used to measure the fair value of the Company's marketable securities were derived from non-binding market consensus prices that are corroborated by observable market data and quoted market prices for similar instruments.

Note 4 – Balance Sheet Components

Marketable Securities

The following tables summarize the Company's marketable securities by significant investment categories (in thousands):

	September 30, 2022		
	Amortized Cost	**Unrealized Loss**	**Fair Value**
Commercial paper	$ 57,146	$ —	$ 57,146
U.S. Treasury and government debt securities	56,989	(221)	56,768
Total	$ 114,135	$ (221)	$ 113,914

	December 31, 2021		
	Amortized Cost	**Unrealized Loss**	**Fair Value**
Commercial paper	$ 50,954	$ —	$ 50,954
U.S. Treasury and government debt securities	26,203	(36)	26,167
Total	$ 77,157	$ (36)	$ 77,121

The remaining contractual maturity of all marketable securities was within one year as of September 30, 2022 and December 31, 2021. Realized gains and losses were immaterial for the three and nine months ended September 30, 2022 and 2021. As of September 30, 2022 and 2021, there were no securities that were in an unrealized loss position for more than twelve months.

Property, Equipment and Software, Net

Property, equipment and software, net consisted of the following (in thousands):

	September 30, 2022	**December 31, 2021**
Internal-use software	$ 40,871	$ 30,581
Network hardware, computer equipment and software	127,878	92,561
Leasehold improvements	3,774	2,426
Furniture and fixtures	1,678	1,448
Property, equipment and software, gross	174,201	127,016
Less: accumulated depreciation and amortization	(99,226)	(76,876)
Total property, equipment and software, net	$ 74,975	$ 50,140

Depreciation and amortization expense related to property, equipment, and software (excluding amortization of internal-use software) was $6.4 million and $4.4 million for the three months ended September 30, 2022 and 2021, respectively, and $16.3 million and $10.7 million for the nine months ended September 30, 2022 and 2021, respectively.

The Company capitalized $3.5 million and $2.6 million in software development costs during the three months ended September 30, 2022 and 2021, respectively, and $10.3 million and $7.2 million for the nine months ended September 30, 2022 and 2021, respectively. Amortization expense of internal-use software was $2.6 million and $1.9 million during the three months ended September 30, 2022 and 2021, respectively, and $7.2 million and $5.3 million for the nine months ended September 30, 2022 and 2021. These costs are included within cost of revenue in the condensed consolidated statements of operations.

The Company did not recognize any impairment charges on its long-lived assets during the nine months ended September 30, 2022 and 2021, respectively.

Acquisition-related Intangible Assets, Net

Acquisition-related intangible assets, net consisted of the following (in thousands):

	September 30, 2022	December 31, 2021
Developed technology	$ 7,900	$ —
Customer relationships	1,000	—
Acquisition-related intangible assets, gross	8,900	—
Less: accumulated amortization	(81)	—
Total acquisition-related intangible assets, net	$ 8,819	$ —

The amortization period for developed technology and customer relationships is 5 years and 2 years, respectively. Amortization expense related to acquisition-related intangibles was $0.1 million for the three and nine months ended September 30, 2022.

As of September 30, 2022, estimated future amortization expense for acquisition-related intangible assets was as follows (in thousands):

Remainder of 2022	$ 520
2023	2,080
2024	1,936
2025	1,580
2026	1,580
Thereafter	1,123
Total estimated future amortization expense for acquisition-related intangible assets	$ 8,819

Accounts Payable

Accounts payable consisted of the following (in thousands):

	September 30, 2022	December 31, 2021
Payable to publishers	$ 238,358	$ 235,440
Trade payables	20,120	8,881
Total accounts payable	$ 258,478	$ 244,321

Accrued Liabilities

Accrued liabilities consisted of the following (in thousands):

	September 30, 2022	December 31, 2021
Accrued compensation	$ 12,563	$ 17,271
Accrued and other current liabilities	2,256	1,509
Total accrued liabilities	$ 14,819	$ 18,780

Note 5 – Loan and Security Agreement

In June 2021, the Company amended and restated its loan and security agreement (the "Loan Agreement") with Silicon Valley Bank ("SVB"). The Loan Agreement provides a senior secured revolving credit facility of up to $25.0 million or 80% of eligible accounts receivable less certain reserves, minus the aggregate principal amount of all outstanding advances. Interest accrues on advances under the revolving line of credit at a variable rate equal to the greater of prime rate or 3.25%. As of September 30, 2022, the applicable interest rate under the revolving line of credit was 6.25%. An unused revolver fee in the amount of 0.40% per annum of the average unused portion of the revolver line is charged and is payable quarterly in arrears in any quarter where the average closing outstanding balance is less than $5.0 million. The maturity date of the revolving line of credit is June 6, 2024. As of September 30, 2022, there were no outstanding advances under the revolving line of credit.

The Company's obligations under the line of credit and the letters of credit (described in Note 8) with SVB are secured by substantially all of its assets excluding its intellectual property. The Loan Agreement contains affirmative covenants including financial covenants that, among other things, require the Company to maintain an adjusted quick ratio of no less than 1.0 to 1.0. The adjusted quick ratio is defined as the ratio of unrestricted cash and cash equivalents at SVB, plus billed accounts receivable to total accounts payable plus all SVB loans outstanding and outstanding letters of credit. The Loan Agreement also restricts the Company from paying dividends to stockholders without prior consent from SVB. The Company was in compliance with the financial covenants as of September 30, 2022.

On October 17, 2022, the Company entered into a Senior Secured Credit Facilities Credit Agreement with the several lenders parties thereto, and Silicon Valley Bank, as administrative agent, lead arranger, issuing lender, and swingline lender. In connection with the entry into the Credit Agreement, the Company's existing Loan Agreement described above was terminated. For additional information, see Note 14, "Subsequent Events."

Note 6 – Leases

Operating lease cost is recognized on a straight-line basis over the lease term. Finance lease cost is recognized as a combination of the amortization expense for the right-of-use assets and interest expense for the outstanding lease liabilities, and results in a front-loaded expense pattern over the lease term.

The components of lease cost were as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Operating lease cost	$ 1,759	$ 592	$ 5,059	$ 1,846
Finance lease cost - amortization of right-of-use assets	43	—	130	—
Finance lease cost - interest on lease liabilities	4	—	14	—
Total lease cost	$ 1,806	$ 592	$ 5,203	$ 1,846

No sublease income was recognized during the nine months ended September 30, 2022 and 2021. Short-term and variable lease expenses are not material to the Company's condensed consolidated financial statements.

As of September 30, 2022, a weighted average discount rate of 3.40% and 2.24% has been applied to the remaining operating and finance lease payments, respectively, to calculate the lease liabilities included within the condensed consolidated balance sheets. The weighted average remaining lease term of operating and finance leases is 4.8 and 5.5 years, respectively, as of September 30, 2022.

As of September 30, 2022, the maturities of lease liabilities under operating and finance leases were as follows (in thousands):

	Operating Leases	Finance Leases	Total
Remainder of 2022	$ 1,688	$ 34	$ 1,722
2023	6,446	140	6,586
2024	6,518	145	6,663
2025	5,155	149	5,304
2026	5,377	153	5,530
Thereafter	5,242	198	5,440
Total minimum lease payments	$ 30,426	$ 819	$ 31,245
Less: imputed interest	(2,293)	(49)	(2,342)
Total present value of lease liabilities	$ 28,133	$ 770	$ 28,903

Note 7 – Business Combination

On September 16, 2022, the Company acquired all outstanding stock of ConsultMates, Inc. (dba "Martin"), a media measurement and reporting platform, for $30.8 million. The acquisition is in response to growing demand from the Company's buy-side customers for enhanced tools to take advantage of the Company's global omnichannel inventory, including market-leading addressability solutions and innovative technology to enable supply path optimization. The assets acquired and liabilities assumed were recorded at fair value. The purchase price excludes $14.2 million of post-acquisition cash compensation arrangements for certain key acquired employees to be paid ratably over three years following the closing of the acquisition (subject to forfeiture upon termination). The purchase price was attributed to $7.9 million of developed technology intangible assets (to be amortized over an estimated useful life of 5 years), $1.0 million of customer relationship intangible assets (to be amortized over an estimated useful life of 2 years), $23.6 million of goodwill, $1.1 million of deferred tax liabilities, and $0.6 million of net liabilities assumed. The fair values of assets acquired and liabilities assumed may change over the measurement period as additional information is received. The measurement period will end no later than one year from the acquisition date. The goodwill recognized was primarily attributable to the assembled workforce and the expected synergies from integrating Martin's technology into the Company's platform. Goodwill is not expected to be deductible for tax purposes. The financial results of Martin are included in the Company's condensed consolidated financial statements from the date of acquisition. Separate operating results and pro forma results of operations for Martin have not been presented as the effect of this acquisition was not material to the Company's financial results. Acquisition-related costs were $0.9 million and are included in general and administrative expenses in the condensed consolidated statements of operations for the three and nine months ended September 30, 2022.

Note 8 – Commitments and Contingencies

Purchase Obligations

The Company's purchase obligations primarily relate to minimum contractual payments due to data center providers. During the three and nine months ended September 30, 2022, there were no material changes outside of the normal course of business to the Company's non-cancelable purchase obligations disclosed in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

Letters of Credit

As of September 30, 2022, the Company had two irrevocable letters of credit outstanding related to non-cancelable facilities leases in the amounts of $3.5 million and $0.5 million, with annual automatic renewal and final expiration dates in July 2028 and April 2025, respectively. As of December 31, 2021, the Company had two irrevocable letters of credit outstanding related to non-cancelable facilities leases in the amounts of $3.5 million and $0.7 million, with annual automatic renewal and final expiration dates in July 2028 and June 2022, respectively.

Legal Matters

From time to time, the Company has become involved in claims and other legal matters arising in the normal course of business. The Company investigates these claims as they arise and accrues for contingencies when the Company believes that a loss is probable and that the Company can reasonably estimate the amount of any such loss. The Company has made an assessment of the probability of incurring any such losses and whether or not those losses are estimable and although claims are inherently unpredictable, the Company concluded that these losses are not material to the Company's business, financial position, results of operations, or cash flows. To the extent there is a reasonable possibility that a loss exceeding amounts already recognized may be incurred, and the amount of such additional loss would be material, the Company will either disclose the estimated additional loss or state that such an estimate cannot be made.

Indemnification

In the normal course of business, the Company enters into contracts and agreements that contain a variety of representations and warranties and provide for general indemnification. The Company's exposure under these agreements is unknown because it involves future claims that may be made against the Company but have not yet been made. To date, the Company has not paid any material claims or been required to defend any actions related to its indemnification obligations. However, the Company may record charges in the future as a result of these indemnification obligations. In addition, the Company has indemnification agreements with certain of its directors and executive officers that require it, among other things, to indemnify them against certain liabilities that may arise due to their status or service as directors or officers of the Company. The terms of such obligations may vary.

Note 9 – Stockholders' Equity and Equity Incentive Plans

Equity Incentive Plans

The Company maintains the 2020 Equity Incentive Plan ("2020 Plan"), pursuant to which the Company may grant stock options, restricted stock awards, stock appreciation rights, restricted stock units ("RSUs"), deferred stock units ("DSUs") performance awards, and stock bonus awards. As of September 30, 2022, the Company has reserved 7,333,638 shares of Class A common stock for the issuance of awards under the 2020 Plan. These available shares will increase automatically on January 1 for each of the first ten calendar years during the term of the 2020 Plan by the number of shares equal to the lesser of five percent (5%) of the aggregate number of outstanding shares of all classes of the Company's common stock outstanding as of the immediately preceding December 31, or a number as may be determined by the Company's board of directors or compensation committee.

To the extent outstanding awards under the 2017 Plan and the 2006 Plan are forfeited, expire unexercised, or would otherwise have been returned to the share reserve under the Prior Plans, the shares of Class B common stock subject to such awards instead will be available for future issuance as Class A common stock under the 2020 Plan. No new awards were issued under the 2006 Plan or 2017 Plan after the effective date of the 2020 Plan.

Stock Options

The following table summarizes stock option activity and related information under the Company's equity incentive plans:

	Stock Options			
	Number of Shares Underlying Outstanding Options	Weighted-Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (in thousands)
Outstanding — December 31, 2021	6,542,351	$ 6.08	6.95	$ 184,727
Options granted	450,153	26.05		
Options exercised	(304,988)	3.48		
Options canceled	(96,179)	12.22		
Options expired	(160)	$ 3.70		
Outstanding — September 30, 2022	6,591,177	$ 7.48	6.39	$ 77,296
Vested and exercisable — September 30, 2022	4,893,334	$ 4.68	5.76	$ 64,664

As of September 30, 2022, unrecognized stock-based compensation of $16.5 million related to unvested stock options will be recognized on a straight-line basis over a weighted average period of 2.37 years.

Restricted Stock Units

The following table summarizes RSU activity and related information under the Company's 2020 Plan:

	RSUs	
	Number of Shares	Weighted-Average Grant Date Fair Value per Share
Unvested — December 31, 2021	483,302	$ 35.23
Granted	1,416,994	$ 25.91
Vested	(207,533)	$ 31.32
Canceled/Forfeited	(125,331)	$ 30.10
Unvested — September 30, 2022	1,567,432	$ 27.73

As of September 30, 2022, unrecognized stock-based compensation of $40.1 million related to unvested RSUs will be recognized on a straight-line basis over a weighted average period of 3.20 years.

2020 Employee Stock Purchase Plan

In November 2020, the Company's board of directors adopted, and its stockholders approved, the 2020 Employee Stock Purchase Plan ("ESPP"), which became effective in connection with the Company's IPO. A total of 500,000 shares of the Company's Class A common stock were initially reserved for issuance under the ESPP.

The aggregate number of shares reserved for issuance under the ESPP will increase automatically on January 1st of each of the first ten calendar years during the term of the ESPP by the number of shares equal to the lesser of (a) 1% of the total outstanding shares of all classes of the Company's common stock as of the immediately preceding December 31, and (b) such number of shares of common stock as determined by the Company's board of directors. The aggregate number of shares issued over the term of the ESPP may not exceed 7,500,000 shares of Class A common stock. As of September 30, 2022, the Company had reserved 571,766 shares of its Class A common stock for issuance under the ESPP.

Under the ESPP, Class A common stock will be purchased for the accounts of employees participating in the ESPP on each purchase date at a price per share equal to 85% of the lesser of: (a) the fair market value on the offering date or (b) the fair market value on the purchase date. The ESPP provides for, at maximum, 27 month offering periods and each offering period may consist of one or more six-month purchase periods, whereby the latest offering period commenced on June 1, 2022, and the offering periods thereafter consist of two six-month purchase periods ending May 31, 2023. As of September 30, 2022, $0.5 million has been withheld on behalf of employees for a future purchase under the ESPP due to the timing of payroll deductions and is included in accrued and other current liabilities. For the nine months ended September 30, 2022, there were 141,709 shares of our Class A common stock purchased under the ESPP.

As of September 30, 2022, unrecognized stock-based compensation expense related to the ESPP was $0.6 million, which is expected to be recognized over a weighted-average period of 0.67 years.

Stock-Based Compensation

Total stock-based compensation recognized in the condensed consolidated statements of operations was as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Cost of revenue	$ 256	$ 233	$ 861	$ 605
Technology and development	683	586	2,467	1,646
Sales and marketing	1,735	1,388	5,740	3,839
General and administrative	1,981	1,507	6,114	4,418
Total stock-based compensation	4,655	3,714	15,182	10,508
Tax benefit from stock-based compensation	(1,245)	(521)	(2,951)	(1,401)
Total stock-based compensation, net of tax effect	$ 3,410	$ 3,193	$ 12,231	$ 9,107

Note 10 – Net Income Per Share Attributable to Common Stockholders

The Company has two classes of common stock, Class A and Class B. Basic and diluted earnings per share ("EPS") attributable to common stockholders for Class A and Class B common stock were the same because they were entitled to the same liquidation and dividend rights.

The following table sets forth the computation of the Company's basic and diluted net income per share (in thousands, except share and per share data):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Numerator:				
Net income attributable to common stockholders – basic	$ 3,326	$ 13,526	$ 15,924	$ 28,365
Denominator:				
Weighted average common shares outstanding – basic	52,435,601	50,559,636	52,168,853	49,754,449
Net income per share attributable to common stockholders – basic:	$ 0.06	$ 0.27	$ 0.31	$ 0.57
Numerator:				
Net income attributable to common stockholders – diluted	$ 3,326	$ 13,526	$ 15,924	$ 28,365
Denominator:				
Weighted average shares outstanding – basic	52,435,601	50,559,636	52,168,853	49,754,449
Options to purchase common stock	4,489,223	5,864,634	4,700,898	6,739,481
Restricted stock	19,406	11,553	9,926	23,222
Employee stock purchase plan shares	—	63,068	15,485	58,715
Weighted average shares outstanding – diluted	56,944,230	56,498,891	56,895,162	56,575,867
Net income per share attributable to common stockholders – diluted	$ 0.06	$ 0.24	$ 0.28	$ 0.50

The following weighted-average outstanding shares of common stock equivalents were excluded from the computation of diluted net income per share attributable to common stockholders for the periods presented because including them would have been anti-dilutive:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Options to purchase common stock	1,059,602	892,639	1,008,066	668,294
Unvested restricted stock units	1,284,870	—	1,095,729	—
ESPP	133,539	—	66,142	—
Total excludable from net income per share attributable to common stockholders – diluted	2,478,011	892,639	2,169,937	668,294

Note 11 – Income Taxes

The Company computes its provision for income taxes by applying the estimated annual effective tax rate to pretax income and adjusts the provision for discrete tax items recorded in the period.

The Company recorded a provision for income taxes of $1.4 million and $0.8 million for the three months ended September 30, 2022 and 2021, respectively, and $4.7 million and $2.7 million for the nine months ended September 30, 2022 and 2021, respectively.

The effective income tax rate was 30% and 6% for the three months ended September 30, 2022 and 2021, respectively, and 23% and 9% for the nine months ended September 30, 2022 and 2021, respectively. The income tax provision for the nine months ended September 30, 2022 is related to an increase in nondeductible stock-based compensation, Section 162(m) limitation on the tax deductibility of officers compensation, state taxes and global intangible low-taxed income (GILTI) inclusion offset by deductions for equity awards, tax benefit from foreign-derived intangible income (FDII), foreign tax credits, federal and state research credits, and other effects created by the capitalization and amortization of R&D expenses for tax purposes starting on January 1, 2022, which was primarily due to a change in Section 174 of the Tax Cuts and Jobs Act of 2017.

Realization of the Company's deferred tax assets is dependent primarily on the generation of future taxable income. In considering the need for a valuation allowance, the Company considers its historical, as well as future projected, taxable income along with other objectively verifiable evidence. Objectively verifiable evidence includes the Company's realization of tax attributes, assessment of tax credits, and utilization of net operating loss carryforwards during the year.

Note 12 – Segment Information

The following table presents total revenue by geographic area based on the publisher's billing address (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
United States	$ 40,780	$ 36,451	$ 111,826	$ 93,935
EMEA	16,525	15,552	48,210	41,306
APAC	6,456	4,909	19,352	13,245
Rest of the world	739	1,174	2,696	2,866
Total	$ 64,500	$ 58,086	$ 182,084	$ 151,352

The following table presents long-lived assets, net, which consist primarily of property and equipment and operating lease right-of-use assets, by geographic area (in thousands):

	September 30, 2022	December 31, 2021
United States	$ 83,975	$ 63,015
Rest of the world	18,733	8,738
Total	$ 102,708	$ 71,753

Note 13 – 401(k) Plan

The Company has a 401(k) Savings Plan (the "401(k) Plan") that qualifies as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Under the 401(k) Plan, participating employees may elect to contribute up to 100% of their eligible compensation, subject to certain limitations. The 401(k) Plan provides for a discretionary employer matching contribution. The Company made $0.9 million in matching contribution to the 401(k) Plan for the nine months ended September 30, 2022 and no matching contribution for the nine months ended September 30, 2021.

