UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

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

For the quarterly period ended September 30, 2023

OR

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

For the transition period from ______________ to ______________

Commission File Number: 001-40557

INTEGRAL AD SCIENCE HOLDING CORP.

(Exact name of registrant as specified in its charter)

Delaware	**83-0731995**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

12 E 49th Street, 20th Floor
New York, NY 10017
(Address of principal executive offices, including zip code)

(646) 278-4871
(Registrant's telephone number, including area code)

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

Title of each class	Trading symbol	Name of each exchange on which registered
Common Stock, $0.001 par value per share	**IAS**	**The NASDAQ Stock Market LLC (Nasdaq Global Select Market)**

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

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

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

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

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

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

On October 31, 2023, the Registrant had 157,850,631 shares of common stock, $0.001 par value, outstanding.

Table of Contents

		Page No.
PART I.	**FINANCIAL INFORMATION**	
Item 1.	**Condensed Consolidated Financial Statements (Unaudited)**	
	Condensed Consolidated Balance Sheets as of September 30, 2023 (Unaudited) and December 31, 2022	3
	Condensed Consolidated Statements of Operations and Comprehensive Loss for the Three and Nine Months Ended September 30, 2023 and 2022 (Unaudited)	4
	Condensed Consolidated Statements of Changes in Stockholders' Equity for the Three and Nine Months Ended September 30, 2023 and 2022 (Unaudited)	5
	Condensed Consolidated Statements of Cash Flows for the Nine Months Ended September 30, 2023 and 2022 (Unaudited)	7
	Notes to the Condensed Consolidated Financial Statements (Unaudited)	8
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	26
Item 3.	Quantitative and Qualitative Disclosures about Market Risk	41
Item 4.	Controls and Procedures	41
PART II.	**OTHER INFORMATION**	
Item 1.	Legal Proceedings	44
Item 1A.	Risk Factors	44
Item 2.	Unregistered Sale of Equity Securities and Use of Proceeds	44
Item 3.	Defaults Upon Senior Securities	44
Item 4.	Mine Safety Disclosures	44
Item 5.	Other Information	45
Item 6.	Exhibits	45
	Signatures	46

PART I — FINANCIAL INFORMATION

Item 1. Financial Statements

INTEGRAL AD SCIENCE HOLDING CORP.
CONDENSED CONSOLIDATED BALANCE SHEETS
(UNAUDITED)

(IN THOUSANDS, EXCEPT SHARE DATA)	September 30, 2023	December 31, 2022
ASSETS		
Current assets:		
Cash and cash equivalents	$ 92,248	$ 86,877
Restricted cash	127	45
Accounts receivable, net	86,682	67,884
Unbilled receivables	41,857	41,550
Prepaid expenses and other current assets	18,853	24,761
Due from related party	20	29
Total current assets	239,787	221,146
Property and equipment, net	3,506	2,412
Internal use software, net	36,079	23,642
Intangible assets, net	188,402	217,558
Goodwill	673,755	674,094
Operating lease right-of-use assets	22,368	22,787
Deferred tax asset, net	1,673	2,020
Other long-term assets	4,705	5,024
Total assets	$ 1,170,275	$ 1,168,683
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued expenses	$ 59,748	$ 60,799
Due to related party	38	122
Deferred revenue	237	99
Operating lease liabilities, current	9,031	6,749
Total current liabilities	69,054	67,769
Net deferred tax liability	24,371	45,495
Long-term debt	173,609	223,262
Operating lease liabilities, non-current	20,299	22,875
Other long-term liabilities	4,296	1,066
Total liabilities	291,629	360,467
Commitments and Contingencies (Note 13)		
Stockholders' Equity		
Preferred Stock, $0.001 par value, 50,000,000 shares authorized at September 30, 2023; 0 shares issued and outstanding at September 30, 2023 and December 31, 2022.	—	—
Common Stock, $0.001 par value, 500,000,000 shares authorized, 157,597,931 and 153,990,128 shares issued and outstanding at September 30, 2023 and December 31, 2022, respectively.	158	154
Additional paid-in-capital	883,386	810,186
Accumulated other comprehensive loss	(3,688)	(2,899)
Retained earnings (accumulated deficit)	(1,210)	775
Total stockholders' equity	878,646	808,216
Total liabilities and stockholders' equity	$ 1,170,275	$ 1,168,683

See notes to the unaudited condensed consolidated financial statements.

INTEGRAL AD SCIENCE HOLDING CORP.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS (UNAUDITED)

	Three Months Ended September 30,		Nine Months Ended September 30,	
(IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA)	**2023**	**2022**	**2023**	**2022**
Revenue	$ 120,331	$ 101,343	$ 340,074	$ 290,913
Operating expenses:				
Cost of revenue (excluding depreciation and amortization shown below)	25,599	19,171	71,100	53,864
Sales and marketing	29,604	28,190	87,566	77,961
Technology and development	17,211	19,459	53,850	54,071
General and administrative	22,611	20,150	85,673	56,081
Depreciation and amortization	14,027	12,617	40,373	37,585
Foreign exchange loss, net	2,078	4,064	931	3,503
Total operating expenses	111,130	103,651	339,493	283,065
Operating income (loss)	9,201	(2,308)	581	7,848
Interest expense, net	(3,109)	(2,619)	(9,747)	(5,859)
Employee retention tax credit	—	6,981	—	6,981
Net income (loss) before income taxes	6,092	2,054	(9,166)	8,970
Benefit (provision) from income taxes	(19,841)	(1,287)	6,240	(5,083)
Net income (loss)	$ (13,749)	$ 767	$ (2,926)	$ 3,887
Net income (loss) per share:				
Basic	$ (0.09)	$ 0.00	$ (0.02)	$ 0.03
Diluted	$ (0.09)	$ 0.00	$ (0.02)	$ 0.02
Weighted average shares outstanding:				
Basic	157,055,904	155,389,195	157,691,005	155,007,655
Diluted	157,055,904	156,696,754	157,691,005	157,581,569
Other comprehensive loss:				
Foreign currency translation adjustments	(1,717)	(3,248)	(789)	(11,218)
Total comprehensive loss	$ (15,466)	$ (2,481)	$ (3,715)	$ (7,331)

See notes to the unaudited condensed consolidated financial statements.

INTEGRAL AD SCIENCE HOLDING CORP.
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(UNAUDITED)

Three Months Ended September 30, 2023

	Common Stock					
(IN THOUSANDS, EXCEPT SHARES)	Shares	Amount	Additional paid-in capital	Accumulated other comprehensive loss	Retained earnings (accumulated deficit)	Total stockholders' equity
Balance, July 1, 2023	156,279,075	$ 156	$ 867,490	$ (1,971)	$ 12,539	$ 878,214
RSUs and MSUs vested	1,102,702	1	—	—	—	1
Option exercises	53,748	1	590	—	—	591
ESPP purchase	162,406	—	1,424	—	—	1,424
Stock-based compensation	—	—	13,882	—	—	13,882
Foreign currency translation adjustment	—	—	—	(1,717)	—	(1,717)
Net loss	—	—	—	—	(13,749)	(13,749)
Balance, September 30, 2023	157,597,931	$ 158	$ 883,386	$ (3,688)	$ (1,210)	$ 878,646

Nine Months Ended September 30, 2023

	Common Stock					
(IN THOUSANDS, EXCEPT SHARES)	Shares	Amount	Additional paid-in capital	Accumulated other comprehensive loss	Retained earnings (accumulated deficit)	Total stockholders' equity
Balance, January 1, 2023	153,990,128	$ 154	$ 810,186	$ (2,899)	$ 775	$ 808,216
RSUs and MSUs vested	2,692,984	3	—	—	—	3
Option exercises	641,250	1	5,583	—	—	5,584
ESPP purchase	273,569	—	2,306	—	—	2,306
Stock-based compensation	—	—	65,311	—	—	65,311
Foreign currency translation adjustment	—	—	—	(789)	—	(789)
Adoption of ASC 326, net of tax	—	—	—	—	941	941
Net loss	—	—	—	—	(2,926)	(2,926)
Balance, September 30, 2023	157,597,931	$ 158	$ 883,386	$ (3,688)	$ (1,210)	$ 878,646

See notes to the unaudited condensed consolidated financial statements.

INTEGRAL AD SCIENCE HOLDING CORP.
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(UNAUDITED)

Three Months Ended September 30, 2022

	Common Stock					
(IN THOUSANDS, EXCEPT SHARES)	Shares	Amount	Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Total stockholders' equity
Balance, July 1, 2022	155,498,704	$ 155	$ 804,175	$ (8,285)	$ (11,479)	$ 784,566
RSUs vested	471,995	—	—	—	—	—
Option exercises	603,670	1	2,526	—	—	2,527
Stock-based compensation	—	—	14,225	—	—	14,225
Foreign currency translation adjustment	—	—	—	(3,248)	—	(3,248)
Repurchase of common stock	(3,080,061)	(3)	(23,652)	—	—	(23,655)
Net income	—	—	—	—	767	767
Balance, September 30, 2022	153,494,308	$ 153	$ 797,274	$ (11,533)	$ (10,711)	$ 775,183

Nine Months Ended September 30, 2022

	Common Stock					
(IN THOUSANDS, EXCEPT SHARES)	Shares	Amount	Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Total stockholders' equity
Balance, January 1, 2022	154,398,495	$ 154	$ 781,951	$ (315)	$ (14,600)	$ 767,190
RSUs vested	761,208	1	—	—	—	1
Option exercises	1,414,666	1	5,907	—	—	5,908
Stock-based compensation	—	—	33,068	—	—	33,068
Foreign currency translation adjustment	—	—	—	(11,218)	—	(11,218)
Repurchase of common stock	(3,080,061)	(3)	(23,652)	—	—	(23,655)
Net income	—	—	—	—	3,887	3,887
Balance, September 30, 2022	153,494,308	$ 153	$ 797,274	$ (11,533)	$ (10,711)	$ 775,183

See notes to the unaudited condensed consolidated financial statements.

INTEGRAL AD SCIENCE HOLDING CORP.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

	Nine Months Ended September 30,	
(IN THOUSANDS)	**2023**	**2022**
Cash flows from operating activities:		
Net income (loss)	$ (2,926)	$ 3,887
Adjustments to reconcile net income (loss) to net cash provided by operating activities		
Depreciation and amortization	40,373	37,585
Stock-based compensation	65,641	33,107
Foreign currency loss, net	571	3,503
Deferred tax benefit	(17,974)	(657)
Amortization of debt issuance costs	348	348
Allowance for credit losses	2,223	647
Employee retention tax credit	—	(6,981)
Impairment of assets	—	55
Changes in operating assets and liabilities:		
Increase in accounts receivable	(19,936)	(8,031)
Increase in unbilled receivables	(370)	(289)
Decrease (increase) in prepaid expenses and other current assets	5,851	(6,757)
Decrease (increase) in operating leases, net	139	(502)
Increase in other long-term assets	(27)	(330)
Increase (decrease) in accounts payable and accrued expenses	148	(8,226)
Increase in deferred revenue	150	127
Increase (decrease) in due to/from related party	(93)	74
Net cash provided by operating activities	74,118	47,560
Cash flows from investing activities:		
Payment for acquisitions, net of acquired cash	—	(1,603)
Purchase of property and equipment	(1,954)	(917)
Acquisition and development of internal use software and other	(23,539)	(9,952)
Net cash used in investing activities	(25,493)	(12,472)
Cash flows from financing activities:		
Proceeds from the Revolver	75,000	15,000
Repayment of long-term debt	(125,000)	(25,000)
Repayment of short-term debt	—	(1,836)
Proceeds from exercise of stock options	5,584	5,908
Payments for repurchase of common stock	—	(23,655)
Cash received from Employee Stock Purchase Program	2,236	388
Net cash used in financing activities	(42,180)	(29,195)
Net increase in cash, cash equivalents and restricted cash	6,445	5,893
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(1,330)	(5,396)
Cash, cash equivalents and restricted cash at beginning of period	89,671	76,078
Cash, cash equivalents and restricted cash at end of period	$ 94,786	$ 76,575
Supplemental Disclosures:		
Cash paid during the period for:		
Interest	$ 8,880	$ 5,548
Taxes	$ 10,361	$ 11,817
Non-cash investing and financing activities:		
Property and equipment acquired included in accounts payable	$ 17	$ 145
Internal use software acquired included in accounts payable	$ 1,012	$ 1,385
Lease liabilities arising from right of use assets	$ 29,330	$ 26,214

See notes to the unaudited condensed consolidated financial statements.

1. Description of business

Integral Ad Science Holding Corp. and its wholly-owned subsidiaries (together, the “Company” or "IAS"), formerly known as Kavacha Topco, LLC, is a leading global media measurement and optimization platform. The Company’s mission is to be the global benchmark for trust and transparency in digital media quality for the world’s leading brands, publishers, and platforms. The Company’s global media measurement and optimization platform provides actionable data and delivers independent measurement and verification of digital advertising across all devices, channels, and formats, including desktop, mobile, connected TV (“CTV”), social, display, audio, gaming, and video. The Company’s Quality Impressions® is a proprietary metric that helps ensure media quality standards. To be counted as a Quality Impression, a digital ad must be viewable, by a real person rather than a bot, in a brand-safe and suitable environment within the correct geography. The viewability and invalid traffic filtration aspects of Quality Impression are accredited by the Media Rating Council across desktop and mobile platforms. The Company is an independent, trusted partner for buyers and sellers of digital advertising to increase accountability, transparency, and effectiveness in the market. The Company helps advertisers optimize their ad spend and better measure consumer engagement with campaigns across platforms, while enabling publishers to improve their inventory yield and revenue.