Note 14 – Subsequent Event

On October 17, 2022, the Company entered into a Senior Secured Credit Facilities Credit Agreement (the "Credit Agreement") with the several lenders parties thereto (the "Lenders"), and Silicon Valley Bank, as administrative agent, lead arranger, issuing lender, and swingline lender.

The Credit Agreement provides a revolving credit facility in an aggregate principal amount of $110.0 million ("the Revolving Credit Facility"), including a $25.0 million letter of credit sub-facility and a $25.0 million swingline sub-facility. The Company may, subject to certain customary conditions, on one or more occasions increase commitments under the Revolving Credit Facility in an amount not to exceed $90.0 million in the aggregate (the "Incremental Facility"). Each Lender will have discretion to determine whether it will participate in any Incremental Facility. The Credit Agreement matures on October 17, 2027. In connection with the entry into the Credit Agreement, the Company's existing Third Amended and Restated Loan and Security Agreement, as amended, dated as of November 7, 2017 (the "Existing Credit Agreement") was terminated.

Borrowings under the Revolving Credit Facility will accrue interest at rates equal, at the Company's election, to (i) the applicable secured overnight financing rate ("SOFR"), plus the applicable margin for such loans, or (ii) the alternate base rate ("ABR"), which is defined as the highest of (a) the prime rate in effect from time to time, (b) the federal funds effective rate in effect from time to time plus 0.50%, and (c) the adjusted term SOFR for a one (1) month tenor in effect from time to time plus 1.0%, plus the applicable margin for such loans. The applicable margin for borrowings bearing interest on the SOFR ranges from 2.00% to 2.75%, and the applicable margin for borrowings bearing interest based on the ABR ranges from 1.00% to 1.75%. The Company will pay a quarterly commitment fee during the term of the Credit Agreement for the non-use of available funds ranging from 0.25% to 0.35%. In addition, the Credit Agreement provides a mechanism to determine a successor reference rate to the applicable reference rate if, among other things, the applicable reference rate becomes unavailable or is generally replaced as a benchmark interest rate.

The Credit Agreement contains customary representations and warranties as well as customary affirmative and negative covenants and customary events of default.

The Company may use amounts borrowed under the Credit Agreement to refinance the Existing Credit Agreement, for general corporate purposes or working capital financing. The Company may borrow additional amounts under the Credit Agreement from time to time as opportunities and needs arise.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

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, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements generally are identified by the words "believe," "may," "will," "potentially," "estimate," "continue," "anticipate," "intend," "could," "would," "project," "plan," "expect," and similar expressions. Examples of forward-looking statements include, but are not limited to, statements we make regarding our ability to maintain our growth and profitability, our ability to attract and retain publishers, our expectations concerning the advertising industry, and our ability to successfully navigate our business through the COVID-19 pandemic.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in "Risk Factors" and elsewhere in this Quarterly Report on Form 10-Q. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties, and assumptions, the forward-looking events and circumstances discussed in this Quarterly Report on Form 10-Q may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance, or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this Quarterly Report on Form 10-Q to conform these statements to actual results or to changes in our expectations, except as required by law.

The following discussion should be read in conjunction with the unaudited condensed consolidated financial statements and the related notes thereto included elsewhere in this Quarterly Report on Form 10-Q, and the audited consolidated financial statements and notes thereto and management's discussion and analysis of financial condition and results of operations for the fiscal year ended December 31, 2021 included in our Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission (the "SEC").

Overview

We are an independent technology company seeking to maximize customer value by delivering digital advertising's supply chain of the future. Our sell-side platform empowers the world's leading digital content creators across the open internet to control access to their inventory and increase monetization by enabling marketers to drive ROI and reach addressable audiences across ad formats and devices. Since 2006, our infrastructure-driven approach has allowed for the efficient processing and utilization of data in real time. By delivering scalable and flexible programmatic innovation, we improve outcomes for our customers while championing a vibrant and transparent digital advertising supply chain.

Our specialized cloud infrastructure platform provides superior monetization for publishers by increasing the value of an impression and providing incremental demand through our deep and growing relationships with buyers. We are aligned with our publisher and app developer partners by being independent. We do not own media and therefore do not have a vested interest in driving ad revenue to specific media properties. Our global platform is omnichannel, supporting a wide array of ad formats and digital device types, including mobile app, mobile web, desktop, display, video, over-the-top ("OTT"), connected television ("CTV"), and rich media.

In September 2022, our platform efficiently processed approximately 491 billion ad impressions daily, each in a fraction of a second. As of September 30, 2022, we served approximately 1,600 publishers and app developers representing over 99,000 individual domains and apps worldwide on our platform across a diverse group of content verticals such as news, e-commerce, gaming, media, weather, fashion, technology, and more, including many of the leading digital companies such as Yahoo, formerly Verizon Media Group, and News Corp. We have demonstrated that we can retain and grow revenues from our publisher customers, as evidenced by our net dollar-based retention rate of 120% for the trailing twelve months ended September 30, 2022 and 157% for the trailing twelve months ended September 30, 2021.

We generate revenue from publishers primarily through revenue share agreements, generally one-year contracts that renew automatically for successive one-year periods, unless terminated prior to renewal. We primarily work with publishers and app developers who allow us direct access to their ad inventory, as well as select channel partners that meet our quality and scale thresholds. We refer to our publishers, app developers, and channel partners collectively as our publishers.

We enter into written service agreements with our DSP buyers that allow them to use our platform to buy ad inventory, but we earn revenue from our publishers. Our platform service agreements with DSPs generally have one-year terms that renew automatically for successive one-year periods, unless terminated prior to renewal. We also negotiate Supply Path Optimization ("SPO") agreements with agencies and advertisers that encourage these buyers to spend a higher share of their advertising budgets on our platform. SPO agreements typically have a one-year term and renewal terms are generally discussed one quarter prior to a new term. The effect of these SPO agreements is to increase the volume of ad spend on our platform without corresponding increases in technology costs.

On September 16, 2022, we acquired all outstanding stock of ConsultMates, Inc. (dba "Martin"), a media measurement and reporting platform, for $30.8 million. The acquisition is in response to growing demand from our buy-side customers for enhanced tools to take advantage of our global omnichannel inventory, including market-leading addressability solutions and innovative technology to enable supply path optimization. Our condensed consolidated results of operations for the three months ended September 30, 2022 include the operating results of Martin from the date of acquisition. For additional information, see Note 7, "Business Combination" to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

In the third quarter of 2022, mobile (including mobile video) and video (including OTT/CTV) combined comprised approximately 73% of our revenue. We anticipate mobile to continue increasing as a percentage of our total impressions and revenue in the future. We further expect video to constitute an increasingly important component of our business.

COVID-19 and Macroeconomic Factors

The COVID-19 pandemic and its variants resulted, and may continue to result, in a global slowdown of economic activity across a broad variety of goods and services, including those provided by certain of the advertisers on our platform. This situation could also potentially limit our ad buyers' budgets or disrupt sales channels and advertising and marketing activities generally. As new variants of COVID-19 emerge and global governments take a variety of approaches to limiting its spread, these disruptive effects may continue for an unknown period of time, with varied effects across markets. With the decline in economic activity, our revenue growth slowed and turned negative in the second quarter of 2020. Although our revenue subsequently returned to growth, the impact of the pandemic on our future growth and our results of operations is unknown and we are unable to accurately predict the future impact. The extent of the impact of the COVID-19 pandemic on our operational and financial performance will depend on a variety of factors, including the duration and spread of the virus, including new variants, and its impact on our publishers, ad buyers, industry, and employees, all of which are uncertain at this time and cannot be accurately predicted.

In addition, ongoing interest rate increases, foreign currency fluctuation and persistent inflation in the U.S. and other markets globally may increase the risk of economic volatility and dislocation in the capital or credit markets in the U.S. or globally. To date, we have not observed material impacts in our business or outlook, but we intend to continue to monitor macroeconomic conditions closely and may determine to take certain financial or operational actions in response to such conditions to the extent our business begins to be adversely impacted.

See "Risk Factors" for further discussion of the risks related to the COVID-19 pandemic, inflation, rising interest rates, and foreign currency fluctuations on our business.

Business Highlights

The table below summarizes the financial highlights of our business performance:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(in thousands)			
Revenue	$ 64,500	$ 58,086	$ 182,084	$ 151,352
Operating income	$ 9,622	$ 14,048	$ 23,997	$ 30,823
Net income	$ 3,326	$ 13,526	$ 15,924	$ 28,365
Adjusted EBITDA[(1)]	$ 25,331	$ 24,264	$ 65,386	$ 57,352
Net cash provided by operating activities	$ 28,072	$ 26,439	$ 67,854	$ 60,202

(1) For a definition of Adjusted EBITDA, an explanation of our management's use of this measure, and a reconciliation of Adjusted EBITDA to net income, see "Non-GAAP Financial Measure."

Key Factors Affecting Our Performance

We believe our growth and financial performance are dependent on many factors, including those described below.

Growing access to valuable ad impressions

Our recent growth has been driven by a variety of factors including increased access to mobile web (display and video) and mobile app (display and video) impressions and desktop video impressions. Our performance is affected by our ability to maintain and grow our access to valuable ad impressions from current publishers as well as through new relationships with publishers. The number of ad impressions processed on our platform was approximately 42.1 trillion and 23.9 trillion for the three months ended September 30, 2022 and 2021, respectively.

Monetizing ad impressions for publishers and buyers

We focus on monetizing digital impressions by coordinating daily over a hundred billion real-time auctions and nearly a trillion bids globally, using our specialized cloud software, machine learning algorithms, and scaled transaction infrastructure. Valuable ad impressions are transparent and data rich, viewable by humans, and verifiable. Each ad impression we auction consists of over 485 independent data parameters, which can yield valuable insights if recorded and analyzed properly. This processing of voluminous data for each ad impression must occur in less than half a second as consumers expect a seamless digital ad experience. By deploying our specialized software and hardware and continuously optimizing our machine learning algorithms, we are able to derive superior outcomes by increasing advertiser return on investment ("ROI") and publisher revenue, while increasing the cost efficiency of our platform and our customers' businesses. We continually assess impressions from new and existing publishers through a rigorous validation process. We add or remove impressions from our platform based on an assessment of the projected value of the impressions, which is influenced by the type of publisher and its related consumers, as well as the potential volume of monetizable impressions and ad format types, such as digital video. We continuously create and iterate algorithms that leverage vast datasets flowing through our infrastructure to improve the liquidity in our marketplace. Our ability to drive successful outcomes in the real-time auction process on behalf of our publishers and buyers will affect our operating results.

Identifying valuable ad impressions that we can profitably monetize at scale

We continuously review our available inventory from existing publishers across every format (mobile, desktop, digital video, OTT, CTV, and rich media). The factors we consider to determine which impressions we process include transparency, viewability, and whether or not the impression is human sourced. By consistently applying these criteria, we believe that the ad impressions we process will be valuable and marketable to advertisers. In addition, using a combination of proprietary analysis driven by machine learning algorithms that are continuously updated along with specialized third-party tools, we aim to exclude low value impressions from our platform and, in some cases, may suspend certain publishers, or particular publisher sites and apps, from using our platform if they do not meet our standards. Our confidence in our ability to achieve our quality goals is backed by a fraud-free guarantee to all of our buyers which we introduced in 2017. We believe that this rigorous commitment to quality helps us maintain our reputation as a leader in the programmatic advertising ecosystem. Our financial performance depends in part on how efficiently and effectively we can conduct these activities at scale.

Increasing revenue from publishers and advertising spend from buyers

We leverage our extensive platform capabilities and the subject matter expertise of our team members to grow revenue from our publishers and increase advertising spending from our buyers. Our sales and marketing team includes customer success pods to enhance customer knowledge and implementation of best practices. Once we onboard a new customer, we seek to expand our relationship with existing publishers by establishing multiple header bidding integrations by leveraging our omnichannel capabilities to maximize our access to publishers' ad formats and devices, and expanding into the various properties that a publisher may own around the world. We may also up-sell additional products to publisher customers including our header bidding management, identity, and audience solutions. We automate workflow processes whenever feasible to drive predictable and value-added outcomes for our customers and increase productivity of our organization.

Net dollar-based retention rate is an important indicator of publisher satisfaction and usage of our platform, as well as potential revenue for future periods. We calculate our net dollar-based retention rate at the end of each quarter for a cumulative twelve months. We calculate our net dollar-based retention rate by starting with the revenue from publishers in the prior trailing twelve-month period ("Prior Period Revenue"). We then calculate the revenue from these same publishers in the current trailing twelve-month period ("Current Period Revenue"). Current Period Revenue includes any upsells and is net of contraction or attrition, but excludes revenue from new publishers. Our net dollar-based retention rate equals the Current Period Revenue divided by Prior Period Revenue. Our net dollar-based retention rate was 120% for the trailing twelve months ended September 30, 2022 and 157% for the trailing twelve months ended September 30, 2021.

We work with DSPs to help them reduce their costs and improve advertiser ROI, which in turn makes us the specialized cloud infrastructure platform of choice for many of our buying partners. As buyers increasingly consolidate their spending with fewer larger technology platforms, we seek to bring an increased proportion of their digital ad spending to our platform through direct deals. We have entered into SPO agreements directly with buyers, advertisers and agencies through various arrangements ranging from custom data and workflow integrations, product features, and volume-based business terms. The effect of these SPO agreements is to increase the volume of ad spend on our platform without corresponding increases in technology costs.

Managing industry dynamics

We operate in the rapidly evolving digital advertising industry. Due to the scale and complexity of the digital advertising ecosystem, direct sales via manual, person-to-person processes are insufficient for delivering a real-time, personalized ad experience, creating the need for programmatic advertising. In turn, advances in programmatic technologies have enabled publishers to auction their ad inventory to more buyers, simultaneously, and in real time through a process referred to as header bidding. Header bidding has also provided advertisers with transparent access to ad impressions. As advertisers keep pace with ongoing changes in the way that consumers view and interact with digital media there will be further innovation and we anticipate that header bidding will be extended into new areas such as OTT/CTV. We believe our focus on publishers and buyers has allowed us to understand their needs and our ongoing innovation has enabled us to quickly adapt to changes in the industry, develop new solutions and do so cost effectively. Our performance depends on our ability to keep pace with industry changes such as header bidding and the evolving needs of our publishers and buyers while continuing our cost efficiency.

Expanding and managing investments

We make software and hardware infrastructure investment decisions to meet expected increases in ad impressions on both a global and regional data center level throughout the calendar year based on the projected quantity, ad format type, and associated data requirements. In parallel, we seek to continuously improve our infrastructure utilization. Our ability to identify and monetize high value impressions allows us to operate more efficiently because the cost of processing low-value impressions and high-value impressions are approximately the same. We believe that increasing utilization of our platform leads to improved outcomes for our customers and more efficient and effective operations for us. To achieve improved utilization, we leverage the data on our platform through extensive application of artificial intelligence technologies, including machine learning and natural language processing. The magnitude and timing of our investments in our software and hardware may lead to fluctuations in our operating results.

Expanding internationally

We plan to continue expanding our international presence and making additional investments in sales and marketing and infrastructure to support our long-term growth and to position ourselves for expected increases in the penetration of programmatic advertising globally. We expect programmatic advertising to grow at different rates in different geographic markets. Our publishers outside of the United States typically have smaller amounts of programmatic inventory, and as a result, our sales and marketing expenses associated with non-U.S. publishers are generally proportionally higher. We are constantly evaluating new markets with a strategy to use our existing infrastructure and adjacent sales offices, or by expanding our infrastructure footprint and placing personnel directly in those markets. Our ability to efficiently expand into new markets will affect our operating results.

Managing seasonality

The global advertising industry experiences seasonal trends that affect the vast majority of participants in the digital advertising ecosystem. Most notably, advertisers have historically spent relatively more in the fourth quarter of the calendar year to coincide with the holiday shopping season, and relatively less in the first quarter. We expect seasonality trends to continue, and our ability to manage our resources in anticipation of these trends will affect our operating results.

Non-GAAP Financial Measure

In addition to our results determined in accordance with U.S. generally accepted accounting principles ("GAAP"), including, in particular, operating income, net cash provided by operating activities, and net income, we believe that Adjusted EBITDA, a non-GAAP measure, is useful in evaluating our operating performance. We define Adjusted EBITDA as net income adjusted for stock-based compensation expense, depreciation and amortization, unrealized loss and impairment of equity investment, interest income, acquisition-related and other expenses, and provision for income taxes.

The following table presents a reconciliation of Adjusted EBITDA to net income for each of the periods indicated:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(in thousands)		(in thousands)	
Net income	$ 3,326	$ 13,526	$ 15,924	$ 28,365
Add back (deduct):				
Stock-based compensation	4,655	3,714	15,182	10,508
Depreciation and amortization	9,082	6,304	23,587	15,992
Unrealized loss and impairment of equity investment	6,405	—	5,948	—
Interest income	(596)	(79)	(1,044)	(208)
Acquisition-related and other expenses [(1)]	1,061	—	1,061	—
Provision for income taxes	1,398	799	4,728	2,695
Adjusted EBITDA	$ 25,331	$ 24,264	$ 65,386	$ 57,352

(1) We exclude acquisition-related and other expenses incurred in connection with our acquisition of Martin from Adjusted EBITDA because we do not believe such expenses are reflective of our ongoing core operations. Acquisition-related expenses incurred in connection with our acquisition of Martin include third-party transaction costs. Other expenses incurred in connection with our acquisition of Martin include post-acquisition cash compensation arrangements for certain key acquired employees to be paid ratably over three years following the closing of the acquisition (subject to forfeiture upon termination). For additional information, see Note 7, "Business Combination" to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

Although Adjusted EBITDA is used by many investors and securities analysts in their evaluations of companies, it has limitations as an analytical tool, and should not be considered in isolation or as a substitute for analysis of our results of operations as reported under GAAP. Other companies in our industry may calculate Adjusted EBITDA differently than we do, limiting its usefulness as a comparative measure.

Key Components of Our Results of Operations

Revenue

We generate revenue from publishers who use our platform. Our platform allows publishers to sell, in real time, customized ad inventory to buyers and provides automated inventory management and monetization tools to publishers across various device types and digital ad formats. We generate revenue primarily through fees charged to our publishers, which are generally a percentage of the value of the advertising impressions that publishers monetize on the platform. We report revenue on a net basis. This represents gross billings to buyers, net of amounts we pay publishers. We record our accounts receivable at the amount of gross billings to buyers, net of allowances, for the amounts we are responsible to collect, and we record our accounts payable at the net amount payable to publishers. Accordingly, both accounts receivable and accounts payable appear large in relation to revenue, which is reported on a net basis.

Our revenue recognition policies are discussed in more detail under "Critical Accounting Policies and Estimates."

Cost of Revenue

Cost of revenue consists of data center co-location costs, depreciation expense related to hardware supporting our platform, amortization expense related to capitalized internal-use software development costs, personnel costs, and allocated facilities costs. Personnel costs include salaries, bonuses, stock-based compensation, and employee benefit costs, and are primarily attributable to our cloud operations group, which maintains our servers, and our client operations group, which is responsible for the integration of new publishers and buyers and providing customer support for existing customers. We expect cost of revenue to generally increase in absolute dollars in future periods.

Operating Expenses

Technology and Development. Technology and development expenses consist of personnel costs, including salaries, bonuses, stock-based compensation, and employee benefits costs, allocated facilities costs, and professional services. These expenses include costs incurred in the development, implementation and maintenance of internal-use software, including platform and related infrastructure. We expend technology and development costs as incurred, except to the extent that such costs are associated with internal-use software development that qualifies for capitalization. We expect technology and development expenses to generally increase in absolute dollars in future periods.

Sales and Marketing. Sales and marketing expenses consist of personnel costs, including salaries, bonuses, stock-based compensation, and employee benefits costs, for our employees engaged in sales, sales support, marketing, business development, and customer relationship functions. Sales and marketing expenses also include expenses related to promotional, advertising and marketing activities, allocated facilities costs, travel, and entertainment primarily related to sales activity and professional services. We expect sales and marketing expenses to increase in absolute dollars in future periods.

General and Administrative. General and administrative expenses consist of personnel costs, including salaries, bonuses, stock-based compensation, and employee benefits costs for our executive, finance, legal, human resources, information technology, and other administrative employees. General and administrative expenses also include outside consulting, legal and accounting services, allocated facilities costs, and travel and entertainment primarily related to inter-office travel and conferences.

We expect to invest in corporate infrastructure and incur additional expenses associated with the transition to and operation as a public company, including increased legal and accounting costs, increased investor relations costs, higher insurance premiums, and compliance costs associated with developing the requisite infrastructure required for internal controls. As a result, we expect general and administrative expenses to increase in absolute dollars in future periods.

Total Other Income (expense), Net

Total other income (expense), net consists of interest income, unrealized gain (loss) on equity investment and other income (expense), net. Interest income is generated by investing excess cash into money market accounts and marketable securities. Unrealized gain (loss) on equity investment consists of losses on our investment in equity securities, including unrealized gains and losses from market price changes or impairment of securities we continue to hold. Other income (expense), net consists primarily of gains and losses from foreign currency exchange transactions.

We believe that investment gains and losses, whether realized from dispositions or unrealized from changes in market prices of equity securities, are generally meaningless in understanding our reported results or evaluating the economic performance of our businesses. These gains and losses have caused and will continue to cause significant volatility in our periodic earnings.

Provision for Income Taxes

The provision for income taxes consists primarily of federal, state, and foreign income taxes. Our income tax provision may be significantly affected by changes to our estimates for tax in jurisdictions in which we operate and other estimates utilized in determining the global effective tax rate. Actual results may also differ from our estimates based on changes in economic conditions. Such changes could have a substantial impact on the income tax provision. We reevaluate the judgments surrounding our estimates and make adjustments, as appropriate, each reporting period.

Our effective tax rate differs from the U.S. federal statutory income tax rate due to state taxes, foreign tax rate differences, technology and development tax credits, and stock-based compensation.

Realization of our deferred tax assets is dependent primarily on the generation of future taxable income. In considering the need for a valuation allowance, we consider our historical, as well as future projected, taxable income along with other objectively verifiable evidence. Objectively verifiable evidence includes our realization of tax attributes, assessment of tax credits, and utilization of net operating loss carryforwards during the year.

Results of Operations

The following tables set forth our condensed consolidated results of operations data and such data as a percentage of revenue for the periods presented. The period-to-period comparison of results is not necessarily indicative of results for future periods.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(in thousands)		(in thousands)	
Condensed Consolidated Statements of Operations:				
Revenue	$ 64,500	$ 58,086	$ 182,084	$ 151,352
Cost of revenue(1)	21,591	16,020	58,557	41,408
Gross profit	42,909	42,066	123,527	109,944
Operating expenses(1):				
Technology and development	5,080	4,139	14,928	11,738
Sales and marketing	16,087	15,004	50,755	41,790
General and administrative	12,120	8,875	33,847	25,593
Total operating expenses	33,287	28,018	99,530	79,121
Operating income	9,622	14,048	23,997	30,823
Total other income (expense), net	(4,898)	277	(3,345)	237
Income before income taxes	4,724	14,325	20,652	31,060
Provision for income taxes	1,398	799	4,728	2,695
Net income	$ 3,326	$ 13,526	$ 15,924	$ 28,365

(1) Amounts include stock-based compensation before tax benefit as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(in thousands)		(in thousands)	
Cost of revenue	$ 256	$ 233	$ 861	$ 605
Technology and development	683	586	2,467	1,646
Sales and marketing	1,735	1,388	5,740	3,839
General and administrative	1,981	1,507	6,114	4,418
Total stock-based compensation expense	$ 4,655	$ 3,714	$ 15,182	$ 10,508

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(as percentage of revenue)		(as percentage of revenue)	
Revenue	100 %	100 %	100 %	100 %
Cost of revenue	33	28	32	27
Gross profit	67	72	68	73
Operating expenses:				
Technology and development	8	7	8	8
Sales and marketing	25	26	28	28
General and administrative	19	15	19	17
Total operating expenses	52	48	55	53
Operating income	15	24	13	20
Total other income (expense), net	(8)	—	(2)	—
Income before income taxes	7	24	11	20
Provision for income taxes	2	1	2	2
Net income	5 %	23 %	9 %	18 %

Revenue, Cost of Revenue and Gross Profit

	Three Months Ended September 30, 2022	2021	$ Change	% Change
	(dollars in thousands)			
Revenue	$ 64,500	$ 58,086	$ 6,414	11 %
Cost of revenue	21,591	16,020	5,571	35 %
Gross profit	$ 42,909	$ 42,066	$ 843	2 %
Gross profit margin	67 %	72 %		

	Nine Months Ended September 30, 2022	2021	$ Change	% Change
	(dollars in thousands)			
Revenue	$ 182,084	$ 151,352	$ 30,732	20 %
Cost of revenue	58,557	41,408	17,149	41 %
Gross profit	$ 123,527	$ 109,944	$ 13,583	12 %
Gross profit margin	68 %	73 %		

Revenue for the three months ended September 30, 2022 increased by $6.4 million, or 11%, compared to the three months ended September 30, 2021. Revenue for the nine months ended September 30, 2022 increased by $30.7 million, or 20%, compared to the nine months ended September 30, 2021. The growth in these periods was driven by increased impressions processed on our platform from both existing and new publishers.

As of September 30, 2022, we served approximately 1,600 publishers and app developers worldwide on our platform, which represented over 79,000 domains and 20,000 apps in total, compared to approximately 1,370 publishers and app developers worldwide, which represented approximately 64,000 domains and 33,000 apps in total as of September 30, 2021. For purposes of our publisher count, we aggregate multiple business accounts from separate divisions, segments or subsidiaries into a single “master” publisher based on our assessment of the related nature of the group.

We expect revenue to continue to grow for the remainder of 2022 with mobile and omnichannel video, which is the combination of short form video and OTT/CTV, as our primary growth drivers.

Cost of revenue increased $5.6 million for the three months ended September 30, 2022 compared to the three months ended September 30, 2021, primarily due to a $2.5 million increase in depreciation of data center equipment and amortization of internal-use software, a $1.8 million increase in data centers costs, a $0.6 million increase in support and maintenance costs, and a $0.5 million increase in personnel costs as headcount increased. Overall, our cost of revenue per impression processed for the three months ended September 30, 2022 decreased by approximately 24% compared to the three months ended September 30, 2021.

Cost of revenue increased $17.1 million for the nine months ended September 30, 2022 compared to the nine months ended September 30, 2021, primarily due to a $7.2 million increase in depreciation of data center equipment and amortization of internal-use software, a $5.5 million increase in data center costs, a $0.5 million increase in professional fees, a $2.4 million increase in support and maintenance costs, and a $1.4 million increase in personnel costs as headcount increased.

Our gross margin of 67% for the three months ended September 30, 2022 decreased compared to 72% for the three months ended September 30, 2021, and our gross margin of 68% for the nine months ended September 30, 2022 decreased compared to 73% for the nine months ended September 30, 2021, primarily due to the timing of infrastructure investments.

We expect the cost of revenue to be higher in 2022 compared to 2021 in absolute dollars as we continue to expand our capacity to process impressions. Cost of revenue may fluctuate from quarter to quarter and period to period, on an absolute dollar basis and as a percentage of revenue, depending on revenue levels and the volume of transactions we process supporting those revenues, and the timing and amounts of depreciation and amortization of equipment and software.

Technology and Development

	Three Months Ended September 30,			
	2022	2021	$ Change	% Change
	(dollars in thousands)			
Technology and development	$ 5,080	$ 4,139	$ 941	23 %
Percent of revenue	8 %	7 %		

	Nine Months Ended September 30,			
	2022	2021	$ Change	% Change
	(dollars in thousands)			
Technology and development	$ 14,928	$ 11,738	$ 3,190	27 %
Percent of revenue	8 %	8 %		

The increase in technology and development costs for the three months ended September 30, 2022 was primarily due to an increase of $1.2 million in personnel costs as headcount increased, and a $0.6 million increase in facilities costs, partially offset by an increase of $0.9 million related to the capitalization of internal-use software.

The increase in technology and development costs for the nine months ended September 30, 2022 was primarily due to an increase of $5.3 million in personnel costs as headcount increased, a $1.3 million increase in facilities costs, mainly due to new office space, partially offset by an increase of $3.1 million related to the capitalization of internal-use software and $0.4 million decrease in professional services utilized.

We expect technology and development expenses to continue to increase in 2022 compared to 2021 in absolute dollars, primarily due to investment in technological innovation and additional headcount.

Sales and Marketing

	Three Months Ended September 30,			
	2022	2021	$ Change	% Change
	(dollars in thousands)			
Sales and marketing	$ 16,087	$ 15,004	$ 1,083	7 %
Percent of revenue	25 %	26 %		

	Nine Months Ended September 30,			
	2022	2021	$ Change	% Change
	(dollars in thousands)			
Sales and marketing	$ 50,755	$ 41,790	$ 8,965	21 %
Percent of revenue	28 %	28 %		

Sales and marketing costs for the three months ended September 30, 2022 increased primarily due to a $0.2 million increase in personnel costs, a $0.6 million increase in facilities costs mainly due to new office space, and a $0.2 million increase in travel expenses.

Sales and marketing costs for the nine months ended September 30, 2022 increased primarily due to a $5.0 million increase in personnel costs as headcount increased and higher stock-based compensation, a $1.8 million increase in facilities costs, mainly due to new office space, and a $1.9 million increase in marketing and travel expenses.

We expect sales and marketing expenses to increase in 2022 compared to 2021 in absolute dollars primarily due to additional headcount investment and marketing programs.

General and Administrative

	Three Months Ended September 30,			
	2022	2021	$ Change	% Change
	(dollars in thousands)			
General and administrative	$ 12,120	$ 8,875	$ 3,245	37 %
Percent of revenue	19 %	15 %		

	Nine Months Ended September 30,			
	2022	2021	$ Change	% Change
	(dollars in thousands)			
General and administrative	$ 33,847	$ 25,593	$ 8,254	32 %
Percent of revenue	19 %	17 %		

General and administrative expense increased for the three months ended September 30, 2022 primarily due to a $1.4 million increase in personnel costs associated with an increase in headcount and higher stock-based compensation costs, a $0.4 million increase in facilities costs, mainly due to new office space, a $0.9 million increase in professional services composed primarily of acquisition expenses, and a $0.3 million increase in taxes and fees.

General and administrative expense increased for the nine months ended September 30, 2022 primarily due to a $4.4 million increase in personnel costs associated with an increase in headcount and higher stock-based compensation costs, a $1.3 million increase in facilities costs, mainly due to new office space, a $1.9 million increase in professional services composed primarily of acquisition expenses, and a $0.4 million increase in taxes and fees.

We expect general and administrative expenses to increase in 2022 compared to 2021 in absolute dollars primarily due to the additional headcount.

Total Other Income (Expense), net

	Three Months Ended September 30,			
	2022	2021	$ Change	% Change
	(dollars in thousands)			
Total other income (expense), net	$ (4,898)	$ 277	$ (5,175)	(1868)%

	Nine Months Ended September 30,			
	2022	2021	$ Change	% Change
	(dollars in thousands)			
Total other income (expense), net	$ (3,345)	$ 237	$ (3,582)	(1511)%

Total other income (expense), net increased for the three months ended September 30, 2022 and for the nine months ended September 30, 2022 compared to the prior year period, as a result of impairment related to our equity investment and due to currency fluctuations.

Provision for Income Taxes

	Three Months Ended September 30,			
	2022	2021	$ Change	% Change
	(dollars in thousands)			
Provision for income taxes	$ 1,398	$ 799	$ 599	75 %

	Nine Months Ended September 30,			
	2022	2021	$ Change	% Change
	(dollars in thousands)			
Provision for income taxes	$ 4,728	$ 2,695	$ 2,033	75 %

The difference between the effective tax rate for the three months ended September 30, 2022 of 30% and the federal statutory income tax rate of 21% was related to an increase in nondeductible stock-based compensation, Section 162(m) limitation, state taxes, global intangible low-taxed income ("GILTI") inclusion, and a higher tax rate in certain foreign countries where the Company operates, partially offset by tax deductions for equity awards, foreign derived intangible income ("FDII") deduction, foreign tax credits, and federal and state research credits.The effective income tax rate was 6% for the three months ended September 30, 2021 primarily due to excess tax benefits from stock-based compensation.

The difference between the effective tax rate for the nine months ended September 30, 2022 of 23% and the federal statutory income tax rate of 21% was primarily due to nondeductible stock-based compensation and executive compensation, a higher tax rate in certain foreign countries where the Company operates, partially offset by tax deductions for equity awards, foreign derived intangible income deduction, foreign tax credits, and federal and state research credits. The effective income tax rate was 9% for the nine months ended September 30, 2021 primarily due to excess benefit from stock-based compensation which reduced the effective tax rate in 2021.

Liquidity and Capital Resources

We have financed our operations and capital expenditures primarily through utilization of cash generated from operations, as well as sales of equity securities and borrowings under our credit facilities. As of September 30, 2022, we had cash, cash equivalents, and marketable securities of $166.1 million and net working capital, consisting of current assets less current liabilities, of $179.3 million. As of September 30, 2022, we had retained earnings of $115.2 million.

Our principal uses of cash are funding our operations and other working capital requirements.

We believe our existing cash, cash equivalents, marketable securities and anticipated net cash provided by operating activities, together with available borrowings under our credit facility, will be sufficient to meet our working capital requirements for at least the next 12 months. However, if our operating performance during the next 12 months is below our expectations, our liquidity and ability to operate our business could be adversely affected. Our future capital requirements and the adequacy of available funds will depend on many factors, including the duration and severity of the COVID-19 pandemic and its impact on buyers and sellers and those set forth under “Risk Factors.” As of September 30, 2022, our material cash requirements included the contractual commitments set forth under “Contractual Obligations and Future Cash Requirements.”

In the future, we may attempt to raise additional capital through the sale of equity securities or through equity-linked or debt financing arrangements. If we raise additional funds by issuing equity or equity-linked securities, the ownership of our existing stockholders will be diluted. If we raise additional financing by incurring additional indebtedness, we may be subject to increased fixed payment obligations and could also be subject to additional restrictive covenants, such as limitations on our ability to incur additional debt, and other operating restrictions that could adversely impact our ability to conduct our business. Any future indebtedness we incur may result in terms that could be unfavorable to equity investors. We cannot guarantee that we will be able to raise additional capital in the future on favorable terms, or at all. Any inability to raise capital could adversely affect our ability to achieve our business objectives.

Credit Facilities

In February 2011, we entered into a Loan and Security Agreement (as amended, the “Loan Agreement”), with Silicon Valley Bank (“SVB”), which was subsequently amended at various times to provide us with additional borrowing capacity and/or flexibility.

As of September 30, 2022, the amount available to borrow under the Loan Agreement was the lesser of $25.0 million or 80% of eligible accounts receivable less certain reserves, minus the aggregate principal amount of all outstanding advances. Interest accrued on advances under the revolving line of credit at a variable rate equal to the greater of prime rate or 3.25%. For any quarter where the average closing outstanding balance under the Loan Agreement was less than $5.0 million, a fee for such unused capacity in the amount of 0.40% per annum of the average unused portion was charged, payable in arrears. As of September 30, 2022, the applicable interest rate under the Loan Agreement was 6.25%. In June 2021, we amended the Loan Agreement to extend its maturity date to June 6, 2024. As of September 30, 2022, there were no outstanding borrowings under the Loan Agreement, and we were in compliance with all covenants.

On October 17, 2022, we entered into a Senior Secured Credit Facilities Credit Agreement (the “Credit Agreement”) with the several lenders parties thereto, and Silicon Valley Bank, as administrative agent, lead arranger, issuing lender, and swingline lender. The Credit Agreement provides a revolving credit facility in an aggregate principal amount of $110.0 million (“the Revolving Credit Facility”), including a $25.0 million letter of credit sub-facility and a $25.0 million swingline sub-facility. We may, subject to certain customary conditions, on one or more occasions increase commitments under the Revolving Credit Facility in an amount not to exceed $90.0 million in the aggregate (the “Incremental Facility”). Each Lender will have discretion to determine whether it will participate in any Incremental Facility. The obligations under the Credit Agreement are secured by substantially all of our assets. The Credit Agreement matures on October 17, 2027. In connection with our entry into the Credit Agreement, the Loan Agreement was repaid in full and terminated.

Borrowings under the Revolving Credit Facility will accrue interest at rates equal, at our election, to (i) the adjusted term secured overnight financing rate (“SOFR”), which is defined as (a) the applicable term SOFR plus (b) a term SOFR adjustment equal to 0.20% per annum, plus the applicable margin for such loans, or (ii) the alternate base rate (“ABR”), which is defined as the highest of (a) the prime rate in effect from time to time, (b) the federal funds effective rate in effect from time to time plus 0.50%, and (c) the adjusted term SOFR for a one (1) month tenor in effect from time to time plus 1.0%, plus the applicable margin for such loans. The applicable margin for borrowings bearing interest on the SOFR ranges from 2.00% to 2.75%, and the applicable margin for borrowings bearing interest based on the ABR ranges from 1.00% to 1.75%. We will pay a quarterly commitment fee during the term of the Credit Agreement for the non-use of available funds ranging from 0.25% to 0.35%.

The Credit Agreement contains customary representations and warranties as well as customary affirmative and negative covenants. Negative covenants include, among others, limitations on incurrence of indebtedness, liens, disposition of property and investments by us and our subsidiaries. In addition, the Credit Agreement requires us to maintain certain interest coverage, leverage and senior leverage ratios.

In connection with the entry into the Credit Agreement, the existing Loan Agreement described above was terminated. For additional information, see Note 14, "Subsequent Event" to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q

Cash Flows

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

	Nine Months Ended September 30,	
	2022	2021
	(in thousands)	
Net cash provided by operating activities	$ 67,854	$ 60,202
Net cash used in investing activities	(101,556)	(57,119)
Net cash provided by financing activities	3,374	5,105
Net increase (decrease) in cash and cash equivalents	$ (30,328)	$ 8,188

Operating Activities

Our cash flows from operating activities are primarily influenced by growth in our operations, increases or decreases in collections from our buyers and related payments to our publishers, as well as our investment in personnel to support the anticipated growth of our business. Cash flows from operating activities have been affected by changes in our working capital, particularly changes in accounts receivable and accounts payable. The timing of cash receipts from buyers and payments to publishers can significantly impact our cash flows from operating activities. In addition, we expect seasonality to impact quarterly cash flows from operating activities.

For the nine months ended September 30, 2022, net cash provided by operating activities of $67.9 million resulted primarily from net income of $15.9 million, adjustments for non-cash expenses of $45.0 million, including $23.6 million for depreciation and amortization and $15.2 million for stock-based compensation, lease expense of $4.3 million, and a decrease in accounts receivable of $12.6 million, partially offset by a decrease in accrued liabilities of $4.8 million.