The Company operates within the United States ("U.S.") in New York, California, and Illinois. Operations outside the U.S. include but are not limited to the United Kingdom ("U.K."), Ireland, France, Germany, Italy, Spain, Singapore, Australia, Japan, India, and the Nordics.

2. Basis of presentation and summary of significant accounting policies

This summary of significant accounting policies is presented to assist in understanding the Company’s condensed consolidated financial statements. These accounting policies have been consistently applied in the preparation of the condensed consolidated financial statements.

(a) Basis of presentation

The Company’s condensed consolidated financial statements are presented in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”) and reflect the financial position, results of operations and cash flows for all periods presented. The year-end condensed balance sheet data was derived from audited financial statements but does not include all disclosures required by U.S. GAAP.

The accompanying interim Condensed Consolidated Balance Sheets as of September 30, 2023, the Condensed Consolidated Statements of Operations and Comprehensive Loss, of Cash Flows and of Changes in Stockholders’ Equity for the three and nine months ended September 30, 2023 and 2022, and the related footnote disclosures are unaudited. These unaudited interim condensed consolidated financial statements have been prepared on the same basis as the annual consolidated financial statements and, in management’s opinion, include all adjustments necessary to state fairly the consolidated financial position of the Company. All adjustments made were of a normal recurring nature. The results for the three and nine months ended September 30, 2023 are not necessarily indicative of the results to be expected for the year ending December 31, 2023, or for any future period.

The Company’s significant accounting policies are discussed in Note 2 to the consolidated financial statements for the years ended December 31, 2022, 2021 and 2020. There have been no significant changes to these policies, except for the adoption of Accounting Standards Update ("ASU") No. 2016-13, "Financial Instruments - Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments," as disclosed in Note 2(g) and Note 2(i), that have had a material impact on the Company’s condensed consolidated financial statements and related notes for the nine months ended September 30, 2023. Therefore, these unaudited condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and related notes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2022, filed with the Securities and Exchange Commission (“SEC”) on March 2, 2023.

During the year ended December 31, 2022, the Company reclassified foreign exchange loss, net from "General and administrative" expenses within the Condensed Consolidated Statements of Operations and Comprehensive Loss as a separate line item "Foreign exchange loss, net" presented on the Condensed Consolidated Statements of Operations and Comprehensive Loss. Corresponding prior period amounts have also been reclassified to conform to current period presentation.

The Company is an Emerging Growth Company, as defined in the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”). Under the JOBS Act, Emerging Growth Companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. The Company has elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that it (i) is no longer an Emerging Growth Company or (ii) it affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. On June 30, 2023, the last day of our second fiscal quarter in 2023, the market value of our common stock held by non-affiliates exceeded $700,000. Accordingly, we will be deemed a large accelerated filer as of December 31, 2023. As such, we will no longer (i) qualify as an Emerging Growth Company, (ii) be able to take advantage of the extended timeline to comply with new or revised accounting standards applicable to public companies beginning with our Annual Report on Form 10-K for the year ending December 31, 2023 and (iii) be exempt from providing an auditor's attestation report on our system of internal control over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act.

(b) Basis of consolidation

The condensed consolidated financial statements include the accounts of Integral Ad Science Holding Corp. and its wholly-owned subsidiaries. All material intercompany accounts and transactions have been eliminated in consolidation.

(c) Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Significant estimates include fair value of assets acquired in business combinations, including assumptions with respect to future cash inflows and outflows, discount rates, assets useful lives, market multiples, the allocation of purchase price consideration in the business combination valuation of acquired assets and liabilities, the estimated useful lives of intangible assets and internal use software, the allowance for doubtful accounts, goodwill impairment testing, assumptions used to calculate equity-based compensation, and the realization of deferred tax assets. The Company bases its estimates on past experience, market conditions, and other assumptions that the Company believes are reasonable under the circumstances, and the Company evaluates these estimates on an ongoing basis. Actual results may differ from these estimates due to risks and uncertainties, including the continued uncertainty surrounding rapidly changing market and economic conditions due to high inflation, changes to fiscal and monetary policy, high interest rates, currency fluctuations, instability in the financial markets and disruptions in European economies as a result of the war in Ukraine and other geopolitical issues.

(d) Employee retention tax credit

The Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") provided an employee retention credit which was a refundable tax credit against certain employment taxes. The Consolidated Appropriations Act (the "Appropriations Act") extended and expanded the availability of the employee retention credit through December 31, 2021. The Appropriations Act amended the employee retention credit to be equal to 70% of qualified wages paid to employees during the 2021 fiscal year. The Company qualified for the employee retention credit beginning in March 2020 for qualified wages through June 2021 and filed a cash refund claim during the year ended December 31, 2022. The employee retention credit totaling $6,981 was included within Prepaid expenses and other current assets on the Company's Condensed Consolidated Balance Sheets as of December 31, 2022. As of September 30, 2023, substantially all of the tax credit receivable has been received.

(e) Foreign currency

The reporting currency of the Company is the U.S. dollar. The functional currency of our foreign subsidiaries is the currency of the primary economic environment in which they operate, which is their local currency. The financial statements of these subsidiaries are translated into U.S. dollars using month-end rates of exchange for assets and liabilities, and average rates of exchange for revenue, costs and expenses. Translation gains and losses are recorded in accumulated other comprehensive loss in stockholders’ equity. Transaction gains and losses including those on intercompany transactions denominated in a currency other than the functional currency of the entity involved are included in foreign exchange loss, net in the Condensed Consolidated Statements of Operations and Comprehensive Loss.

For the three months ended September 30, 2023, and 2022, foreign exchange loss, net consists of unrealized foreign exchange losses of $1,810 and $4,311, respectively, and realized transaction losses of $268 and gains of $247, respectively. For the nine months ended September 30, 2023, and 2022, foreign exchange loss, net consists of unrealized foreign exchange losses of $571 and $3,985, respectively, and realized transaction losses of $360 and gains of $482, respectively.

(f) Cash, cash equivalents, and restricted cash

Cash equivalents includes amounts invested in money market accounts. The Company considers all highly liquid investments purchased with original maturities of three months or less from the purchase date to be cash equivalents. The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the Condensed Consolidated Balance Sheets to the amounts shown in the Condensed Consolidated Statements of Cash Flows.

	September 30, 2023	December 31, 2022
Cash and cash equivalents	$ 92,248	$ 86,877
Short term restricted cash	$ 127	$ 45
Long term restricted cash (held in other long-term assets)	$ 2,411	$ 2,749
Total cash, cash equivalents, and restricted cash shown in the Condensed Consolidated Statements of Cash Flows	$ 94,786	$ 89,671

(g) Accounts receivable, net

Accounts receivable are carried at the original invoiced amount less an allowance for credit losses. The allowance is estimated by pooling accounts receivables based on similar risk characteristics, and expected credit loss exposure is evaluated for each accounts receivable pool. Invoices are typically issued with net 30-days to net 90-days terms. Account balances are considered delinquent if payment is not received by the due date, and the receivables are written off when deemed uncollectible. These costs are recorded in general and administrative expenses within the Condensed Consolidated Statements of Operations and Comprehensive Loss.