For the nine months ended September 30, 2021, net cash provided by operating activities of $60.2 million resulted primarily from net income of $28.4 million, adjustments for non-cash expenses of $29.2 million, including $16.0 million for depreciation and amortization and $10.5 million for stock-based compensation, an increase in accounts payable of $16.6 million, partially offset by an increase in accounts receivable of $8.9 million.

Investing Activities

Our investing activities primarily included investments in marketable securities, purchases of equipment as we expanded the infrastructure in our third-party data centers, and capitalized internal-use software costs in support of enhancing our platform. Purchases of property and equipment may vary from period-to-period due to the timing of the expansion of our data centers, the addition of headcount, and the development cycles of our software development. As our business grows, we expect our capital expenditures and our investment activity to continue to increase.

For the nine months ended September 30, 2022, we used $101.6 million of cash in investing activities, consisting of $27.0 million in purchases of property and equipment (primarily data center infrastructure), $9.6 million of investments in capitalized internal-use software, $28.1 million for the Martin acquisition, and a net increase in investments of marketable securities of $36.9 million.

For the nine months ended September 30, 2021, we used $57.1 million of cash in investing activities, consisting of $22.8 million in purchases of property and equipment (primarily data center infrastructure), $6.8 million of investments in capitalized internal-use software and a net increase in investments of marketable securities of $27.5 million.

Financing Activities

For the nine months ended September 30, 2022, net cash provided by financing activities of $3.4 million was primarily due to proceeds from our employee stock purchase plan.

For the nine months ended September 30, 2021, net cash provided by financing activities of $5.1 million was primarily due to $2.6 million proceeds from our employee stock purchase plan, $3.3 million proceeds from exercise of stock options, partially offset by $0.8 million from the payment of offering costs from our IPO.

Contractual Obligations and Future Cash Requirements

Our principal contractual obligations consist of non-cancelable leases for our various facilities. In certain cases, the terms of the lease agreements provide for rental payments that increase over time.

The following table summarizes our contractual obligations, at September 30, 2022 (in thousands):

	Payments due by period				
	Total	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years
Operating lease liabilities	$ 30,426	$ 1,688	$ 12,964	$ 10,532	$ 5,242
Finance lease liabilities	819	34	285	302	198
Total	$ 31,245	$ 1,722	$ 13,249	$ 10,834	$ 5,440

As of September 30, 2022, we had $1.8 million of long-term income tax liabilities, including interest, related to uncertain tax positions. Because of the high degree of uncertainty regarding the settlement of these liabilities, we are unable to estimate the years in which future cash outflows may occur.

Critical Accounting Policies and Estimates

We prepare our condensed consolidated financial statements in accordance with GAAP. The preparation of the condensed consolidated financial statements requires us to make estimates and assumptions that affect the amounts of assets and liabilities reported, disclosures about contingent assets and liabilities, and reported amounts of revenue and expenses. We evaluate our estimates and assumptions on an ongoing basis using historical experience and other factors, and adjust those estimates and assumptions when facts and circumstances dictate. Actual results could materially differ from these estimates and assumptions.

We believe estimates and assumptions associated with the evaluation of revenue recognition criteria, including the determination of revenue reporting as net versus gross in our revenue arrangements, as well as internal-use software development costs, fair values of stock-based awards, and income taxes 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 significant changes in our accounting policies from those disclosed in our audited consolidated financial statements and notes thereto for the year ended December 31, 2021 included in our Annual Report on Form 10-K, except for those policies relating to business combinations, acquisition-related intangible assets, and impairment of equity investment as described in Note 2, “Basis of Presentation and Summary of Significant Accounting Policies,” to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

Our revenue recognition policy is further described below, which is consistent with the policy included in our Annual Report referenced above.

Revenue Recognition

We generate revenue through the monetization of publisher ad impressions processed on our platform. Our platform allows publishers to sell, in real time, ad impressions to buyers and provides automated inventory management and monetization tools to publishers across various device types and digital ad formats. We charge publishers a fee, which is typically a percentage of the value of the impressions monetized through our platform.

We maintain agreements with each publisher and buyer in the form of written service agreements, which set out the terms of the relationship, including payment terms (typically ninety days or less) and access to our platform.

We invoice buyers for publisher digital advertising inventory purchased through its platform. We recognize revenue when a bid is won and a buyer purchases inventory on our platform. We estimate and record reductions to revenue for volume discounts based on expected volumes during the incentive term.

The determination as to whether revenue should be reported gross of amounts billed to buyers (gross basis) or net of payments to publishers (net basis) requires significant judgment, and is based on our assessment of whether we are acting as the principal or an agent in the transaction. We have determined that we do not act as the principal in the purchase and sale of digital advertising inventory because we do not control the advertising inventory and do not set the price which is the result of an auction within the marketplace. Based on these and other factors, we report revenue on a net basis.

We generally invoice buyers at the end of each month for the full purchase price of ad impressions monetized in that month. Accounts receivable are recorded at the amount of gross billings for the amounts it is responsible to collect, and accounts payable are recorded at the net amount payable to publishers. Accordingly, both accounts receivable and accounts payable appear large in relation to revenue reported on a net basis.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to certain market risks in the ordinary course of our business. These risks primarily include:

Interest Rate Risk

We had cash and cash equivalents of $52.2 million and marketable securities of $113.9 million as of September 30, 2022, which consisted of bank deposits, money market accounts, commercial paper, U.S. Treasury and government debt securities. The primary objective of our investment activities is to preserve principal while maximizing income without significantly increasing risk. Because our cash, cash equivalents, and marketable securities have a relatively short maturity, our portfolio's fair value is relatively insensitive to interest rate changes. Our line of credit is at variable interest rates. We had no amounts outstanding under our credit facility as of September 30, 2022. We do not believe that an increase or decrease in interest rates of 100 basis points would have a material effect on our operating results or financial condition. In future periods, we will continue to evaluate our investment policy relative to our overall objectives.

Currency Exchange Risk

Our condensed consolidated results of operations and cash flows are subject to fluctuations due to changes in foreign currency exchange rates. Historically, the majority of our revenue contracts have been denominated in U.S. Dollars. Our expenses are generally denominated in the currencies in which our operations are located, primarily the U.S. Dollar, Indian Rupee and British Pound. To date, we have not entered into any hedging arrangements with respect to foreign currency risk or other derivative instruments. In the event our foreign sales and expenses increase, our operating results may be more greatly affected by foreign currency exchange rate fluctuations, which can affect our operating income. A hypothetical 10% change in the U.S. Dollar to India Rupee exchange rate could result in a change of $1.2 million in our operating income for the nine months ended September 30, 2022. A hypothetical 10% change in the U.S. Dollar to British Pound exchange rate could result in a change of $1.1 million in our operating income for the nine months ended September 30, 2022.

Inflation Risk

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

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), as of September 30, 2022. Based on such evaluation, our principal executive officer and principal financial officer have concluded that, as of such date, our disclosure controls and procedures were effective at a reasonable assurance level.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(d) and 15d-15(d) under the Exchange Act) that occurred during the quarter ended September 30, 2022 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls and Procedures

Our management, including our principal executive officer and principal financial officer, do not expect that our disclosure controls or our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well designated and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we may become involved in legal or regulatory proceedings, lawsuits and other claims arising in the ordinary course of our business. In view of the inherent difficulty of predicting the outcome of such matters, we cannot state what the eventual outcome of such matters will be. However, based on our knowledge, we are not presently a party to any legal proceedings that, in the opinion of our management, would individually or taken together have a material adverse effect on our business, operating results, financial condition, or cash flows. Regardless of outcome, litigation can have an adverse impact on us due to defense and settlement costs, diversion of management resources, negative publicity and reputational harm, and other factors. For additional information, see Note 8, "Commitments and Contingencies," to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

ITEM 1A. RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this Quarterly Report on Form 10-Q, including our condensed consolidated financial statements and related notes, before making an investment decision. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that affect us. If any of the following risks materializes, our business, financial condition, results of operations, and prospects could be materially harmed, which could cause the price of our Class A common stock to decline, and cause any investment in our Class A common stock to lose some or all of its value.

Summary of Risk Factors

Consistent with the foregoing, our business is subject to a number of risks and uncertainties, including those risks discussed at length below. These risks include, among others, the following, which we consider our most material risks:

- Our revenue and results of operations are highly dependent on the overall demand for advertising.
- If our existing customers do not expand their usage of our platform, or if we fail to attract new publishers and buyers, our growth will suffer. Moreover, any decrease in the use of the advertising channels that we primarily depend on, or failure to expand into emerging channels, could adversely affect our business, results of operations, and financial condition.
- Our results of operations may fluctuate significantly and may not meet our expectations or those of securities analysts and investors.
- If we fail to make the right investment decisions in our platform, or if we fail to innovate and develop new solutions that are adopted by publishers, we may not attract and retain publishers, which could have an adverse effect on our business, results of operations, and financial condition.
- The extent to which the ongoing COVID-19 pandemic, including the resulting global economic uncertainty, and measures taken in response to the pandemic, could adversely affect our business, results of operations, and financial condition will depend on future developments, which are highly uncertain and difficult to predict.
- We must scale our platform infrastructure to support anticipated growth and transaction volume. If we fail to do so, we may limit our ability to process ad impressions, and we may lose revenue.
- The recently completed acquisition of Martin presents risks and we must successfully integrate the Martin business to realize the strategic and financial goals that we currently anticipate.
- Our efforts to offer private marketplace solutions may not be successful, or we may not be able to scale our platform to meet this demand in a timely manner, and, as a result, we may not realize a return from our investments in that area.
- The rejection of digital advertising by consumers, through opt-in, opt-out or ad-blocking technologies or other means or the restriction on the use of third party-cookies, mobile device identifiers or other tracking technologies, could adversely affect our business, results of operations, and financial condition.
- Our business depends on our ability to collect, use, and disclose data to deliver advertisements. Any limitation imposed on our collection, use or disclosure of this data could significantly diminish the value of our solution and cause us to lose publishers, buyers, and revenue. Consumer tools, regulatory restrictions and technological limitations all threaten our ability to use and disclose data.

- If publishers, buyers, and data providers do not obtain necessary and requisite consents from consumers for us to process their personal data, we could be subject to fines and liability.
- The digital advertising industry is intensely competitive, and if we do not effectively compete against current and future competitors, our business, results of operations, and financial condition could be harmed.
- Market pressure may reduce our revenue per impression.
- Seasonal fluctuations or market changes in digital advertising activity could adversely affect our business, results of operations, and financial condition.
- If ad formats and digital device types develop in ways that prevent advertisements from being delivered to consumers, our business, results of operations, and financial condition generally, will be adversely affected.
- If we fail to detect or prevent fraud on our platform, or malware intrusion into the systems or devices of our publishers and their consumers, publishers could lose confidence in our platform, and we could face legal claims.
- Our success depends on our ability to retain key members of our management team, and on our ability to hire, train, retain, and motivate new employees.
- We are subject to payment-related risks if DSPs dispute or do not pay their invoices, and any decreases in payments or in our overall take rate could adversely affect our business, results of operations, and financial condition.
- Our international operations subject us to additional costs and risks, and our continued international expansion may not be successful.
- Our use and reliance upon technology and development resources in India may expose us to unanticipated costs and liabilities, which could affect our ability to realize cost savings from our operations in India.
- We depend on third-party data centers, the disruption of which could adversely affect our business, results of operations, and financial condition.
- Platform outages or disruptions, including due to cyberattacks or our failure to maintain adequate security and supporting infrastructure, could adversely affect our business, results of operations, and financial condition.
- Our software platform could be susceptible to errors, defects, or unintended performance problems that could adversely affect our business, results of operations, and financial condition.
- Our continued business success depends upon our ability to offer high-quality inventory with appropriate viewability capabilities.
- Future acquisitions or strategic investments could be difficult to identify and integrate, divert the attention of management, and could disrupt our business, dilute stockholder value and adversely affect our business, results of operations, and financial condition.
- We rely on publishers, buyers, and partners to abide by contractual requirements and relevant laws, rules, and regulations when using our platform, and legal claims or enforcement actions resulting from their actions could expose us to liabilities, damage our reputation, and be costly to defend.
- We are subject to constantly evolving laws, regulations and industry requirements related to data privacy, data protection, information security, and consumer protection across the markets we operate in.
- We may be subject to intellectual property rights claims by third parties, which are costly to defend, could require us to pay significant damages and could limit our ability to use technology or intellectual property.
- If we fail to maintain effective internal controls, our ability to produce accurate financial statements and other disclosures on a timely basis could be impaired.
- Insiders have substantial control over our company, including as a result of the dual class structure of our common stock, which could limit or preclude your ability to influence corporate matters, including the election of directors and the approval of any change of control transaction.
- Our charter documents and Delaware law could discourage takeover attempts and other corporate governance changes.

Risks Related to Our Business, Results of Operations and Growth

Our revenue and results of operations are highly dependent on the overall demand for advertising.

Our business depends on the overall demand for advertising and on the economic health of our current and prospective publishers and buyers. For example, due to the COVID-19 pandemic and the recession in the United States and global economy in the second quarter of 2020, advertising demand on our platform decreased and did not recover to pre-COVID-19 levels for two months. In addition, the conflict in Ukraine could cause unpredictable economic effects in Europe, including potentially softening general consumer demand. Various macroeconomic factors could cause advertisers to reduce their advertising budgets, including inflation; adverse economic conditions and general uncertainty about economic recovery or growth, particularly in North America, Europe, and Asia, where we do most of our business; instability in political or market conditions generally; and any changes in tax treatment of advertising expenses and the deductibility thereof. Reductions in overall advertising spending as a result of these factors could make it difficult to predict our revenue and could adversely affect our business, results of operations, and financial condition.

If our existing customers do not expand their usage of our platform, or if we fail to attract new publishers and buyers, our growth will suffer. Moreover, any decrease in the use of the advertising channels that we primarily depend on, or failure to expand into emerging channels, could adversely affect our business, results of operations, and financial condition.

We depend upon our buyer and publisher relationships, including channel partners, which aggregate large numbers of smaller publishers, to provide advertising space which we can offer to prospective buyers, to continue to grow the usage of our platform. In doing so, we compete for both supply and demand with larger, well-established companies that may have technological advantages stemming from their experience in the market. We must continue to adapt and improve our technology to compete effectively, and customers have not always embraced our offering due to various factors, including switching costs from moving away from pre-existing technology integrations, such as already implemented header bidding wrappers, and lack of awareness of our omnichannel offerings. Although we believe we provide superior transparency and accountability to such competitors, certain customers may place technological or financial demands that we are unable to meet. These and other factors may make it difficult for us to increase our business with our publishers and buyers, cause some buyers to reduce their spending with us, or increase our costs of doing business, which could adversely affect our business, results of operations, and financial condition.

A relatively small number of premium publishers have historically accounted for a significant portion of the ad impressions sold on our platform, as well as a significant portion of our revenue from publishers, including a relatively small number of channel partners. In particular, for the nine months ended September 30, 2022 and 2021, 13% and 18%, respectively, of our revenue was derived from ad impressions sold on our platform from our largest publisher, Yahoo. We have no minimum commitments from publishers, so the amount, quality, and cost of ad impressions available to us can change at any time, and we cannot assure you that we will have access to a consistent volume or quality of ad impressions at a reasonable cost, or at all. We expect to depend upon a relatively small number of premium publishers and channel partners for the foreseeable future. To support our continued growth, we will seek to add additional publishers to our platform, and to expand current utilization with our existing publishers. Any disruptions in our relationships with premium publishers or largest channel partners could adversely affect our business, results of operations, and financial condition. If we cannot retain or add individual publishers with valuable ad impressions, or if such publishers decide not to make their valuable ad impressions available to us, then our buyers may be less inclined to use our platform, which could adversely affect our business, results of operations, and financial condition.

A limited number of large DSPs – The Trade Desk and Google DV360, in particular – account for a significant portion of the ad impressions purchased on our platform. We expect to depend upon these DSPs for a large percentage of impressions purchased for the foreseeable future. We have no minimum commitments from buyers to spend on our platform, so the amount of demand available to us can change at any time, and we cannot assure you that we will have access to a consistent volume or quality of ad campaigns or demand for our ad impressions at a reasonable price, or at all. Any disruptions in our relationships with DSPs, agencies or advertisers could adversely affect our business, results of operations, and financial condition. If a buyer or group of buyers representing a significant portion of the demand in our marketplace decides to materially reduce use of our platform, it could cause an immediate and significant decline in our revenue and profitability and adversely affect our business, results of operations, and financial condition. Historically, our buyers have predominantly used our platform to purchase mobile, display, and video advertising inventory from our publishers. We expect that these will continue to be significant channels used by our customers for digital advertising in the future. We also believe that our revenue growth may depend on our ability to expand within mobile, video, and in particular, CTV, and we have been, and are continuing to, enhance such channels. We may not be able to accurately predict changes in overall advertiser demand for the channels in which we operate and cannot assure you that our investment in formats will correspond to any such changes.

Any decrease in the use of mobile, display, and video advertising, whether due to customers losing confidence in the value or effectiveness of such channels, regulatory restrictions or other causes, or any inability to further penetrate CTV or enter new and emerging advertising channels, could adversely affect our business, results of operations, and financial condition.

Our results of operations may fluctuate significantly and may not meet our expectations or those of securities analysts and investors.

We operate in an evolving industry with ever-changing customer needs, and, as a result, our business has evolved over time such that our operating history makes it difficult to evaluate our business and future prospects. Our results of operations have fluctuated in the past, and future results of operations are likely to fluctuate as well. Although we have experienced substantial revenue growth, we may not be able to sustain this growth rate, current revenue levels or profitability. In addition, because our business is evolving, our historical results of operations may be of limited utility in assessing our future prospects. We expect to face challenges, risks, and difficulties frequently experienced by growing companies in rapidly developing industries, including those relating to:

- changes in demand and pricing for ad impressions sold on our platform;
- changes in our access to valuable ad impressions from publishers;
- developing, maintaining, and expanding relationships with publishers, DSPs, agencies, and advertisers;
- seasonality in our business;
- innovating and developing new solutions that are adopted by and meet the needs of publishers, DSPs, agencies, and advertisers;
- competing against companies with a larger customer base or greater financial or technical resources;
- changes in the structure of the buying and selling of ad impressions;
- changes in the pricing policies of publishers and competitors;
- responding to evolving industry standards and government regulations that impact our business, particularly in the areas of data protection and consumer privacy;
- changes in demand as a result of changes in the macroeconomic environment, as a result of inflation, changes in interest rates or foreign exchange rates, or otherwise;
- further expanding our business internationally; and
- recruiting, integrating, and retaining qualified and motivated employees, particularly engineers.

Any one or more of the factors above may result in significant fluctuations in our results of operations. You should not rely on our past results as an indicator of our future performance.

Because many of our expenses are based upon forecasted demand and may be difficult to reduce in the short term, volatility in quarterly revenue could cause significant variations in quarterly results of operations. We may not forecast our revenue or expenses accurately, causing our results of operations to diverge from our estimates or the expectations of securities analysts, and investors. If we fail to meet or exceed such expectations for these or any other reasons, the trading price of our Class A common stock could fall, and we could face costly litigation, including securities class action lawsuits.

If we fail to make the right investment decisions in our platform, or if we fail to innovate and develop new solutions that are adopted by publishers, we may not attract and retain publishers, which could adversely affect our business, results of operations, and financial condition.