The activity in our allowance for credit losses consists of the following as of:

	September 30, 2023	September 30, 2022
Balance, beginning of period	$ 6,691	$ 5,883
Additional provision	$ 2,223	$ 647
Receivables written off and impact of exchange rates	$ (406)	$ (1,129)
Adoption of ASC 326	$ (1,271)	$ —
Balance, end of period	$ 7,237	$ 5,401

(h) Stock-based compensation

Stock-based compensation is measured at the grant date based on the fair value of the award and is recognized as expense over the requisite service period, which is generally the vesting period. The Company accounts for forfeitures as they occur. The Company used the following assumptions in valuing its market stock units ("MSUs"), shares granted under the Company's 2021 Employee Stock Purchase Program ("ESPP"), time-based service options, which vest over a period of time subject to continued employment ("Time-Based Options"), and return target options ("Return-Target Options"), which vest upon a realized cash return of the equity investment of funds affiliated with Vista Equity Partners ("Vista"), the Company’s largest shareholder.

Expected term — For time-based awards, the estimated expected term of options granted is generally calculated as the vesting period plus the midpoint of the remaining contractual term, as the Company does not have sufficient historical information to develop reasonable expectations surrounding future exercise patterns and post-vesting employment termination behavior. For awards subject to market and performance conditions, the expected term represents the period of time that the options granted are expected to be outstanding.

Expected volatility — Volatility is estimated based upon observed option-implied volatilities for the Company in addition to a group of peer companies. The Company believes this is the best estimate of the expected volatility over the weighted-average expected term of its option grants.

Risk-free interest rate — The risk-free interest rate is based on the implied yield currently available on U.S. Treasury instruments with terms approximately equal to the expected term of the option.

Expected dividend — The expected dividend assumption was based on the Company's history and expectation of dividend payouts. The Company currently has no history or expectation of paying cash dividends on its common stock.

Fair value — Following the pricing of the Initial Public Offering, the Company's shares have traded publicly, and accordingly the Company uses the applicable closing price of its common stock to determine fair value.

The Company used the following assumptions in valuing its stock-based compensation:

	September 30, 2023			September 30, 2022		
Estimated fair value	$3.35	-	$38.36	$3.26	-	$14.43
Expected volatility (%)	50%	-	65%	65%	-	80%
Expected term (in years)	0.26	-	4.00	0.50	-	10.00
Risk-free interest rate (%)	3.63%	-	5.55%	0.46%	-	3.35%
Dividend yield		—			—	

(i) Recently adopted accounting pronouncements

In February 2016, the FASB issued ASU 2016-2, "Leases (Topic 842)" ("ASU No. 2016-2"). Under ASU No. 2016-2, lessees are required to put most leases on their balance sheets but to recognize expenses in the income statement in a manner similar to current accounting. ASU No. 2016-2 also eliminated the current real estate-specific provisions and changes the guidance on sale-leaseback transactions, initial direct costs, and lease executory costs for all entities. The updated guidance is effective for the Company beginning January 1, 2022. Upon adoption, entities are required to use the modified retrospective approach for leases that exist, or are entered into, after the beginning of the earliest comparative period in the financial statements. In July 2018, the FASB issued ASU 2018-11, Leases (Topic 842), Targeted Improvements, which allows entities to not apply the new leases standard, including its disclosure requirements, in the comparative periods they present in their financial statements in the year of adoption.

The Company adopted ASU No. 2016-2 on January 1, 2022 using the modified retrospective transition approach, which resulted in the recognition of right-of-use assets ("ROU assets") of $21,666 and lease liabilities of $29,361. Differences between ROU assets and lease liabilities are attributed to deferred rent, lease incentive obligations and cease-use liability previously recognized under Accounting Standards Codification ("ASC") 420 *Exit or Disposal Cost Obligations.* The Company elected the package of practical expedients not to reassess prior conclusions related to contracts containing leases, lease classification and initial direct costs. In addition, the Company elected the expedient permitting the combination of lease and non-lease components into a single lease component. The Company made a policy election to not recognize ROU assets and lease liabilities for short-term leases for all asset classes.

The adoption of ASU No. 2016-2 did not have a material impact on the Consolidated Statements of Operations and Comprehensive Loss or the Consolidated Statements of Cash Flows.

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments — Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments," ("ASU No. 2016-13") which is intended to provide more decision-useful information about expected credit losses on financial instruments and other commitments to extend credit held by a reporting entity at each reporting date. ASU No. 2016-13 revises the impairment model to utilize an expected loss methodology in place of the currently used incurred loss methodology, which will result in more timely recognition of losses on financial instruments, including, but not limited to accounts receivable.

The Company adopted ASU No. 2016-13 on January 1, 2023, utilizing the modified retrospective approach requiring a cumulative-effect adjustment to the opening accumulated deficit in the first quarter of 2023, and the adoption resulted in $941 adjustment to retained earnings on January 1, 2023, net of tax. Refer to Note 2(g), Accounts receivables, net, for details on the Company's accounting policy in accordance with ASU 2016-13.

In March 2020, the FASB issued ASU 2020-4, “Facilitation of the Effects of Reference Rate Reform on Financial Reporting,” (“ASU No. 2020-4”) which was intended to address accounting consequences that could result from the global markets’ anticipated transition away from the use of the London Interbank Offered Rate (“LIBOR”) and other interbank offered rates to alternative reference rates. The amendments in ASU No. 2020-4 provide operational expedients and exceptions for applying U.S. GAAP to contracts, hedging relationships and other transactions affected by reference rate reform if certain criteria are met. The amendments in ASU No. 2020-4 apply only to contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued because of the reference rate reform. On December 21, 2022, the FASB issued ASU 2022-06, “Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848,” which defers the sunset date of ASC 848 from December 31, 2022 to December 31, 2024, after which entities will no longer be permitted to apply the relief in ASC 848.

On June 23, 2023, the Company entered into the First Amendment to Credit Agreement, which changed the market interest rate indices that the Company can elect to accrue interest on outstanding borrowings from LIBOR to the Secured Overnight Financing Rate as administered by the Federal Reserve Bank of New York (“SOFR”). First Amendment to Credit Agreement became effective at the end of the applicable interest period for any LIBOR borrowings outstanding on the amendment effective date, which was June 30, 2023. As a result, as of June 30, 2023, the Company no longer had any contracts that referenced LIBOR. The Company adjusted the effective interest rate on outstanding borrowings on a prospective basis, which did not have a material impact on the condensed consolidated financial statements.

(j) Accounting pronouncements not yet adopted

In October 2021, the FASB issued ASU 2021-08, "Accounting for Contract Assets and Contract Liabilities from Contracts with Customers," ("ASU No. 2021-08") which is intended to improve the accounting for acquired revenue contracts with customers in a business combination and create consistency in practice related to (i) the recognition of an acquired contract liability, and (ii) payment terms and their effect on subsequent revenue recognized by the acquirer. ASU No. 2021-08 is effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2023. The Company will evaluate the impact of this guidance on future acquisitions as transactions occur.

3. Property and equipment, net

Property and equipment consisted of the following:

	Estimated useful life (in years)	September 30, 2023		December 31, 2022	
Computer and office equipment	1 - 3 years	$	3,920	$	3,761
Computer software	3 - 5 years	$	218	$	218
Leasehold improvements	Various	$	2,136	$	1,060
Furniture	5 years	$	559	$	308
Total property and equipment		$	6,833	$	5,347
Less: accumulated depreciation		$	(3,327)	$	(2,935)
Total property and equipment, net		$	3,506	$	2,412

Depreciation expense of property and equipment for the three months ended September 30, 2023 and 2022 was $287 and $234, respectively. Depreciation expense of property and equipment for the nine months ended September 30, 2023 and 2022 was $772 and $669, respectively.

4. Internal use software, net

Internal use software consisted of the following:

	Estimated useful life (in years)	September 30, 2023	December 31, 2022
Internal use software	3 - 5 years	$ 70,556	$ 47,658
Less: Assets written off		—	(199)
Less: Accumulated amortization		(34,477)	(23,817)
Total internal use software, net		$ 36,079	$ 23,642

Amortization expense related to internal use software for the three months ended September 30, 2023 and 2022 was $4,032 and $2,453, respectively. Amortization expense for the nine months ended September 30, 2023 and 2022 was $10,477 and $7,000, respectively.

5. Intangible assets, net

The gross book value, accumulated amortization, net book value and amortization periods of the intangible assets were as follows:

	September 30, 2023				
	Estimated useful life (in years)	Gross book value	Accumulated amortization	Net book value	Weighted average remaining useful life
Customer relationships	5 - 15 years	$ 301,944	$ (134,716)	$ 167,228	8.8 years
Developed technology	5 years	137,042	(123,636)	13,406	2.8 years
Trademarks	5 - 9 years	19,700	(11,958)	7,742	3.6 years
Favorable leases	6 years	198	(172)	26	0.8 years
Total		$ 458,884	$ (270,482)	$ 188,402	

	December 31, 2022				
	Estimated useful life	Gross book value	Accumulated amortization	Net book value	Weighted average remaining useful life
Customer relationships	5 - 15 years	$ 301,955	$ (112,589)	$ 189,366	9.5 years
Developed technology	4 - 5 years	137,112	(118,650)	18,462	3.5 years
Trademarks	5 - 9 years	19,700	(10,021)	9,679	4.4 years
Favorable leases	6 years	198	(147)	51	1.5 years
Total		$ 458,965	$ (241,407)	$ 217,558	

Amortization expense related to intangibles for the three months ended September 30, 2023 and 2022 was $9,708 and $9,930, respectively. Amortization expense related to intangibles for the nine months ended September 30, 2023 and 2022 was $29,124 and $29,916, respectively.

6. Goodwill

The following table provides a roll forward of the changes in the goodwill balance:

Goodwill as of December 31, 2022	$ 674,094
Impact of exchange rates	(339)
Goodwill as of September 30, 2023	$ 673,755

7. Accounts payable and accrued expenses and other long-term liabilities

Accounts payable and accrued expenses consisted of the following:

	September 30, 2023	December 31, 2022
Accounts payable	$ 8,201	$ 10,487
Accrued payroll	8,249	12,623
Accrued professional fees	3,941	3,150
Accrued bonuses and commissions	15,294	16,527
Accrued revenue sharing	5,467	3,522
Taxes payable	3,803	3,130
Accrued hosting fees	4,597	5,949
Other accrued expenses	10,196	5,411
Total accounts payable and accrued expenses	$ 59,748	$ 60,799

Other long-term liabilities consisted of the following:

	September 30, 2023	December 31, 2022
Security deposit received	$ 672	$ 672
Fin 48 liability	3,624	394
Total Other long-term liabilities	$ 4,296	$ 1,066

8. Long-term debt

On September 29, 2021, the Company entered into a credit agreement with various lenders, which was amended on June 23, 2023 (as amended, the "Credit Agreement”). The Credit Agreement provides for an initial $300,000 in commitments for revolving credit loans (the “Revolver”), which amount may be increased or decreased under specific circumstances, with a $30,000 letter of credit sublimit and a $100,000 alternative currency sublimit. In addition, the Credit Agreement provides for the ability to request incremental term loan facilities, in a minimum amount of $5,000 for each facility. Borrowings pursuant to the Credit Agreement may be used for working capital and other general corporate purposes, including for acquisitions permitted under the Credit Agreement. During the nine months ended September 30, 2023, the Company drew down $75,000 and paid down $125,000 on the Revolver.

Borrowings under the Credit Agreement are scheduled to mature on September 29, 2026. The Credit Agreement contains certain customary events of default including failure to make payments when due thereunder, and failure to observe or perform certain covenants.

The initial proceeds of the Revolver in September 2021, together with cash on hand, were used to repay the outstanding balance of the term loan and revolving loan under the prior credit agreement. In connection with the entry into the Revolver, the Company incurred costs of $2,318 that are included in Long-term debt, net, in the Condensed Consolidated Balance Sheets.

The interest rates for the Revolver under the Credit Agreement (i) for U.S. dollar loans are equal to the applicable rate for base rate loans ranging from 0.75% to 1.50% per annum, (ii) for Term SOFR Loans (as defined in the Credit Agreement) ranging from 1.75% to 2.50% per annum, (iii) for RFR Loans (as defined in the Credit Agreement) denominated in sterling ranging from 1.7826% to 2.5326%, and (iv) for RFR Loans denominated in euro range from 1.7956% to 2.5456%, in each case, based on the Senior Secured Net Leverage Ratio (as defined in the Credit Agreement). Base rate borrowings may only be made in dollars. The Company is required to pay a commitment fee during the term of the Credit Agreement ranging from 0.20% to 0.35% per annum of the average daily undrawn portion of the revolving commitments based on the Senior Secured Net Leverage Ratio. The interest rate on September 30, 2023 was 7.3%.

Any borrowings under the Credit Agreement may be repaid, in whole or in part, at any time and from time to time without premium or penalty other than customary breakage costs, and any amounts repaid may be reborrowed. No mandatory prepayments will be required other than when borrowings and letter of credit usage exceed the aggregate commitment of all lenders.

The Credit Agreement contains covenants requiring certain financial information to be submitted quarterly and annually. In addition, the Company is also required to comply with certain financial covenants such as maintaining a Total Net Leverage Ratio (as defined in the Credit Agreement) of 3.50 to 1.00 or lower and maintaining a minimum Interest Coverage Ratio (as defined in the Credit Agreement) of 2.50 to 1.00. As of September 30, 2023, the Company was in compliance with all covenants contained in the Credit Agreement.