We face intense competition in the marketplace and are confronted by rapidly changing technology, evolving industry standards, and consumer preferences, regulatory changes, and the frequent introduction of new solutions by our competitors that we must adapt and respond to. We need to continuously update our platform and the technology we invest in and develop, including our machine learning and other proprietary algorithms, in order to attract publishers and buyers and keep ahead of changes in technology, evolving industry standards and regulatory requirements. Our platform is complex and new solutions can require a significant investment of time and resources to develop, test, introduce, and enhance. These activities can take longer than we expect. Moreover, we may not make the right decisions regarding these investments. New formats and channels, such as mobile header bidding and CTV, present unique challenges that we must address in order to succeed. Our success in new formats and channels depends upon our ability to integrate our platform with these new formats and channels. If our mobile and video solutions or our new CTV solutions are not widely adopted by publishers, we may not retain publishers.

In addition, new demands from publishers and buyers, superior offerings by competitors, changes in technology, or new industry standards or regulatory requirements could render our platform or our existing solutions less effective and require us to make unanticipated changes to our platform or business model. Our failure to adapt to a rapidly changing market, anticipate publisher and buyer demand, or attract and retain publishers would cause our revenue or revenue growth rate to decline, and adversely affect our business, results of operations, and financial condition.

The extent to which the ongoing COVID-19 pandemic, including the resulting global economic uncertainty, and measures taken in response to the pandemic, could adversely affect our business, results of operations, and financial condition will depend on future developments, which are highly uncertain and difficult to predict.

The COVID-19 pandemic, including its variants, has disrupted the flow of the economy and put unprecedented strains on governments, health care systems, educational institutions, businesses, and individuals around the world and resulted in regional quarantines, labor shortages or stoppages, changes in consumer purchasing patterns, disruptions to service providers to deliver data on a timely basis, or at all, and overall economic instability. The impact on the global population and the duration of the COVID-19 pandemic is difficult to assess or predict. It is even more difficult to predict the impact on the global economic market, which will be highly dependent upon the actions of governments, businesses, and other enterprises in response to the pandemic and the effectiveness of those actions. The pandemic has already caused, and is likely to result in further, significant disruption of global financial markets and economic uncertainty. Although the advertising market and our business have generally recovered from the economic effects of the COVID-19 pandemic, it did initially adversely impact our sales and operations. A recession, depression, or other sustained adverse market events resulting from the spread of COVID-19 could adversely affect our business, results of operations, and financial condition, as well as the value of our common stock.

In light of the uncertain and rapidly evolving situation relating to the spread of COVID-19, we have taken temporary precautionary measures intended to help minimize the risk of the virus to our employees, our customers, and the communities in which we participate, which could adversely affect our business, results of operations, or financial condition. As a company with employees, customers, partners, and investors across the globe, we believe in upholding our company value of being good people by doing our part to help slow the spread of the virus. To this end, most of our employees worked remotely during the peak of the pandemic, and, more recently, many continue to work on a remote or hybrid basis. Although we continue to monitor the situation and may adjust our policies as more information and guidance become available, such policies could negatively impact our marketing efforts, lengthen sales cycles and result in an increase in certain prospective and current customers seeking lower prices or other more favorable contract terms, slow down our recruiting efforts, or create operational or other challenges due to our hybrid workforce, any of which could adversely affect our business, results of operations, and financial condition.

Our customers or potential customers, particularly in industries most impacted by the COVID-19 pandemic including transportation, travel and hospitality, retail, and energy, may reduce their advertising spending or delay their advertising initiatives, which could adversely affect our business, results of operations, and financial condition. We may also experience curtailed customer demand, reduced customer spend or contract duration, delayed collections, lengthened payment terms, and increased competition due to changes in terms and conditions and pricing of our competitors' products and services.

We must scale our platform infrastructure to support anticipated growth and transaction volume. If we fail to do so, we may limit our ability to process ad impressions, and we may lose revenue.

Our business depends on processing ad impressions in milliseconds, and we must handle an increasingly large volume of such transactions. The addition of new solutions, such as header bidding in mobile and the CTV and OTT formats, support of evolving advertising formats, handling, and use of increasing amounts of data, and overall growth in impressions place growing demands upon our platform infrastructure. If we are unable to grow our platform to support substantial increases in the number of transactions and in the amount of data we process, on a high-performance, cost-effective basis, our business, results of operations, and financial condition could be adversely affected. We expect to continue to invest in our platform in order to meet these requirements, and that investment could adversely affect our business, results of operations, and financial condition. Additionally, if we overestimate future usage of our platform, we may incur expense in adding infrastructure without a commensurate increase in revenue, which could adversely affect our business, results of operations, and financial condition.

The recently completed acquisition of Martin presents risks and we must successfully integrate the Martin business to realize the strategic and financial goals that we currently anticipate.

Risks we may face in connection with our acquisition of ConsultMates, Inc. (dba "Martin"), and its integration into our business and operations include:

- we may not realize the revenue or other economic benefits and synergies we expect to receive from the transaction;
- we may have difficulties integrating and managing Martin's SPO products and technology, as well as business relationships, or retaining key personnel from Martin;
- the acquisition may not further our business strategy as we expected or we may otherwise not realize our expected return on investment, which could adversely affect our business or operating results;
- Martin's existing privacy and information security systems and related infrastructure may require additional investments of time and resources in order to scale and, as necessary, to integrate into our platform or to be developed to appropriate standards;
- Martin's management and compliance functions and processes may require significant investments of time and resources in order to support its current and anticipated future product offerings, to scale and, as necessary, to integrate into our platform;
- Our operating results or financial condition may be adversely impacted by (i) claims or liabilities (including tax liabilities) related to Martin's business and the Martin acquisition including, among others, claims from U.S. or international regulatory or other governmental agencies, terminated employees, current or former customers or business partners, or other third parties; (ii) pre-existing contractual relationships of Martin that we would not have otherwise entered into, the termination or modification of which may be costly or disruptive to our business; (iii) unfavorable accounting treatment as a result of Martin's practices; and (iv) intellectual property claims or disputes against Martin; and
- Martin has not been required to maintain an internal control infrastructure that would meet the standards of a public company, including the requirements of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"). The costs that we may incur to implement such controls and procedures may be substantial and we could encounter unexpected delays and challenges in this implementation. In addition, we may discover significant deficiencies or material weaknesses in Martin's financial and disclosure controls and procedures.

Our efforts to offer private marketplace solutions may not be successful, or we may not be able to scale our platform to meet this demand in a timely manner, and, as a result, we may not realize a return from our investments in that area.

We believe there is significant and growing demand for private marketplace solutions ("PMPs"), and we are making significant investments to meet that demand and grow our market share of PMPs. PMPs may involve lower fees than we can charge for our real-time bidding services, which may not be fully offset by anticipated higher pricing. In some cases, we have experienced fee pressure as we have built out our PMP offering, and we expect this fee pressure to increase as more competitors, including new entrants as well as publishers themselves, build their own technology and infrastructure to enter this business. Even if the market for these solutions develops as we anticipate, publishers and buyers might not embrace our offerings to the degree we expect due to various factors such as inertia from moving off of existing implementations of competitive products. Additionally, even if publishers and buyers embrace our offerings, the positive effect of our PMP offerings on our results of operations may be offset or negated if PMPs cannibalize our open marketplace transaction volumes, by similar offerings from our competitors, or other adverse developments.

Risk Related to Data Collection and the Use of Collected Data

The rejection of digital advertising by consumers, through opt-in, opt-out or ad-blocking technologies or other means or the restriction on the use of third party-cookies, mobile device identifiers or other tracking technologies, could adversely affect our business, results of operations, and financial condition.

We use "cookies," or small text files placed on consumer devices when an Internet browser is used, as well as mobile device identifiers, to gather data that enables our platform to be more effective. Our cookies and mobile device identifiers do not identify consumers directly, but record information such as when a consumer views or clicks on an advertisement, when a consumer uses a mobile app, the consumer's location, and browser or other device information. Publishers and partners may also choose to share their information about consumers' interests or give us permission to use their cookies and mobile device identifiers. We use data from cookies, mobile device identifiers, and other tracking technologies to help advertisers decide whether to bid on, and how to price, an ad impression in a certain location, at a given time, for a particular consumer.

Without cookies, mobile device identifiers, and other tracking technology data, transactions processed through our platform would be executed with less insight into consumer activity, reducing the precision of advertisers' decisions about which impressions to purchase for an advertising campaign. This could make placement identifiers advertising through our platform less valuable, and harm our revenue. If our ability to use cookies, mobile device identifiers or other tracking technologies is limited, we may be required to develop or obtain additional applications and technologies to compensate for the lack of cookies, mobile device identifiers and other tracking technology data, which could be time consuming or costly to develop, less effective, and subject to additional regulation.

Additionally, consumers can, with increasing ease, implement technologies that limit our ability to collect and use data to deliver advertisements, or otherwise limit the effectiveness of our platform. Cookies may be deleted or blocked by consumers. The most commonly used Internet browsers allow consumers to modify their browser settings to block first-party cookies (placed directly by the publisher or website owner that the consumer intends to interact with) or third-party cookies (placed by parties, like us, that have no direct relationship with the consumer), and some browsers block third-party cookies by default. Some prominent technology companies, including Google, have also announced intentions to discontinue the use of cookies, and to develop alternative methods and mechanisms for tracking consumers. As companies replace cookies, it is possible that such companies may rely on proprietary algorithms or statistical methods to track consumers without cookies, or may utilize log-in credentials entered by consumers into other web properties owned by these companies, such as their email services, to track web usage, including usage across multiple devices. Alternatively, such companies may build different and potentially proprietary consumer tracking methods into their widely-used web browsers.

Although we believe our platform is well-positioned to adapt and continue to provide key data insights to our publishers without cookies, this transition could be more disruptive, slower, or more expensive than we currently anticipate, and could materially affect our ability to serve our customers, and our business, results of operations, and financial condition could be adversely affected. Many applications and other devices also allow consumers to avoid receiving advertisements by paying for subscriptions or other downloads. Mobile devices using Android and iOS operating systems limit the ability of cookies to track consumers while they are using applications other than their web browser on the device. As a consequence, fewer of our cookies or publishers' cookies may be set in browsers or be accessible in mobile devices, which adversely affects our business.

Some consumers also download “ad blocking” software on their computers or mobile devices, not only for privacy reasons, but also to counteract the adverse effect advertisements can have on the consumer experience, including increased load times, data consumption, and screen overcrowding. Ad-blocking technologies and other global privacy controls may prevent some third-party cookies, or other tracking technologies, from being stored on a consumer's computer or mobile device. If more consumers adopt these measures, it could reduce the volume or effectiveness and value of advertising, which could adversely affect our business, results of operations, and financial condition. In addition, some ad blocking technologies block only ads that are targeted through use of third-party data, while allowing ads based on first-party data (i.e., data owned by the publisher). These ad blockers could place us at a disadvantage because we rely on third-party data, while some large competitors have troves of first-party data they use to direct advertising. Other technologies allow ads that are deemed “acceptable,” which could be defined in ways that place us or our publishers at a disadvantage, particularly if such technologies are controlled or influenced by our competitors. Even if ad blockers do not ultimately have an adverse effect on our business, investor concerns about ad blockers could cause our stock price to decline.

Our business depends on our ability to collect, use, and disclose data to deliver advertisements. Any limitation imposed on our collection, use or disclosure of this data could significantly diminish the value of our solution and cause us to lose publishers, buyers, and revenue. Consumer tools, regulatory restrictions and technological limitations all threaten our ability to use and disclose data.

As we process transactions through our platform, we collect large amounts of data about advertisements and where they are placed, such as advertiser and publisher preferences for media and advertising content. We also collect data on ad specifications such as placement, size and format, ad pricing, and auction activity such as price floors, bid response behavior, and clearing prices. Further, we collect data on consumers that does not identify the individual, including browser, device location and characteristics, online browsing behavior, exposure to and interaction with advertisements, and inferential data about purchase intentions, and preferences. We collect this data through various means, including from our own systems, pixels that publishers allow us to place on their websites to track consumer visits, software development kits installed in mobile applications, cookies, and other tracking technologies. Our publishers, buyers, and data providers may also choose to provide us with their proprietary data about consumers.

We aggregate this data and analyze it in order to enhance our services, including the pricing, placement, and scheduling of advertisements. As part of our real-time analytics service offering we also share the data, or analyses based on it, with our publishers and buyers. Our ability to collect, use and share data about advertising transactions and consumer behavior is critical to the value of our services. Evolving regulatory standards could place restrictions on the collection, management, aggregation and use of information, which could result in a material increase in the cost of collecting or otherwise obtaining certain kinds of data and could limit the ways in which we may use or disclose information. Internet users can, with increasing ease, implement practices or technologies that may limit our ability to collect and use data to deliver advertisements, or otherwise inhibit the effectiveness of our platform. Although our publishers and buyers generally permit us to aggregate and use data from advertising placements, subject to certain restrictions, publishers or buyers might decide to restrict our collection or use of their data. Any limitations on this ability could impair our ability to deliver effective solutions, which could adversely affect our business, results of operations, and financial condition.

If publishers, buyers, and data providers do not obtain necessary and requisite consents from consumers for us to process their personal data, we could be subject to fines and liability.

Because we do not have direct relationships with consumers, we rely on publishers, buyers, and data providers, as applicable, to obtain the consent of the consumer on our behalf to process their data and deliver interest-based advertisements, and to implement any notice or choice mechanisms required under applicable laws, but if publishers, buyers, or data providers do not follow this process (and in any event as the legal requirements in this area continue to evolve and develop), we could be subject to fines and liability. We may not have adequate insurance or contractual indemnity arrangements to protect us against any such claims and losses.

Risk Related to the Advertising Industry and Competition

The digital advertising industry is intensely competitive, and if we do not effectively compete against current and future competitors, our business, results of operations, and financial condition could be adversely affected.

The digital advertising ecosystem is competitive and complex due to a variety of factors. While programmatic header bidding has enabled the purchasing and selling of vast amounts of digital advertising inventory, there now exist significant challenges related to proliferation of media across platforms, transaction speed, increased costs, transparency, and regulatory requirements. To address these issues at scale for both buyers and sellers, we provide specialized software and hardware infrastructure to optimally power technology-driven transactions. To successfully grow our business, we compete with SSPs like Magnite, Inc., smaller private SSPs in markets around the world, as well as divisions of larger companies like Google.

Some of our competitors have longer operating histories, greater name recognition, and greater financial, technical, sales, and marketing resources than we have. In addition, some competitors, particularly those with greater scale or a more diversified revenue base and a broader offering, have greater flexibility than we do to compete aggressively on the basis of price and other contract terms, or to compete with us by including in their product offerings services that we may not provide. Some of our competitors may also choose to sell products or services competitive to ours at lower prices by accepting lower margins and profitability, or may be able to sell products or services competitive to ours at lower prices given proprietary ownership of data, technical superiority, or economies of scale. Such introduction of competent, competitive products, pricing strategies, or other technologies by our competitors that are superior to or that achieve greater market acceptance than our products and services could adversely affect our business.

We experience requests from publishers and buyers for discounts, fee concessions, rebates, or other forms of consideration, refunds, and greater levels of pricing transparency, in some cases as a condition to maintain the relationship or to increase the amount of advertising spend that the buyer sends to our platform. In addition, we charge fees to publishers for use of our platform, and we may decide to offer discounts or other pricing concessions in order to attract more inventory or demand, or to compete effectively with other providers that have different or lower pricing structures and may be able to undercut our pricing due to greater scale or other factors. Our revenue, take rate, business, results of operations and financial condition could be adversely affected if we cannot maintain and grow our revenue and profitability through volume increases that compensate for any price reductions, or if we are forced to make significant fee concessions, rebates, or refunds.

Some of our competitors are also able or willing to agree to contract terms that expose them to risks that might be more appropriately allocated to publishers or buyers of advertising (including inventory risk and the risk of having to pay publishers for unsold advertising impressions), and in order to compete effectively we might need to accommodate risks that could be difficult to manage or insure against. Some existing and potential buyers have their own relationships with publishers or are seeking to establish such relationships, and many publishers are investing in capabilities that enable them to connect more effectively directly with buyers.

Our business suffers to the extent that publishers and buyers purchase and sell advertising inventory directly from one another or through other intermediaries other than us, reducing the amount of advertising spend on our platform. If we are unable to compete effectively for publishers’ ad impressions and buyer’s advertising spend, we could experience a decline in market share and revenues and be forced to reduce our prices, resulting in lower profit margins for us. Loss of existing or future market share to new competitors and increased price competition could substantially harm our business, results of operations, and financial condition.

There has also been rapid evolution and consolidation in the advertising technology industry, and we expect these trends to continue, thereby increasing the capabilities and competitive posture of larger companies, particularly those that are already dominant in various ways, and enabling new or stronger competitors to emerge. Many publishers and buyers are large consolidated organizations that may need to acquire other companies in order to grow. Smaller publishers and buyers may need to consolidate in order to compete effectively. There is a finite number of large publishers and buyers in our target markets, and any consolidation of publishers or buyers may give the resulting enterprises greater bargaining power or result in the loss of publishers and buyers that use our platform, reducing our potential base of publishers and buyers, each of which would lead to erosion of our revenue.

Market pressure may reduce our revenue per impression.

Our revenue may be affected by market changes, new demands by publishers and buyers, new solutions, and competitive pressure. Our solutions may be priced too high or too low, or our pricing approaches may not be accepted, any of which may carry adverse consequences. We may receive requests from publishers for discounts, fee revisions, rebates, and refunds, or from DSPs, agencies and advertisers for volume discounts, fee revisions, and rebates. Any of these developments could adversely affect our business, results of operations, and financial condition.

Seasonal fluctuations or market changes in digital advertising activity could adversely affect our business, results of operations, and financial condition.

Our revenue, net cash provided by operating activities, results of operations, and other key operating and performance metrics may vary from quarter to quarter due to the seasonal nature of digital advertising spending. For example, digital advertisers tend to devote a large portion of their budgets to campaigns in the fourth quarter of the year, to coincide with consumer holiday spending, and then have a significantly smaller advertising budget in the first calendar quarter. Pricing of digital ad impressions in the fourth quarter is likely to be higher due to increased demand. In addition, adverse economic conditions, inflation, changes in foreign exchange rates or interest rates, or general economic uncertainty may cause advertisers to decrease purchases of digital ad impressions, adversely affecting our business, results of operation and financial condition. A decline in the market for programmatic advertising or the failure of that market to grow as expected could also adversely affect our business, results of operations, and financial condition.

If ad formats and digital device types develop in ways that prevent advertisements from being delivered to consumers, our business, results of operations, and financial condition may be adversely affected.

Our success depends upon the ability of our platform to provide advertising for a variety of digital devices, the major operating systems or Internet browsers that run on them, and the thousands of applications that are downloaded onto them. The design of digital devices and operating systems or browsers is controlled by third parties that may also introduce new devices and operating systems or modify existing ones, and our access to content on certain devices may be limited. If our platform cannot operate effectively with popular devices, operating systems, or Internet browsers, our business, results of operations, and financial condition could be adversely affected.

Risks Related to our Operations

If we fail to detect or prevent fraud on our platform, or malware intrusion into the systems or devices of our publishers and their consumers, publishers could lose confidence in our platform, and we could face legal claims.

We may be subject to fraudulent or malicious activities undertaken by persons seeking to use our platform for improper purposes. For example, someone may attempt to divert or artificially inflate advertiser purchases through our platform, or to disrupt or divert the operation of the systems, and devices of our publishers, and their consumers in order to misappropriate information, generate fraudulent billings or stage cyberattacks, or for other illicit purposes. For example, sophisticated bot-nets and other complex forms of click fraud might be used to generate fraudulent impressions and divert advertising revenue from legitimate websites of publishers. Those activities could also introduce malware through our platform in order to commandeer or gain access to information on consumers’ computers. We use third-party tools and proprietary technology to identify non-human traffic and malware, and we may reduce or terminate relationships with publishers that we find to be engaging in such activities.

Although we continuously assess the quality and performance of advertising on publishers' digital media properties, it may be difficult to detect fraudulent or malicious activity. Further, perpetrators of fraudulent impressions and malware frequently change their tactics and may become more sophisticated over time, requiring both us and third parties to improve processes for assessing the quality of publisher inventory and controlling fraudulent activity. If we fail to detect or prevent fraudulent or malicious activity of this sort, our reputation could be damaged, publishers may contest payment, demand refunds, or fail to give us future business, or we could face legal claims. Even if we are not directly involved in fraud or malicious activity, any sustained failures of others in our industry to adequately detect and prevent fraud could generate the perception that programmatic advertising is unsafe and lead our publishers to avoid programmatic advertising.

Our success depends on our ability to retain key members of our management team, and on our ability to hire, train, retain, and motivate new employees.

Our success depends upon the continued service of members of our senior management team and other key employees. Our Co-Founder and Chief Executive Officer, Rajeev K. Goel, is critical to our overall management, as well as the continued development of our platform and relationships with publishers, DSPs, and agencies, and our strategic direction. Our success also depends on our ability to hire, train, retain, and motivate new employees that align with our corporate culture that has fostered innovation, creativity, and teamwork across our business. Competition for employees in our industry can be intense, and we compete for experienced personnel with many companies that have greater resources than we have. The market for talent in our key areas of operations, especially in engineering, and competition for qualified personnel is particularly intense in the San Francisco Bay Area, Pune, India, and New York, where we maintain offices. As we expand and change, in particular across multiple geographies or following acquisitions, it may be difficult to preserve our corporate culture, which could reduce our ability to innovate, create, and operate effectively.

We are subject to payment-related risks if DSPs dispute or do not pay their invoices, and any decreases in payments or in our overall take rate could adversely affect our business, results of operations, and financial condition.

We generate revenue primarily through revenue share agreements with our publishers. We invoice DSPs and collect the full purchase price for the digital ad impressions they purchase, retain our fees, and remit the balance to the publisher. However, in some cases, we are required to pay publishers for digital ad impressions delivered even if we are unable to collect from the buyer that purchased the digital ad impressions. In the past, certain buyers have sought to slow their payments to us or been forced into filing for bankruptcy protection, resulting in us not receiving payment. These challenges may be exacerbated by the overall market and economic volatility, inflation, changes in foreign exchange rates or interest rates, inflation, and the COVID-19 pandemic and resulting economic impact, as certain of our buyers are experiencing financial difficulties and liquidity constraints. In certain cases, buyers have been unable to timely make payments and we have suffered losses. For example, in early 2019, the advertising company Sizmek declared bankruptcy, which led us to lose approximately $6 million in contracted spending on our platform. While our contracts generally do not contain such exposure, there are certain agreements under which we may be responsible for the whole amount of contracted spending, whether or not ultimately paid by the buyer.

In addition, a prolonged economic downturn may lead additional buyers to slow or default on payments or in some cases seek bankruptcy protection. We cannot assure you that we will not experience bad debt in the future, and write-offs for bad debt could adversely affect our business, results of operations, or financial condition in the periods in which the write-offs occur. If our cash collections are significantly diminished as a result of these dynamics, our revenue and/or cash flow could be adversely affected, and we may need to use working capital to fund our accounts payable pending collection from the buyers. This may result in additional costs and cause us to forgo or defer other more productive uses of that working capital.

Our international operations subject us to additional costs and risks, and our continued international expansion may not be successful.

We have entered into several international markets and we expect to continue to expand our international operations. Further expansion may require significant management attention and financial resources and may place burdens on our management, administrative, operational, legal, and financial infrastructure. The costs and risks inherent in conducting business internationally include, but are not limited to:

- difficulties and costs associated with maintaining effective controls at foreign locations;
- adapting our platform and solutions to non-U.S. publishers' preferences and customs;
- regulatory and other delays and difficulties in setting up foreign operations, including staffing difficulties;
- compliance with anti-bribery laws and regulations, export and import control and economic sanctions, laws and regulations;

- compliance with foreign data privacy laws;
- economic and political instability in some countries, including as a result of the conflict in Ukraine; and
- compliance with the laws of numerous taxing jurisdictions.

As we continue to expand our business globally, our success will depend, in large part, on our ability to anticipate and effectively manage these risks. These factors and others could harm our ability to increase international revenues and, consequently, could adversely affect our business, results of operations, and financial condition.

Our use and reliance upon technology and development resources in India may expose us to unanticipated costs and liabilities, which could affect our ability to realize cost savings from our operations in India.

Most of our technology and development work is conducted in Pune, India. We cannot assure you that our reliance upon development resources in India will enable us to achieve meaningful cost reductions or greater resource efficiency. Further, our development efforts and other operations in India involve significant risks, including, but not limited to:

- difficulty hiring and retaining engineering and management resources due to intense competition for such resources and resulting wage inflation;
- heightened exposure to changes in economic, health, security, and political conditions in India; and
- fluctuations in currency exchange rates and tax compliance in India.

In addition, enforcement of intellectual property rights and confidentiality protections in India may not be as effective as in the United States or other countries. Policing unauthorized use of proprietary technology is difficult and expensive, and we may need to resort to litigation to protect our trade secrets and confidential information. The experience and capabilities of Indian courts in handling intellectual property litigation vary, and outcomes are unpredictable. Further, such litigation may require significant expenditures of cash and management efforts and could harm our business, financial condition, and results of operations.

We expect to continue to rely on significant cost savings obtained by concentrating our technology and development and engineering work in India, rather than in the United States, but difficulties resulting from the factors noted above and other risks related to our operations in India could increase our expenses and harm our competitive position. The historical rate of wage inflation has been higher in India than in the United States. In addition, if the Rupee strengthens against the U.S. Dollar, our costs would increase. If the cost of technology and development work in India significantly increases or the labor environment in India changes unfavorably, our cost savings may be diminished. Any such developments could adversely affect our business, results of operations, and financial condition.

We depend on third-party data centers, the disruption of which could adversely affect our business, results of operations, and financial condition.

We host our company-owned infrastructure at third-party data centers. Any damage to or failure of our systems generally would prevent us from operating our business. We rely on the Internet and, accordingly, depend upon the continuous, reliable, and secure operation of Internet servers, related hardware and software, and network infrastructure. While we control and have access to our servers and all of the components of our network that are located in our external data centers, we do not control the operation of these facilities. The owners of our data center facilities have no obligation to renew their agreements with us on commercially reasonable terms, or at all. If we are unable to renew these agreements on commercially reasonable terms, or if one of our data center operators is acquired, we may be required to transfer our servers and other infrastructure to new data center facilities, and we may incur significant costs and possible service interruption in connection with doing so.

Problems faced by our third-party data center operations, with the telecommunications network providers with whom we or they contract, or with the systems by which our telecommunications providers allocate capacity among their customers, including us, could adversely affect the experience of publishers. Additionally, improving our platform's infrastructure and expanding its capacity in anticipation of growth in new channels and formats, as well as implementing technological enhancements to our platform to improve its efficiency and cost-effectiveness are key components of our business strategy, and if our data centers are unable to keep up with our growing needs for capacity, this could have an adverse effect on our business. Any changes in third-party service levels at our data centers or any errors, defects, disruptions, or other performance problems could adversely affect our reputation, expose us to liability, cause us to lose customers, or otherwise adversely affect our business, results of operations, and financial condition. Service interruptions might reduce our revenue, trigger refunds to publishers, subject us to potential liability, or adversely affect our business, results of operations, and financial condition.

The occurrence of a natural disaster, an act of terrorism, vandalism or sabotage, or other unanticipated problems at these facilities could result in interruptions in the availability of our platform. While we have disaster recovery arrangements in place, they have not been tested under actual disasters or similar events and may not effectively permit us to continue to provide our products and services in the event of any problems with respect to our data centers. Moreover, because we do not currently have full redundancy with respect to the services at each data center, if one of our data centers shuts down there may be a period of time that our products or services, or some of our products or services, will be unavailable to publishers served by that data center. If any of these events were to occur to our business, our business, results of operations, or financial condition could be adversely affected.

Platform outages or disruptions, including due to cyberattacks or our failure to maintain adequate security and supporting infrastructure, could adversely affect our business, results of operations, and financial condition.

As we grow our business, we expect to continue to invest in our platform infrastructure, including hardware and software solutions, network services and database technologies, as well as potentially increase our reliance on open source software. Without these improvements, our operations might suffer from unanticipated system disruptions, slow transaction processing, unreliable service levels, impaired quality or delays in reporting accurate information regarding transactions on our platform, any of which could negatively affect our reputation and ability to attract and retain publishers. The steps we take to enhance the reliability, integrity and security of our platform as it scales are expensive and complex, and poor execution could result in operational failures. In addition, cyberattack techniques are constantly evolving and becoming increasingly diverse, growing increasingly more sophisticated and could involve denial-of-service attacks or other maneuvers that have the effect of disrupting the availability of services on our platform.

Other types of cyberattacks could harm us even if our platform operations are left undisturbed. For example, attacks may be designed to deceive employees into releasing control of their systems to a hacker, while others may aim to introduce computer viruses or malware into our systems with a view to stealing confidential or proprietary data. We are also vulnerable to unintentional errors or malicious actions by persons with authorized access to our systems that exceed the scope of their access rights, distribute data erroneously, or, unintentionally or intentionally, interfere with the intended operations of our platform. Although we maintain insurance coverage, it may be insufficient to protect us against all losses and costs stemming from security breaches, cyberattacks and other types of unlawful activity, or any resulting disruptions from such events. Outages and disruptions of our platform, including any caused by cyberattacks, may harm our reputation and adversely affect our business, results of operations, and financial condition.

Our software platform could be susceptible to errors, defects, or unintended performance problems that could adversely affect our business, results of operations, and financial condition.

We depend upon the sustained and uninterrupted performance of our platform to operate our business. Software bugs, faulty algorithms, technical or infrastructure problems, or system updates could lead to an inability to process data to place advertisements or price inventory effectively, or cause advertisements to display improperly or be placed in proximity to inappropriate content, which could adversely affect our business, results of operations, and financial condition. These risks are compounded by the complexity of our technology and the large amounts of data we utilize. Because our software is complex, undetected material defects, errors and failures may occur. Despite testing, errors, or bugs in our software may not be found until the software is in our live operating environment. For example, changes to our solution have in the past caused errors in the measurements of transactions conducted through our platform, resulting in disputes raised by publishers. Errors or failures in our solution, even if caused by the implementation of changes by publishers or partners to their systems, could also result in negative publicity, damage to our reputation, loss of or delay in market acceptance of our solution, increased costs or loss of revenue, or loss of competitive position. As a result, defects or errors in our products or services could harm our reputation, result in significant costs to us, impair the ability of publishers to sell and for buyers to purchase inventory and impair our ability to fulfill obligations with publishers and partners. Any significant interruptions could adversely affect our business, results of operations, and financial condition.

Our continued business success depends upon our ability to offer high-quality inventory with appropriate viewability capabilities.

We must address quality concerns of both advertisers and publishers. Publishers require ad quality tools that enable granular control over the characteristics of the ads that run on their ad impressions, including those relating to the advertiser, industry and content for a particular ad. We must also provide automatic or ad hoc blocking of ads that contain malware or other ads the publisher deems undesirable. Our inventory quality tools must continue to help publishers demonstrate the value and quality of their ad impressions to DSPs, advertisers, and agencies with automated fraud detection and viewability reporting. Maintaining and upgrading our capabilities associated with ad quality and inventory quality is complex and costly. If we fail to maintain high quality controls for our publishers and partners, our business, results of operations, and financial condition could be adversely affected.

In addition, the viewability of ad impressions is important to certain advertisers because it enables them to assess the value of particular ad impressions as a means to reach a target audience. However, there is no consensus regarding the definition of viewability or the minimum standard viewability thresholds and metrics that should apply for different ad formats. We cannot predict whether consensus views will emerge, or what they will be. Incorporating accepted viewability approaches fully into our business as they evolve will require us to incur additional costs to integrate relevant technologies and process additional information through our platform. In addition, ad impressions that are well differentiated on the basis of viewability will also typically be differentiated on the basis of value, with those that are less viewable valued lower. In this context, if we are not able to effectively transact ad impressions with higher viewability and to incorporate appropriate viewability capabilities into our platform, we could be competitively disadvantaged and our business, results of operations, and financial condition could be adversely affected.

Future acquisitions or strategic investments could be difficult to identify and integrate, divert the attention of management, and could disrupt our business, dilute stockholder value and adversely affect our business, results of operations, and financial condition.

As part of our growth strategy, we may acquire or invest in other businesses, assets or technologies that are complementary to and fit within our strategic goals. Any acquisition or investment may divert the attention of management and require us to use significant amounts of cash, issue dilutive equity securities or incur debt. Any additional capital raised through the sale of equity or convertible debt securities would dilute your stock ownership, and any new equity securities we issue could have rights, preferences, and privileges superior to those of holders of our common stock.

Any debt financing we secure in the future could involve restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. In addition, the anticipated benefits of any acquisition or investment may not be realized, and we may be exposed to unknown risks, any of which could adversely affect our business, results of operations, and financial condition, including risks arising from:

- difficulties in integrating the operations, technologies, product or service offerings, administrative systems, and personnel of acquired businesses;
- ineffectiveness or incompatibility of acquired technologies or solutions;
- potential loss of key employees of the acquired business;
- inability to maintain key business relationships and reputation of the acquired business;
- litigation arising from the acquisition or the activities of the acquired business;
- failure to generate the expected financial results related to an acquisition in a timely manner or at all;
- failure to accurately forecast the impact of an acquisition; and
- implementation or remediation of effective controls, procedures, and policies for acquired businesses.

We rely on publishers, buyers, and partners to abide by contractual requirements and relevant laws, rules, and regulations when using our platform, and legal claims or enforcement actions resulting from their actions could expose us to liabilities, damage our reputation, and be costly to defend.

The publishers, buyers, and partners engaging in transactions through our platform impose various requirements upon each other, and they and the underlying advertisers are subject to regulatory requirements by governments and standards bodies applicable to their activities. We may assume responsibility for satisfying or facilitating the satisfaction of some of these requirements through the contracts we enter into with publishers, buyers, and partners.

In addition, we may have responsibility for some acts or omissions of publishers, buyers, or partners transacting business through our platform under applicable laws or regulations or as a result of common law duties, even if we have not assumed responsibility contractually. These responsibilities could expose us to significant liabilities, perhaps without the ability to impose effective mitigating controls upon, or to recover from, publishers and buyers. Moreover, for those third parties who are both publishers and buyers on our platform, it is feasible that they could use our platform to buy and sell advertisements in an effort to inflate their own revenue. We could be subject to litigation as a result of such actions, and, if we were sued, we would incur legal costs in our defense and cannot guarantee that a court would not attribute some liability to us.

We contractually require our publishers, buyers, data providers, and partners to abide by relevant laws, rules and regulations, and restrictions by their counterparties, when transacting on our platform, and we generally attempt to obtain representations from buyers that the advertising they place through our platform complies with applicable laws and regulations and does not violate third-party intellectual property rights, and from publishers about the quality and characteristics of the impressions they provide. We also generally receive representations from publishers, buyers, and data providers about their privacy practices and compliance with applicable laws and regulations, including their maintenance of adequate privacy policies that disclose and permit our data collection practices. Nonetheless, there are many circumstances in which it is difficult or impossible for us to monitor or evaluate their compliance. For example, we cannot control the content of publisher's media properties, and we are often unable to determine exactly what information a partner collects after an ad has been placed, and how the buyer uses any such collected information. Moreover, we are unable to prevent DSPs from aggregating bid requests from publishers and directing it to their own buying platforms or even reselling such bid data to advertisers or third parties.

If publishers, buyers, data providers, or partners fail to abide by relevant laws, rules and regulations, or contractual requirements, when transacting over our platform, or after such a transaction is completed, we could potentially face liability to consumers for such misuse. Potential sources of liability to consumers include malicious activities, such as the introduction of malware into consumers' computers through advertisements served through our platform, and code that redirects consumers to sites other than the ones consumers sought to visit, potentially resulting in malware downloads or use charges from the redirect site. Publishers often have terms of use in place with their consumers that disclaim or limit their potential liabilities to such consumers, or pursuant to which consumers waive rights to bring class-action lawsuits against the publishers related to advertisements. Similarly, if such misconduct results in enforcement action by a regulatory body or other governmental authority, we could become involved in a potentially time-consuming and costly investigation or we could be subject to some form of sanction or penalty. We may not have adequate indemnity to protect us against, and our insurance policies, may not cover, such claims and losses.

Our business is subject to the risk of catastrophic events such as pandemics, earthquakes, flooding, fire, and power outages, and to interruption by man-made problems such as acts of war and terrorism.

Our business is vulnerable to damage or interruption from pandemics, earthquakes, flooding, fire, power outages, telecommunications failures, terrorist attacks, acts of war, human errors, break-ins, and similar events. A significant natural disaster could have a material adverse effect on our business, results of operations, and financial condition, and our insurance coverage may be insufficient to compensate us for losses that may occur. We have one office and one data center facility located in California, a state known for seismic activity. Significant portions of our development and advertising operations work is located in Pune, India, which is susceptible to earthquakes and flooding. In addition, economic or political instability caused by the conflict in Ukraine, or international responses thereto, could adversely affect our business, results of operations, and financial condition. Furthermore, acts of terrorism, which may be targeted at metropolitan areas that have higher population density than rural areas, could cause disruptions in our or our publishers' and partners' businesses or the economy as a whole. Our servers may also be vulnerable to computer viruses, break-ins, denial-of-service attacks, and similar disruptions from unauthorized tampering with our computer systems, which could lead to interruptions, delays, loss of critical data. We may not have sufficient protection or recovery plans in some circumstances, such as natural disasters affecting California, New York, Virginia, or Pune, India. As we rely heavily on our data center facilities, computer and communications systems and the Internet to conduct our business and provide high-quality customer service, these disruptions could negatively impact our ability to run our business and either directly or indirectly disrupt publishers' and partners' businesses, which could adversely affect our business, results of operations, and financial condition.

Risks Related to Regulation

We are subject to constantly evolving laws, regulations and industry requirements related to data privacy, data protection, information security, and consumer protection across the markets we operate in.

We receive, store, and process data about or related to consumers in addition to our customers, employees, and services providers. Our handling of this data is subject to a variety of federal, state, and foreign laws and regulations and is subject to regulation by various government authorities. Our data handling also is subject to contractual obligations and may be deemed to be subject to industry standards.

The U.S. federal and various state and foreign governments have adopted or proposed limitations on the collection, distribution, use, and storage of data relating to individuals, including the use of contact information and other data for marketing, advertising and other communications with individuals and businesses. In the United States, various laws and regulations apply to the collection, processing, disclosure, and security of certain types of data.

Additionally, the U.S. Federal Trade Commission and many state attorneys general are interpreting federal and state consumer protection laws as imposing standards for the online collection, use, dissemination, and security of data. If we fail to comply with any such laws or regulations, we may be subject to enforcement actions that may not only expose us to litigation, fines, and civil and/or criminal penalties, but also require us to change our business practices, each of which could adversely affect our business, results of operations, and financial condition.