	September 30, 2023	December 31, 2022
Revolver	$ 175,000	$ 225,000
Less: Unamortized debt issuance costs	(1,391)	(1,738)
Total carrying amount	$ 173,609	$ 223,262

Amortization of debt issuance costs for the three months ended September 30, 2023 and 2022 were $116, respectively. Amortization of debt issuance costs for the nine months ended September 30, 2023 and 2022 were $348, respectively. Amortization of debt issuance costs is recorded to interest expense, net on the Company's Condensed Consolidated Statements of Operations and Comprehensive Loss.

The Company recognized interest expense of $3,639 and $2,592 during the three months ended September 30, 2023 and 2022, respectively. The Company recognized interest expense of $11,326 and $5,615 during the nine months ended September 30, 2023 and 2022, respectively. Future principal payments of long-term debt as of September 30, 2023 are as follows:

Year Ending	
2023 (remaining three months)	$ —
2024	—
2025	—
2026	175,000
	$ 175,000

9. Income taxes

At the end of each interim period, the Company estimates the annual expected effective income tax rate and applies that rate to its ordinary year-to-date earnings or loss. The income tax provision or benefit related to significant, unusual, or extraordinary items, if applicable, that will be separately reported or reported net of their related tax effects are individually computed and recognized in the interim period in which they occur. In addition, the effect of changes in enacted tax laws or rates, tax status, judgment on the realizability of a beginning-of-the-year deferred tax asset in future years or unrecognized tax benefits is recognized in the interim period in which the change occurs.

The computation of the annual expected effective income tax rate at each interim period requires certain estimates and assumptions including, but not limited to, the expected pre-tax income (or loss) for the year, projections of the proportion of income (and/or loss) earned and taxed in foreign jurisdictions, permanent and temporary differences, and the likelihood of the realization of deferred tax assets generated in the current year. The accounting estimates used to compute the provision or benefit for income taxes may change as new events occur, more experience is acquired, additional information is obtained or the Company’s tax environment changes. To the extent that the expected annual effective income tax rate changes during a quarter, the effect of the change on prior quarters is included in income tax provision in the quarter in which the change occurs.

For the three months ended September 30, 2023 and 2022, the Company recorded an income tax provision of $19,841 and $1,287, respectively. The Company’s effective tax rate for the three months ended September 30, 2023 and 2022 was 325.7% and 62.7%, respectively. The Company's effective tax rate for the three months ended September 30, 2023 is higher than for the respective three months ended September 30, 2022, primarily due to non-deductible stock-based compensation and other permanent tax differences and discrete items.

For the nine months ended September 30, 2023 and 2022, the Company recorded an income tax benefit of $6,240 and income tax provision of $5,083, respectively. The Company's effective tax rate for the nine months ended September 30, 2023 and 2022 was 68.1% and 56.7%, respectively. The Company's effective tax rate for the nine months ended September 30, 2023 is higher than for the respective nine months ended September 30, 2022, primarily due to non-deductible executive compensation and other permanent tax differences and discrete items.

The Company recognizes interest and, if applicable, penalties related to unrecognized tax benefits in the income tax provision. The Company is not currently under audit in any taxing jurisdiction.

10. Segment data

Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker ("CODM"), in deciding how to allocate resources and in assessing performance. The Company's Chief Executive Officer is the CODM.

The Company manages its operations as a single segment for the purpose of assessing and making operating decisions. The CODM allocates resources and assesses performance based upon financial information at the consolidated level. Since the Company operates in one operating segment, all required financial segment information can be found in the condensed consolidated financial statements.

The following table summarizes revenue by geographic area:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	**2022**	**2023**	**2022**
Revenue				
North and South America ("Americas")	$ 83,419	$ 69,786	$ 236,610	$ 199,078
Europe, Middle East and Africa ("EMEA")	27,649	23,110	78,201	68,368
Asia and Pacific Rim ("APAC")	9,263	8,447	25,263	23,467
Total	$ 120,331	$ 101,343	$ 340,074	$ 290,913

For the three months ended September 30, 2023 and 2022, revenue in the U.S. was $78,777 and $65,725, respectively. For the nine months ended September 30, 2023 and 2022, revenue in the U.S. was $224,743 and $188,193, respectively.

The following table summarizes long lived assets, net by geographic area:

	September 30, 2023	December 31, 2022
Long lived assets		
Americas	$ 15,301	$ 16,016
EMEA	8,597	6,419
APAC	1,976	2,764
Total	$ 25,874	$ 25,199

11. Stock-based compensation

Total stock-based compensation expense for all equity arrangements for the three and nine months ended September 30, 2023 and 2022 were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	**2022**	**2023**	**2022**
Cost of revenue	$ 118	$ 101	$ 328	$ 258
Sales and marketing	5,714	4,457	17,859	10,650
Technology and development	2,902	3,168	13,434	6,979
General and administrative	5,166	6,521	34,020	15,220
Total	$ 13,900	$ 14,247	$ 65,641	$ 33,107

The Company maintains multiple stock-based incentive compensation plans. Expense relating to outstanding awards under such plans is summarized as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,		Unamortized Expense as of	Weighted Average Vesting Term
	2023	2022	2023	2022	September 30, 2023	
Time Based Options						
2018 Plan	$ 1,727	$ 3,234	$ 3,544	$ 10,970		
2021 Plan	536	672	1,740	2,417		
Total Time Based Options Expense	$ 2,263	$ 3,906	$ 5,284	$ 13,387	$ 4,977	1.5 years
Return Target Options						
2018 Plan	$ (2,111)	$ —	$ 18,215	$ —		
2021 Plan	—	—	3,124	—		
Total Return Target Options Expense	$ (2,111)	$ —	$ 21,339	$ —	$ —	0.0 years
LTIP Expense (2018 Plan)	$ 16	$ —	$ 333	$ —		
Other equity awards under 2021 Plan						
Restricted Stock Units ("RSUs")	$ 8,760	$ 7,552	$ 25,483	$ 16,524	$ 104,381	3.1 years
Market Stock Units ("MSUs")	4,632	2,657	12,194	3,065	23,845	3.5 years
Other equity awards under 2021 Plan expense	$ 13,392	$ 10,209	$ 37,677	$ 19,589	$ 128,226	
Employee Stock Purchase Plan "ESPP"	$ 340	$ 131	$ 1,008	$ 131		
Total Stock-Based Compensation Expense	**$ 13,900**	**$ 14,247**	**$ 65,641**	**$ 33,107**	**$ 133,203**	

Integral Ad Science Holding Corp. Amended and Restated 2018 Non-Qualified Stock Option Plan

On August 1, 2018, the Company adopted the 2018 Non-Qualified Stock Option Plan (“2018 Plan”). Under the 2018 Plan, the Company issued (i) Time-Based Options that vest over four years with 25% vesting after twelve months and an additional 6.25% vesting at the end of each successive quarter thereafter; and (ii) Return-Target Options that were to vest upon the first to occur of sale of the Company, or, sale or transfer to any third party of shares, as a result of which, any person or group other than Vista, obtains possession of voting power to elect a majority of the Board or any other governing body and the achievement of a total equity return multiple of 3.0 or greater.