The regulatory framework for data privacy issues worldwide is currently evolving and is likely to remain uncertain for the foreseeable future. The occurrence of unanticipated events often rapidly drives the adoption of legislation or regulation affecting the use, collection, or other processing of data and manners in which we conduct our business. Restrictions could be placed upon the collection, management, aggregation, and use of information, which could result in a material increase in the cost of collecting or otherwise obtaining certain kinds of data and could limit the ways in which we may use or disclose information. In particular, interest-based advertising, or the use of data to draw inferences about a user's interests and deliver relevant advertising to that user, and similar or related practices (sometimes referred to as behavioral advertising or personalized advertising), such as cross-device data collection and aggregation, steps taken to de-identify personal data, and to use and distribute the resulting data, including for purposes of personalization and the targeting of advertisements, have come under increasing scrutiny by legislative, regulatory, and self-regulatory bodies in the United States and abroad that focus on consumer protection or data privacy. Much of this scrutiny has focused on the use of cookies and other technology to collect information about Internet users' online browsing activity on web browsers, mobile devices, and other devices, to associate such data with user or device identifiers or de-identified identities across devices and channels. In addition, providers of Internet browsers have engaged in, or announced plans to continue or expand, efforts to provide increased visibility into, and certain controls over, cookies and similar technologies and the data collected using such technologies. Because we, and our customers, rely upon large volumes of such data collected primarily through cookies and similar technologies, it is possible that these efforts may have a substantial impact on our ability to collect and use data from Internet users, and it is essential that we monitor developments in this area domestically and globally, and engage in responsible privacy practices, including providing consumers with notice of the types of data we collect and how we use that data to provide our services.

In the United States, the U.S. Congress and state legislatures, along with federal regulatory authorities have recently increased their attention on matters concerning the collection and use of consumer data. In the United States, non-sensitive consumer data generally may be used under current rules and regulations, subject to certain restrictions, so long as the person does not affirmatively "opt-out" of the collection or use of such data. If an "opt-in" model or other more restrictive regulations were to be adopted in the United States, less data would be available, and the cost of data would be higher.

California enacted legislation, the California Consumer Privacy Act (the "CCPA") that became operative on January 1, 2020 and became enforceable by the California Attorney General on July 1, 2020, along with related regulations which came into force on August 14, 2020. The CCPA creates individual privacy rights for California residents and increases the privacy and security obligations of businesses handling personal data. The CCPA is enforceable by the California Attorney General and there is also a private right of action relating to certain data security incidents. The CCPA generally requires covered businesses to, among other things, provide new disclosures to California consumers and afford California consumers new abilities to opt-out of certain sales of personal information, a concept that is defined broadly, and although formal guidance has not been issued, behavioral advertising is believed to be a sale under CCPA by us, consumer advocacy groups and in some cases our larger competitors. We cannot yet fully predict the impact of the CCPA or subsequent guidance on our business or operations, but it may require us to further modify our data processing practices and policies and to incur substantial costs and expenses in an effort to comply. Decreased availability and increased costs of information could adversely affect our ability to meet our customers' requirements and could have an adverse effect on our business, results of operations, and financial condition.

Additionally, a California ballot initiative, the California Privacy Rights Act (the "CPRA"), imposes additional data protection obligations on companies doing business in California, including additional consumer rights processes and opt-outs for certain uses of sensitive data and sharing of personal data starting in January 2023. The effects of the CCPA and CPRA are potentially significant and may require us to modify our data collection or processing practices and policies and to incur substantial costs and expenses in an effort to comply and increase our potential exposure to regulatory enforcement and/or litigation.

The CCPA has encouraged “copycat” laws and in other states across the country. For example, in March 2020, Virginia passed the Consumer Data Protection Act (the “CDPA”) which takes effect in January 2023. The CDPA is enforceable by the Virginia Attorney General and creates individual privacy rights for Virginia residents and increases the privacy obligations of businesses handling sensitive personal data. In July 2021, Colorado passed the Colorado Privacy Act (the “CPA”) which takes effect in July 2023. The CPA is enforceable by the Colorado Attorney General and also creates individual privacy rights for Colorado residents and increases the privacy obligations of business handling personal data. Similar laws have also been passed into law by Utah and Connecticut, and numerous other U.S. states in which we operate and the U.S. federal government are also considering privacy legislation.

We cannot yet fully predict the impact of such state laws or subsequent guidance on our business or operations, but it may require us to further modify our data processing practices and policies and to incur substantial costs and expenses in an effort to comply. Other proposed legislation may add additional complexity, variation in requirements, restrictions, and potential legal risk, require additional investment in resources to compliance programs, and could impact strategies and availability of previously useful data and could result in increased compliance costs and/or changes in business practices and policies.

In Europe, the GDPR took effect on May 25, 2018 and applies to products and services that we provide in Europe, as well as the processing of personal data of EU citizens, wherever that processing occurs. The GDPR includes operational requirements for companies that receive or process personal data of residents of the European Union that are different than those that were in place in the European Union. For example, we have been required to offer new controls to data subjects in Europe before processing data for certain aspects of our service. Failure to comply with GDPR may result in significant penalties for non-compliance of up to the greater of €20 million or 4% of an enterprise’s global annual revenue. In addition to the foregoing, a breach of the GDPR could result in regulatory investigations, reputational damage, orders to cease/ change our processing of our data, enforcement notices, and/ or assessment notices (for a compulsory audit). We may also face civil claims including representative actions and other class action type litigation (where individuals have suffered harm), potentially amounting to significant compensation or damages liabilities, as well as associated costs, diversion of internal resources, and reputational harm.

Further, in the European Union, regulators are increasingly focusing on compliance with requirements in the online behavioral advertising ecosystem, and current national laws that implement the ePrivacy Directive will be replaced by an EU Regulation, known as the ePrivacy Regulation, which will significantly increase fines for non-compliance and impose burdensome requirements around obtaining consent. While the text of the ePrivacy Regulation is still under development, a recent European court decision and regulators’ recent guidance are driving increased attention to cookies and tracking technologies. As regulators start to enforce the strict approach (which has already begun to occur in Germany, where data protection authorities have initiated a probe on third-party cookies), this could lead to substantial costs, require significant systems changes, limit the effectiveness of our marketing activities, divert the attention of our technology personnel, adversely affect our margins, increase costs, and subject us to additional liabilities.

In addition, some countries are considering or have passed legislation implementing data protection requirements or requiring local storage and processing of data or similar requirements that could increase the cost and complexity of delivering our services, including Brazil, Thailand, and Japan. Any failure to achieve required data protection standards (which are not currently clear when applied to the online advertising ecosystem) may result in lawsuits, regulatory fines, or other actions or liability, all of which may harm our results of operations. Because the interpretation and application of privacy and data protection laws such as the CCPA and GDPR, and the related regulations and standards, are uncertain, it is possible that these laws, regulations and standards may be interpreted and applied in manners that are, or are asserted to be, inconsistent with our data management practices or the technological features of our solutions.

We are also subject to laws and regulations that dictate whether, how, and under what circumstances we can transfer, process and/or receive certain data that is critical to our operations, including data shared between countries or regions in which we operate and data shared among our products and services.

We are also subject to regulation with respect to political advertising activities, which are governed by various federal and state laws in the United States, and national and provincial laws worldwide. Online political advertising laws are rapidly evolving and our publishers may impose restrictions on receiving political advertising. The lack of uniformity and increasing compliance requirements around political advertising may adversely impact the amount of political advertising spent through our platform, increase our operating and compliance costs, and subject us to potential liability from regulatory agencies.

In addition to government regulation, privacy advocacy and industry groups may propose new and different self-regulatory standards that either legally or contractually apply to us or our customers. We are members of self-regulatory bodies that impose additional requirements related to the collection, use, and disclosure of consumer data. Under the requirements of these self-regulatory bodies, in addition to other compliance obligations, we are obligated to provide consumers with notice about our use of cookies and other technologies to collect consumer data and of our collection and use of consumer data for certain purposes, and to provide consumers with certain choices relating to the use of consumer data. Some of these self-regulatory bodies have the ability to discipline members or participants, which could result in fines, penalties, and/or public censure (which could in turn cause reputational harm). Additionally, some of these self-regulatory bodies might refer violations of their requirements to the U.S. Federal Trade Commission or other regulatory bodies. If we were to be found responsible for such a violation, it could adversely affect our reputation, as well as our business, results of operations, and financial condition.

Legal uncertainty and industry unpreparedness for new regulations may mean substantial disruption and inefficiency, demand constraints, and reduced inventory supply and value.

Some of our publishers may be unprepared to comply with evolving regulatory guidance under the CCPA, CPRA, GDPR, CDPA or other new regulations, and may therefore remove personal data from their inventory before passing it into the bid stream, at least temporarily. This may lower their inventory, resulting in loss of ad spend and revenue for us. Further, since we do not have direct relationships with end users, we rely on publishers to obtain such consents as required. While we can and do provide training and guidance on compliance, the nature of the ecosystem and technology does not support 100% verification that consent from end users has been obtained, when required, and we may unknowingly pass on consumer personal information when we should not be. This exposes us to potential regulatory scrutiny, investigations, fines, penalties, and other legal and financial exposure. Additionally, privacy and data protection laws are evolving, and it is possible that these laws may be interpreted and applied in a manner that is inconsistent with our safeguards and practices that could result in fines, lawsuits and other penalties, and significant changes to our publishers business practices and inventory. Even well-prepared publishers and buyers may be confronted with difficult choices and administrative and technical hurdles as they implement their compliance programs and integrate with multiple other parties in the ecosystem. Further, compliance program design and implementation will be an ongoing process as understanding of the CCPA, GDPR, or other new regulations increase and industry compliance standards evolve. The resulting process friction could result in substantial inefficiency and loss of inventory and demand, as well as increased burdens upon our organization as we seek to assist customers and adapt our own technology and processes as necessary to comply with the law and adapt to industry practice. The uncertain regulatory environment caused by the CCPA, GDPR, or other new regulations may disadvantage us in comparison to large, integrated competitors such as Google and Facebook, which have greater compliance resources and can take advantage of their direct relationships with end users to secure consents from end users. Changes in the business practices of such large integrated competitors could impose additional requirements with respect to the retention and security of our handling or ability to handle customer and end user data, could limit our marketing and core business activities, and have an adverse effect on our business, results of operations, and financial condition.

Recent rulings from the Court of Justice of the European Union invalidated the EU-US Privacy Shield as a lawful means for transferring personal data from the European Union to the United States; this introduces increased uncertainty and may require us to change our EU data practices and/or rely on an alternative legally sufficient compliance measure.

The GDPR generally prohibits the transfer of personal data of EU subjects outside of the European Union, unless a lawful data transfer solution has been implemented or a data transfer derogation applies. On July 16, 2020, in a case known as Schrems II, the Court of Justice of the European Union (the "CJEU") ruled on the validity of two of the primary data transfer solutions. The first method, EU-US Privacy Shield operated by the U.S. Department of Commerce, was declared invalid as a legal mechanism to transfer data from Europe to the United States. As a result, despite the fact that we have certified our compliance to the EU-US Privacy Shield, our customers may no longer rely on this mechanism as a lawful means to transfer European data to us in the United States. For the time being, however, the Department of Commerce continues to operate the EU-US Privacy Shield, and if we fail to comply with the Privacy Shield requirements, we risk investigation and sanction by U.S. regulatory authorities, including the Federal Trade Commission. Such investigation could cost us significant time and resources, and could potentially result in fines, criminal prosecution, or other penalties. While the United States and the European Union are in discussions regarding a replacement to Privacy Shield, we cannot predict if we it will happen or if it does, what impact it will have on our business and industry.

The second mechanism, Standard Contractual Clauses ("SCCs"), an alternative transfer measure that we also offer to our EU customers for extra-EU data transfers, was upheld as a valid legal mechanism for transnational data transfer. However, the ruling requires that European organizations seeking to rely on the SCCs to export data out of the European Union ensure the data is protected to a standard that is "essentially equivalent" to that in the European Union including, where necessary, by taking "supplementary measures" to protect the data. It remains unclear what "supplementary measures" must be taken to allow the lawful transfer of personal data to the United States, and it is possible that EU data protection authorities may determine that there are no supplementary measures that can legitimize EU-US data transfers. For the time being, we will rely on SCCs for EU-US transfers of EU personal data and explore what "supplementary measures" can implemented to protect EU personal data that is transferred to us in the United States. SCCs also contemplate data received from a third party, but may not cover data that is collected directly on behalf of a third party. In June 2021, the European Commission issued updated Standard Contractual Clauses ("New SCCs") that require additional information for transnational data transfers. New agreements must incorporate the New SCCs effective September 27, 2021 and existing agreements must incorporate the New SCCs by December 27, 2022. It remains unclear whether SCCs or New SCCs can cover our use of cookies and other tracking technologies placed directly on consumer's browsers or devices through our publishers or buyers' websites.

We may also need to restructure our data export practices as a result of Brexit. European Union law may cease to apply to the United Kingdom. This means that data may not be able to flow freely between the European Union and the United Kingdom, and our United Kingdom subsidiaries may need to enter into SCCs and adopt "supplementary measures" both with customers and other group entities or enter into New SCCs, in order to ensure the continuing flow of data to and from the United Kingdom subsidiary. We would likely need to restructure our transfers of European data via another European subsidiary and have such entity enter into the SCCs or New SCCs with other group entities and implement "supplementary measures" to ensure the continuing flow of data from the European Union to the United States. In the event that use of the SCCs or New SCCs is subsequently invalidated as a solution for data transfers to the United States, or there are additional changes to the data protection regime in the European Union resulting in any inability to transfer personal data from the European Union to the United States in compliance with data protection laws, European customers may be more inclined to work with businesses that do not rely on such compliance mechanisms to ensure legal and regulatory compliance, such as EU-based companies or other competitors that do not need to transfer personal data to the United States in order to avoid the above-identified risks and legal issues. Such changes could cause us to incur penalties under GDPR and could increase the cost and complexity of operating our business.

Failure to comply with industry self-regulation could adversely affect our business, results of operations, and financial condition.

In addition to complying with government regulations, we participate in trade associations and industry self-regulatory groups that promote best practices or codes of conduct addressing privacy. For example, we have undertaken to comply with industry codes of conduct in the United States and Europe. On our website, we offer consumers the ability to opt out of receiving advertisements based on cookies or other technologies. If we encounter difficulties implementing such guidelines, or our opt-out mechanisms fail to work as designed, we may experience negative publicity and be the subject of investigations or litigation.

Any representations that we make regarding our adherence to self-regulatory standards could result in regulatory action if we fail to meet them. Any such action against us could be costly and time consuming, require us to change our business practices, cause us to divert management's attention and our resources, and be damaging to our reputation and our business. New self-regulatory guidelines that are inconsistent with our practices or in conflict with applicable laws and regulations in the United States and other countries where we do business could arise. If we fail to abide by or are perceived as not operating in accordance with applicable laws and regulations and industry best practices or any industry guidelines or codes with regard to privacy or the provision of Internet advertising, our reputation may suffer and we could lose relationships with our publishers or others.

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

We are subject to governmental economic sanctions requirements and export and import controls that could impair our ability to compete in international markets or subject us to civil or criminal liability.

We are subject to various U.S. export control and trade and economic sanctions laws and regulations, including the U.S. Export Administration Regulations and the various sanctions programs administered by the U.S. Department of the Treasury's Office of Foreign Assets Control (collectively, "Trade Controls"). U.S. Trade Controls may prohibit the shipment of specified products and services to certain countries, governments, and persons. Although we endeavor to conduct our business in compliance with Trade Controls, our failure to successfully comply may expose us to negative legal and business consequences, including civil or criminal penalties, governmental investigations, and reputational harm.

Furthermore, if we export our technology or software, the exports may require authorizations, including a license, a license exception, or other appropriate government authorization or regulatory requirements. Complying with Trade Controls may be time-consuming and may result in the delay or loss of opportunities.

In addition, various countries regulate the import of encryption technology, including the imposition of import permitting and licensing requirements, and have enacted laws that could limit our ability to offer our platform or could limit our customers' ability to use our platform in those countries. Changes in our platform or future changes in export and import regulations may create delays in the introduction of our platform in international markets or prevent our customers with international operations from deploying our platform globally.

Any change in export or import regulations, economic sanctions or related legislation, or change in the countries, governments, persons, or technologies targeted by such regulations, could result in decreased use of our platform by, or in our decreased ability to export our technology and services to, existing or potential customers with international operations. Any decreased use of our platform or limitation on our ability to export our platform could adversely affect our business, results of operations, and financial condition.

Risks Related to Intellectual Property

Our intellectual property rights may be difficult to enforce and protect, which could enable others to copy or use aspects of our technology without compensating us, thereby eroding our competitive advantages and having an adverse effect on our business, results of operations, and financial condition.

We rely upon a combination of trade secrets, third-party confidentiality and non-disclosure agreements, additional contractual restrictions on disclosure and use, and trademark, copyright, patent, and other intellectual property laws to establish and protect our proprietary technology and intellectual property rights. We currently rely on copyright laws to protect computer programs related to our platform and our proprietary technologies, although to date we have not registered for statutory copyright protection. In order to bring a copyright infringement lawsuit in the United States, the copyright must be registered. Accordingly, the remedies and damages available to us for unauthorized use of our software may be limited. Historically, we have prioritized keeping our technology architecture, trade secrets, and engineering roadmap private, and as a general matter, have not patented our proprietary technology. As a result, we cannot look to patent enforcement rights to protect much of our proprietary technology. Any issued patents may be challenged, invalidated, or circumvented, and any rights granted under these patents may not actually provide adequate defensive protection or competitive advantages to us. Additionally, the process of obtaining patent protection is expensive and time-consuming, and we may not be able to prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner.

While it is our policy to protect and defend our rights to our intellectual property, we cannot predict whether steps taken by us to protect our intellectual property will be adequate to prevent infringement, misappropriation, dilution, or other violations of our intellectual property rights. Third parties may knowingly or unknowingly infringe our intellectual property rights, third parties may challenge intellectual property rights held by us, and pending and future trademark and patent applications may not be approved. These claims may result in restrictions on our use of our intellectual property or the conduct of our business. In any of these cases, we may be required to expend significant time and expense to prevent infringement or to enforce our rights. We also cannot guarantee that others will not independently develop technology with the same or similar functions to any proprietary technology we rely on to conduct our business and differentiate ourselves from our competitors. Unauthorized parties may also attempt to copy or obtain and use our technology to develop applications with the same functionality as our solutions, and policing unauthorized use of our technology and intellectual property rights is difficult and may not be effective. In addition, the laws of some foreign countries may not be as protective of intellectual property rights as those of the United States, and mechanisms for enforcement of our intellectual property rights in such countries may be inadequate. If we are unable to protect our intellectual property rights (including in particular, the proprietary aspects of our platform) we may find ourselves at a competitive disadvantage to others who have not incurred the same level of expense, time and effort to create, and protect their intellectual property.

Our customer agreements generally restrict the use of our confidential information solely to such customer's use in connection with its use of our services. In spite of such limitations, reverse engineering our software or the theft or misuse of our confidential information could occur by customers or other third parties who have access to our technology.

We also endeavor to enter into agreements with our employees and contractors in order to limit access to and disclosure of our confidential information, as well as to clarify rights to intellectual property and technology associated with our business. These agreements may not effectively grant all necessary rights to any inventions that may have been developed by the employees or consultants party thereto. In addition, these agreements may not effectively prevent unauthorized use or disclosure of our confidential information, intellectual property or technology and may not provide an adequate remedy in the event of unauthorized use or disclosure of our confidential information, intellectual property, or technology. Furthermore, protecting our intellectual property is particularly challenging after our employees or our contractors end their relationship with us, and, in some cases, decide to work for our competitors. Enforceability of the non-compete agreements that we have in place is not guaranteed, and contractual restrictions could be breached without discovery or adequate remedies.

We may be subject to intellectual property rights claims by third parties, which are costly to defend, could require us to pay significant damages and could limit our ability to use technology or intellectual property.

We operate in an industry with extensive intellectual property litigation. There is a risk that our business, platform, and services may infringe or be alleged to infringe the trademarks, copyrights, patents, and other intellectual property rights of third parties, including patents held by our competitors or by non-practicing entities. We could be subject to third parties claims if our publishers or buyers do not have sufficient rights to the content, technology, data, or other material associated with an ad impression that they provide, or if it infringes or is alleged to infringe the intellectual property rights of such parties. We may also face allegations that our employees have misappropriated or divulged the intellectual property of their former employers or other third parties. Regardless of whether claims that we are infringing patents or other intellectual property rights have any merit, the claims are time consuming, divert management attention and financial resources and are costly to evaluate and defend. Some of our competitors have substantially greater resources than we do and are able to sustain the cost of complex intellectual property litigation to a greater extent and for longer periods of time than we could. Results of these litigation matters are difficult to predict and may require us to stop offering some features, purchase licenses, which may not be available on favorable terms or at all, or modify our technology or our platform while we develop non-infringing substitutes, or incur significant settlement costs. Any of these events could adversely affect our business, results of operations, and financial condition.

We rely on licenses to use the intellectual property rights of third parties to conduct our business.

We rely on products, technologies, and intellectual property that we license from third parties, for use in operating our business. We cannot assure you that these third-party licenses, or support for such licensed products and technologies, will continue to be available to us on commercially reasonable terms, if at all. We cannot be certain that our licensors are not infringing the intellectual property rights of others or that our suppliers and licensors have sufficient rights to the technology in all jurisdictions in which we may operate. Some of our license agreements may be terminated by our licensors for convenience. If we are unable to obtain or maintain rights to any of this technology because of intellectual property infringement claims brought by third parties against our suppliers and licensors or against us, or if we are unable to continue to obtain the technology or enter into new agreements on commercially reasonable terms, our ability to operate and expand our business could be adversely affected.

Our platform relies on third-party open source software components. Failure to comply with the terms of the underlying open source software licenses could expose us to liabilities, and the combination of open source software with code that we develop could compromise the proprietary nature of our platform.

Our platform utilizes software licensed to us by third-party authors under "open source" licenses and we expect to continue to utilize open source software in the future. The use of open source software may entail greater risks than the use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. To the extent that our platform depends upon the successful operation of the open source software we use, any undetected errors or defects in this open source software could prevent the deployment or impair the functionality of our platform, delay new solutions introductions, result in a failure of our platform, and injure our reputation. For example, undetected errors or defects in open source software could render it vulnerable to breaches or security attacks, and, in conjunction, make our systems more vulnerable to data breaches.

Furthermore, some open source licenses contain requirements that we make available source code for modifications or derivative works we create based upon the type of open source software we use. If we combine our proprietary software with open source software in a specific manner, we could, under some open source licenses, be required to release the source code of our proprietary software to the public. This would allow our competitors to create similar solutions with lower development effort and time and ultimately put us at a competitive disadvantage.

Although we monitor our use of open source software to avoid subjecting our platform to conditions we do not intend, we cannot assure you that our processes for controlling our use of open source software in our platform will be effective. If we are held to have breached the terms of an open source software license, we could be required to seek licenses from third parties to continue operating using our solution on terms that are not economically feasible, to re-engineer our solution or the supporting computational infrastructure to discontinue use of code, or to make generally available, in source code form, portions of our proprietary code.

Risks Related to Financial and Accounting Matters

If we fail to maintain effective internal controls, our ability to produce accurate financial statements and other disclosures on a timely basis could be impaired.

We are required, pursuant to Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. Effective internal control over financial reporting is necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation, could cause us to fail to meet our reporting obligations. Ineffective internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock.

This assessment must include disclosure of any material weaknesses identified by our management in our internal control over financial reporting, as well as a statement that our independent registered public accounting firm has issued an opinion on the effectiveness of our internal control over financial reporting. Section 404(b) of the Sarbanes-Oxley Act requires our independent registered public accounting firm to annually attest to the effectiveness of our internal control over financial reporting, which requires increased costs, expenses, and management resources. An independent assessment of the effectiveness of our internal controls could detect problems that our management’s assessment might not. Undetected material weaknesses in our internal controls could lead us to restate our financial statements, which could cause investors to lose confidence in our reported financial information, have a negative effect on the trading price of our common stock, and result in additional costs to remediate such material weaknesses. We are required to disclose changes made in our internal control and procedures on a quarterly basis. To comply with the requirements of being a public company, we may need to undertake various actions, such as implementing new internal controls and procedures and hiring accounting or internal audit staff.

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 also could 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 that we are required to include in our periodic reports that are filed with the SEC. 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 Market.

In addition to our results determined in accordance with GAAP, we believe certain non-GAAP measures and key metrics may be useful in evaluating our operating performance. We present certain non-GAAP financial measures and key metrics in this report and intend to continue to present certain non-GAAP financial measures and key metrics in future filings with the SEC and other public statements. Any failure to accurately report and present our non-GAAP financial measures and key metrics could 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.

Our credit agreement contains operating and financial covenants that may restrict our business and financing activities.

As of September 30, 2022, we had no outstanding borrowings under our loan and security agreement with Silicon Valley Bank ("SVB"). On October 17, 2022, we entered into a Senior Secured Credit Facilities Credit Agreement (the "Credit Agreement") with the several lenders parties thereto, and SVB. Upon entering into the Credit Agreement, the loan and security agreement with SVB was terminated.

Borrowings under the Credit Agreement are secured by substantially all of our assets. The Credit Agreement contains customary representations and warranties as well as customary affirmative and negative covenants. Negative covenants include, among others, limitations on incurrence of indebtedness, liens, disposition of property and investments by us and our subsidiaries. In addition, the Credit Agreement requires us to maintain certain interest coverage, leverage and senior leverage ratios. The operating and financial restrictions and covenants in the Credit Agreement, as well as any future financing arrangements that we may enter into, may restrict our ability to finance our operations, engage in, expand, or otherwise pursue our business activities and strategies.

Our ability to comply with these or other covenants may be affected by events beyond our control, and future breaches of these or other covenants could result in a default under the Credit Agreement. If not waived, future defaults could cause all of the outstanding indebtedness under our Credit Agreement to become immediately due and payable and terminate all commitments to extend further credit.

If we do not have or are unable to generate sufficient cash to repay our debt obligations when they become due and payable, either upon maturity or in the event of a default, we may not be able to obtain additional debt or equity financing on favorable terms, if at all, which may negatively impact our ability to operate and continue our business as a going concern.

Our tax liabilities may be greater than anticipated.

The U.S. and non-U.S. tax laws applicable to our business activities are subject to interpretation and are changing. We are subject to audit by the Internal Revenue Service and by taxing authorities of the state, local and foreign jurisdictions in which we operate. Our tax obligations are based in part on our corporate operating structure, including the manner in which we develop, value, use and hold our intellectual property, the jurisdictions in which we operate, how tax authorities assess revenue-based taxes such as sales and use taxes, the scope of our international operations, and the value we ascribe to our intercompany transactions. Taxing authorities may challenge, and have challenged, our tax positions and methodologies for valuing developed technology or intercompany arrangements, positions regarding the collection of sales and use taxes, and the jurisdictions in which we are subject to taxes, which could expose us to additional taxes. Any adverse outcomes of such challenges to our tax positions could result in additional taxes for prior periods, interest and penalties, as well as higher future taxes. In addition, our future tax expense could increase as a result of changes in tax laws, regulations or accounting principles, or as a result of earning income in jurisdictions that have higher tax rates. For example, the European Commission has proposed, and various jurisdictions have enacted or are considering enacting laws that impose separate taxes on specified digital services, which may increase our tax obligations in such jurisdictions. Any increase in our tax expense could have a negative effect on our financial condition and results of operations. Moreover, the determination of our provision for income taxes and other tax liabilities requires significant estimates and judgment by management, and the tax treatment of certain transactions is uncertain. Any changes, ambiguity, or uncertainty in taxing jurisdictions' administrative interpretations, decisions, policies and positions, including the position of taxing authorities with respect to revenue generated by reference to certain digital services, could also materially impact our income tax liabilities. Although we believe we will make reasonable estimates and judgments, the ultimate outcome of any particular issue may differ from the amounts previously recorded in our financial statements and any such occurrence could adversely affect our business, results of operations, and financial condition.

Tax changes could affect our effective tax rate and future profitability.

We are subject to U.S. federal, state, local and sales taxes in the United States and foreign income taxes, withholding taxes and transaction taxes in numerous foreign jurisdictions. Significant judgment is required in evaluating our tax positions and our worldwide provision for income taxes. During the ordinary course of business, there are many activities and transactions for which the ultimate tax determination is uncertain. In addition, our future income tax obligations could be adversely affected by changes in, or interpretations of, tax laws in the United States or in other jurisdictions in which we operate. For example, the United States tax law legislation commonly referred to as the Tax Cuts and Jobs Act of 2017 (the "Tax Act") (as modified by the Coronavirus Aid, Relief, Economic Security Act, the Families First Coronavirus Response Act and the American Rescue Plan Act), significantly reformed the Internal Revenue Code of 1986, as amended, reducing U.S. federal tax rates, making sweeping changes to rules governing international business operations, and imposing significant additional limitations on tax benefits, including the deductibility of interest and the use of net operating loss carryforwards.

Recently, in the United States, Congress and the Biden administration proposed legislation to make various tax law changes, including to increase U.S. taxation of international business operations and impose a global minimum tax. These proposals, recommendations and enactments include changes to the existing framework in respect of income taxes, limitations on the ability of taxpayers to claim and utilize foreign tax credits, as well as add new types of non-income taxes (such as taxes based on a percentage of revenue or taxes applicable to digital services).

Due to the large and expanding scale of our international business activities, these types of changes to the taxation of our activities could impact the tax treatment of our foreign earnings, increase our worldwide effective tax rate, increase the amount of taxes imposed on our business, and harm our financial position. Such changes may also apply retroactively to our historical operations and result in taxes greater than the amounts estimated and recorded in our financial statements.

Risks Related to Ownership of Our Class A Common Stock

The trading price of the shares of our Class A common stock has been and may continue to be volatile and could subject us to litigation.

Technology stocks historically have experienced high levels of volatility. The trading price of our Class A common stock has fluctuated substantially and may continue to do so. These fluctuations could cause you to incur substantial losses, including all of your investment in our Class A common stock. Factors that could cause fluctuations in the trading price of our Class A common stock, some of which are beyond our control and may not be related to our operational or financial performance, include, among others, the following:

- volatility in the market price and trading volume of technology companies in general and of companies in the digital advertising industry in particular;
- announcements of new solutions or technologies, commercial relationships, acquisitions, or other events by us or our competitors;
- the public’s reaction to our press releases, other public announcements, and filings with the SEC;
- fluctuations in the trading volume of our shares or the size of our public float;
- sales of large blocks of our common stock;
- actual or anticipated changes or fluctuations in our results of operations or financial projections;
- changes in actual or future expectations of investors or securities analysts;
- governmental or regulatory developments or actions, or litigation involving us, our industry, or both; and
- general economic conditions and trends or catastrophic events in our domestic and foreign markets.

In addition, if the market for technology stocks, the stock of digital advertising companies or the stock market, in general, experiences a loss of investor confidence, the trading price of our Class A common stock could decline for reasons unrelated to our business, results of operations, or financial condition. The trading price of our Class A common stock might also decline in reaction to events that affect other companies in the digital advertising industry even if these events do not directly affect us. In the past, following periods of volatility in the market price of a company’s securities, securities class action litigation has often been brought against that company. If litigation is instituted against us, it could subject us to substantial costs, divert management’s attention and resources, and adversely affect our business.

Insiders have substantial control over our company, including as a result of the dual class structure of our common stock, which could limit or preclude your ability to influence corporate matters, including the election of directors and the approval of any change of control transaction.

Our Class B common stock has ten votes per share, and our Class A common stock has one vote per share. Transfers of stock by holders of Class B common stock will generally result in those shares converting to Class A common stock, subject to limited exceptions. As of September 30, 2022, our directors and officers, and their respective affiliates, beneficially owned in the aggregate approximately 66% of the voting power of our capital stock. Because of the ten-to-one voting ratio between our Class B and Class A common stock, the holders of our Class B common stock collectively will continue to control a majority of the combined voting power of our common stock and therefore be able to control all matters submitted to our stockholders for approval.

This concentrated control will limit or preclude your ability to influence corporate matters for the foreseeable future, including the election of directors, amendments of our organizational documents, and any merger, consolidation, sale of all or substantially all of our assets, or other major corporate transaction requiring stockholder approval. The interests of this group of stockholders may not coincide with our interests or the interests of other stockholders. This concentration of ownership may also have the effect of deterring, delaying or preventing a change of control of our company, could deprive our stockholders of an opportunity to receive a premium for their common stock as part of a sale of our company and might ultimately affect the market price of our common stock. Having a dual-class common stock structure may make our Class A common stock less attractive to some investors, such as funds and investment companies that attempt to track the performance of any indexes that prohibit or limit the inclusion of companies with such structures.

Sales of substantial amounts of our Class A common stock in the public markets, or the perception that they might occur, could cause the market price of our Class A common stock to decline.

Sales of a substantial number of shares of our Class A common stock into the public market, particularly sales by our directors and executive officers, or the perception that these sales might occur, could cause the market price of our Class A common stock to decline and may make it more difficult for you to sell your common stock at a time and price that you deem appropriate. Our directors, executive officers and employees hold options and restricted stock units under our equity incentive plans, and the common stock issuable upon the exercise of such options or vesting of such restricted stock units has been registered for public resale under the Securities Act. Accordingly, these shares of common stock will be able to be freely sold in the public market upon issuance subject to certain legal and contractual requirements.

Our charter documents and Delaware law could discourage takeover attempts and other corporate governance changes.

Our restated certificate of incorporation and restated bylaws contain provisions that could delay or prevent a change in control of our company. These provisions could also make it difficult for stockholders to elect directors who are not nominated by the current members of our board of directors or take other corporate actions, including effecting changes in our management. These provisions include:

- a provision that our board of directors will be classified into three classes of directors with staggered three-year terms at such time as the outstanding shares of our Class B common stock represent less than a majority of the combined voting power of our common stock, which could delay the ability of stockholders to change the membership of our board;
- the ability of our board to issue shares of preferred stock without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;
- a prohibition on stockholder action by written consent effective upon such time as the outstanding shares of our Class B common stock represent less than a majority of the combined voting power of our common stock;
- the requirement that a special meeting of stockholders may be called only by the chairman of the board, our chief executive officer, our lead director, or a majority of our board;
- the requirement for the affirmative vote of holders of at least 66-2/3% of the voting power of all of the then outstanding shares of the voting stock, voting together as a single class, to amend provisions of our restated certificate of incorporation or our restated bylaws;
- the ability of our board to amend the bylaws, which may allow it to take additional actions to prevent an unsolicited takeover and inhibit the ability of an acquirer;
- the requirement that stockholders submitting notice of a nomination or proposal to be considered at an annual meeting of our stockholders must have continuously beneficially owned at least 1% of our outstanding common stock for a period of one year before giving such notice;
- advance notice procedures with which stockholders must comply to nominate candidates to our board or to propose matters to be acted upon at a stockholders' meeting; and
- the 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 common stock, including the election of directors and significant corporate transactions, such as a merger or other sale of our company or its assets.

In addition, our restated certificate of incorporation provides that the Court of Chancery of the State of Delaware will be the exclusive forum for derivative actions, actions asserting a breach of fiduciary duty, actions asserting a claim against us arising pursuant to the Delaware General Corporation Law, our restated certificate of incorporation or restated bylaws, or any action asserting a claim against us that is governed by the internal affairs doctrine. This 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, or other employees, which may discourage lawsuits with respect to such claims. Alternatively, if a court were to find the choice of forum provision contained in our restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect our business, results of operations, and financial condition.

In addition, because we are incorporated in Delaware, we are governed by the provisions of the anti-takeover provisions of the Delaware General Corporation Law, which may discourage, delay or prevent a change in control by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change of control would be beneficial to our existing stockholders.

Although we believe these provisions collectively provide for an opportunity to obtain greater value for stockholders by requiring potential acquirers to negotiate with our board, they would apply even if an offer rejected by our board was considered beneficial by some stockholders. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board, which is responsible for appointing the members of our management.

If we are unable to meet the continued listing requirements of the Nasdaq Global Market, the Nasdaq may delist our Class A common stock.

On December 29, 2021, we received notification from the Nasdaq Global Market ("Nasdaq") regarding our noncompliance with Nasdaq Listing Rule 5605(c)(2) ("Rule 5605"), which requires that our audit committee be comprised of a minimum of three independent directors. Our noncompliance occurred as the result of the passing of one of our directors, Narendra Gupta, who was one of the three members of our audit committee. On June 3, 2022, we appointed additional two additional independent directors to our audit committee, and on June 9, 2022, we received a letter from Nasdaq confirming that we had regained compliance with Rule 5605.

If in the future we are unable to maintain our listing on Nasdaq for any reason, it may become more difficult for our stockholders to sell our stock in the public market, and the price of our Class A common stock may be adversely affected due to the likelihood of decreased liquidity resulting from delisting.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Not applicable.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Not applicable.

ITEM 6. EXHIBITS

Exhibit Number	Description of Document	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
2.1	Agreement and Plan of Merger, dated as of September 14, 2022, by and among the Registrant, Marlin Acquisition Sub, Inc., and ConsultMates, Inc.	8-K	001-39748	2.1	September 14, 2022	
10.1	Credit Agreement, dated as of October 17, 2022, by and among the Registrant, the lenders party thereto, and Silicon Valley Bank	8-K	001-39748	10.1	October 17, 2022	
31.1	Certification of Chief Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Chief Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1*	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
32.2*	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS	Inline XBRL Instance Document — the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document					X
101.SCH	Inline XBRL Taxonomy Extension Schema Document					X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					X
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)					X

* The information in this exhibit is furnished and deemed not filed with the Securities and Exchange Commission for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and is not to be incorporated by reference into any filing of PubMatic, Inc. under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

SIGNATURES

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

Dated: November 8, 2022

PUBMATIC, INC.

By: /s/ Steven Pantelick

Steven Pantelick
Chief Financial Officer
(Principal Financial Officer)

Exhibit 31.1

CERTIFICATION OF 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

I, Rajeev K. Goel, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of PubMatic, 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 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 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.

Dated: November 8, 2022

By: /s/ Rajeev K. Goel
Rajeev K. Goel
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF 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

I, Steven Pantelick, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of PubMatic, 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 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 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.

Dated: November 8, 2022

By: /s/ Steven Pantelick
Steven Pantelick
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

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

I, Rajeev K. Goel, Chief Executive Officer of PubMatic, Inc. (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) the Quarterly Report on Form 10-Q of the Company for the fiscal quarter ended September 30, 2022 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: November 8, 2022

By: /s/ Rajeev K. Goel
Rajeev K. Goel
Chief Executive Officer
(Principal Executive Officer)

The foregoing certification is not deemed filed with the Securities and Exchange Commission for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and is not to be incorporated by reference into any filing of PubMatic, Inc. under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Exhibit 32.2

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

I, Steven Pantelick, Chief Financial Officer of PubMatic, Inc. (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) the Quarterly Report on Form 10-Q of the Company for the fiscal quarter ended September 30, 2022 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: November 8, 2022

By: /s/ Steven Pantelick
Steven Pantelick
Chief Financial Officer
(Principal Financial Officer)

The foregoing certification is not deemed filed with the Securities and Exchange Commission for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and is not to be incorporated by reference into any filing of PubMatic, Inc. under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof, regardless of any general incorporation language in such filing.