The 2018 Plan contained a provision wherein, the Time-Based Options could be repurchased by the Company at cost upon resignation of the employee. Due to this repurchase feature, the Time-Based Options did not provide the employee with the potential benefits associated with a stock award holder, and therefore, these awards were not accounted for as a stock-based award under ASC 718, *Compensation - Stock Compensation* but instead, compensation cost was recognized when the benefit to the employee was determined to be probable.

The Return-Target Options were considered to contain both market (total stockholder return threshold) and performance (exit event) conditions. As such, the award was measured on the date of grant. Since the conditions for vesting related to the Return-Target Options were not met prior to the IPO, no stock-based compensation was recognized in the pre-IPO financial statements of the Company. During the three months ended June 30, 2023, with the filing of a “shelf” registration statement on Form S-3, the market condition and the implied performance condition relating to the Return-Target Options were deemed to be probable.

In connection with the IPO, the 2018 Plan was amended and restated (the “Amended and Restated 2018 Plan”) with the following modifications: (i) the provision to repurchase the Time-Based Options at cost upon resignation of the employee was removed and (ii) the Return-Target Options were modified to include vesting upon a sale of shares by Vista following the IPO resulting in Vista realizing a cash return on its investment in the Company equaling or exceeding $1.17 billion.

As a result of the modification to the Time-Based Options, the awards became subject to the guidance in ASC 718, *Compensation - Stock Compensation*. As the return multiple and vesting conditions associated with the Return-Target Options were also modified, the Company fair valued the Return-Target Options using a Monte Carlo simulation model. The Return-Target Options become exercisable following both (i) a registration of shares of common stock held by Vista and (ii) Vista realizing a cash return on its investment in the Company equaling or exceeding $1.17 billion.

Vesting of the Time-Based Options accelerates when the Return-Target Options vest and therefore, recognition of the remaining unamortized stock compensation expense related to the Time-Based Options will accelerate when the Return-Target Options vest.

The total number of Time-Based Options and Return Target Options outstanding under the Amended and Restated 2018 Plan as of September 30, 2023 were 2,656,023 and 1,342,092, respectively. The Company does not expect to issue any additional awards under the Amended and Restated 2018 Plan.

2021 Omnibus Incentive Plan (“2021 Plan”)

On June 29, 2021, the Company adopted the 2021 Plan to incentivize executive officers, management, employees, consultants and directors of the Company and to align the interests of the participants with those of the Company’s shareholders. As of September 30, 2023, there were 35,121,308 shares reserved for issuance under the 2021 Plan. The total number of shares reserved for issuance under the 2021 Plan is increased on January 1 of each of the first 10 calendar years during the term of the 2021 Plan, by the lesser of (i) 5% of the total number of shares of common stock outstanding on each December 31st immediately prior to the date of increase or (ii) such number of shares of common stock determined by our Board or compensation committee.

As of September 30, 2023, there were 1,147,846 total options outstanding under the 2021 Plan, consisting of 764,908 Time-Based Options and 382,938 Return-Target Options. The vesting conditions for the options issued under the 2021 Plan are identical to those described under the Amended and Restated 2018 Plan.

Stock option activity for the three months ended September 30, 2023 is as follows:

Time-Based Options

	Stock options	Weighted average exercise price	Weighted average remaining contractual life (years)	Aggregate intrinsic value
Outstanding as of July 1, 2023	3,499,594	$ 7.68	6.32	$ 36,049
Conversion of Return-Target Options to Time-Based Options	9,112	8.58	—	—
Canceled or forfeited	(34,027)	12.40	—	—
Exercised	(53,748)	10.98	—	—
Outstanding at September 30, 2023	3,420,931	$ 7.59	5.72	$ 19,393
Vested and expected to vest at September 30, 2023	3,420,931	$ 7.59	5.72	$ 19,393
Exercisable as of September 30, 2023	2,968,006	$ 6.47	5.45	$ 18,726

Return-Target Options

	Stock options	Weighted average exercise price	Weighted average remaining contractual life (years)	Aggregate intrinsic value
Outstanding as of July 1, 2023	1,909,715	$ 7.66	6.39	$ 19,724
Conversion of Return-Target Options to Time-Based Options	(9,112)	8.58	—	—
Canceled or forfeited	(175,573)	9.43	—	—
Exercised	—	—	—	—
Outstanding at September 30, 2023	1,725,030	$ 7.47	6.03	$ 9,963
Vested and expected to vest at September 30, 2023	1,725,030	$ 7.47	6.03	$ 9,963
Exercisable as of September 30, 2023	—	—	—	—

Stock option activity for the nine months ended September 30, 2023 is as follows:

Time-Based Options

	Stock options	Weighted average exercise price	Weighted average remaining contractual life (years)	Aggregate intrinsic value
Outstanding at January 1, 2023	4,251,290	$ 8.07	6.97	$ 12,163
Conversion of Return-Target Options to Time-Based Options	9,112	8.58	—	—
Canceled or forfeited	(198,221)	14.43	—	—
Exercised	(641,250)	8.71	—	—
Outstanding at September 30, 2023	3,420,931	$ 7.59	5.72	$ 19,393
Vested and expected to vest at September 30, 2023	3,420,931	$ 7.59	5.72	$ 19,393
Exercisable as of September 30, 2023	2,968,006	$ 6.47	5.45	$ 18,726

Return-Target Options

	Stock options	Weighted average exercise price	Weighted average remaining contractual life (years)	Aggregate intrinsic value
Outstanding at January 1, 2023	2,153,264	$ 8.03	6.97	$ 6,190
Conversion of Return-Target Options to Time-Based Options	(9,112)	8.58	—	—
Canceled or forfeited	(419,122)	10.34	—	—
Exercised	—	—	—	—
Outstanding at September 30, 2023	1,725,030	$ 7.47	6.03	$ 9,963
Vested and expected to vest at September 30, 2023	1,725,030	$ 7.47	6.03	$ 9,963
Exercisable as of September 30, 2023	—	—	—	—

Restricted Stock Units ("RSUs")

RSUs under the 2021 Plan granted prior to May 2022 vest 25% each year and become fully vested after four years of service. RSUs under the 2021 Plan granted during or after May 2022 vest 6.25% at the end of each successive quarter and become fully vested after four years of service.

RSU activity for the three months ended September 30, 2023 is as follows:

	RSUs	
	Number of Shares	Weighted Average Grant Date Fair Value
Outstanding as of July 1, 2023	9,792,184	$ 12.42
Granted	614,174	14.54
Canceled or forfeited	(329,852)	13.06
Vested	(996,715)	13.35
Outstanding as of September 30, 2023	9,079,791	$ 12.44
Expected to vest as of September 30, 2023	9,079,791	

RSU activity for the nine months ended September 30, 2023 is as follows:

	RSUs	
	Number of Shares	Weighted Average Grant Date Fair Value
Outstanding as of January 1, 2023	8,085,367	$ 11.88
Granted	3,915,070	13.89
Canceled or forfeited	(659,753)	13.11
Vested	(2,260,893)	12.74
Outstanding as of September 30, 2023	9,079,791	$ 12.44
Expected to vest as of September 30, 2023	9,079,791	

Market Stock Units ("MSUs")

The Company granted MSUs under the 2021 Plan to certain executive officers. MSUs vest over four years, 25% on the first anniversary of the vesting commencement date and 6.25% at the end of each quarter thereafter. The number of MSUs eligible to vest is based on the performance of the Company's common stock over each applicable vesting period. The number of shares eligible to vest is calculated based on a payout factor. The payout factor is calculated by dividing (i) the average closing price of the Company's stock during the ten trading days immediately preceding the applicable vesting date by (ii) the closing price of the Company's stock on the vesting commencement date. The payout factor is zero if such quotient is less than 0.60 and is capped at 2.25. Such quotient is then multiplied by the target number of MSUs granted to the relevant officer to determine the number of shares to be issued to the officer at vesting. The grant date fair value of the MSUs was determined using a Monte-Carlo simulation. The Company uses the accelerated attribution method to account for these awards.

MSU activity for the three months ended September 30, 2023 is as follows:

	MSUs	
	Number of Shares	Weighted Average Grant Date Fair Value
Outstanding as of July 1, 2023	2,156,449	$ 18.83
Granted	36,792	19.44
Canceled or forfeited	(235,411)	18.37
Change in awards based on performance	43,273	14.88
Vested	(105,987)	14.43
Outstanding as of September 30, 2023	1,895,116	$ 19.07
Expected to vest as of September 30, 2023	1,895,116	

MSU activity for the nine months ended September 30, 2023 is as follows:

	MSUs	
	Number of Shares	Weighted Average Grant Date Fair Value
Outstanding as of January 1, 2023	1,209,262	$ 14.55
Granted	1,446,396	21.01
Canceled or forfeited	(444,979)	16.52
Change in awards based on performance	116,528	14.89
Vested	(432,091)	14.43
Outstanding as of September 30, 2023	1,895,116	$ 19.07
Expected to vest as of September 30, 2023	1,895,116	

2021 Employee Stock Purchase Plan

The Company adopted the ESPP for the primary purpose of incentivizing employees in future periods. As of September 30, 2023, 4,573,457 shares of common stock are reserved for issuance under the ESPP. The number of shares available for issuance under the ESPP is increased on January 1st of each calendar year, ending in and including 2031, by an amount equal to the lesser of (i) 1% of the shares outstanding on the final day of the immediately preceding calendar year and (ii) such smaller number of shares as is determined by our Board, subject to a maximum of 16,000,000 shares of our common stock for the portion of the ESPP intended to qualify as an employee stock purchase plan under Section 423 of the Internal Revenue Code. All Company employees and employees of designated subsidiaries are eligible to participate in the ESPP and may purchase shares through payroll deductions of up to 15% of their eligible compensation, subject to a maximum of $25 in any annual period for the portion of the ESPP intended to qualify as an employee purchase plan under Section 423 of the Internal Revenue Code.

The ESPP provides eligible employees the opportunity to purchase shares of the Company's common stock through payroll deductions at a price equal to 85% of the fair market value of the shares on (i) the first business day of the offering period or (ii) the last business day of the offering period, whichever is lower. The ESPP is offered to employees in six-month windows, with phases beginning on February 1 and August 1 of each calendar year. For the window that ended on January 31, 2023, employees purchased 111,163 shares at a price of $7.93 per share. For the window that ended on July 31, 2023, employees purchased 162,406 shares at a price of $8.77 per share. After such purchases, 4,299,888 shares were available for future purchase under the ESPP.

12. Stockholders’ equity

As of September 30, 2023, our authorized common stock consists of 500,000,000 shares of common stock, par value $0.001 per share and 50,000,000 preferred stock, par value $0.001 per share.

For the three months ended September 30, 2023, the Company issued 1,102,702 shares of common stock for vested RSUs and MSUs, employees exercised stock options in exchange for 53,748 shares of common stock for $591, and employees purchased 162,406 shares of common stock through the ESPP. For the nine months ended September 30, 2023, the Company issued 2,692,984 shares of common stock for vested RSUs and MSUs, employees exercised stock options in exchange for 641,250 shares of common stock for $5,584 and employees purchased 273,569 shares of common stock through the ESPP.

For the three months ended September 30, 2022, the Company issued 471,995 shares of common stock for vested RSUs and employees exercised stock options in exchange for 603,670 shares of common stock for $2,527. For the nine months ended September 30, 2022, the Company issued 761,208 shares of common stock for vested RSUs and employees exercised stock options in exchange for 1,414,666 shares of common stock for $5,908. During the three and nine months ended September 30, 2022, the Company repurchased 3,080,061 shares of common stock for $23,655.

13. Commitments and contingencies

Indemnifications

In its normal course of business, the Company has made certain indemnities, commitments, and guarantees under which it may be required to make payments in relation to certain transactions. Those indemnities include intellectual property indemnities to the Company's customers, indemnities to directors and officers of the Company to the maximum extent permitted under the laws of the State of Delaware, and indemnifications related to the Company's lease agreements. In addition, the Company's advertiser and distribution partner agreements contain certain indemnification provisions which are generally consistent with those prevalent in the Company's industry. The Company has not incurred any obligations under indemnification provisions historically and does not expect to incur significant obligations in the future. Accordingly, the Company has not recorded any liability for these indemnities, commitments, and guarantees in the accompanying balance sheets.

Purchase commitments

In the ordinary course of business, the Company enters into various purchase commitments primarily related to third-party cloud hosting and data services, and information technology operations. Total non-cancelable purchase commitments as of September 30, 2023 were approximately $163,905 for periods through 2028.

14. Net income (loss) per share

Basic and diluted income (loss) per share is computed by dividing net income (loss) by the weighted-average shares outstanding:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Numerator:				
Net income (loss)	$ (13,749)	$ 767	$ (2,926)	$ 3,887
Denominator:				
Basic Shares:				
Weighted-average shares outstanding	157,055,904	155,389,195	157,691,005	155,007,655
Diluted Shares:				
Basic weighted-average shares outstanding	157,055,904	155,389,195	157,691,005	155,007,655
Dilutive effect of stock-based awards	—	1,307,559	—	2,573,914
Weighted-average diluted shares outstanding	157,055,904	156,696,754	157,691,005	157,581,569
Net income (loss) per share				
Basic	$ (0.09)	$ 0.00	$ (0.02)	$ 0.03
Diluted	$ (0.09)	$ 0.00	$ (0.02)	$ 0.02

The following potential outstanding equity awards were excluded from the computation of diluted net income (loss) per share attributable to common stockholders for the periods presented given that their inclusion would have been anti-dilutive.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Options to purchase common stock	5,267,371	5,169,703	5,792,252	4,493,135
Restricted stock units	9,328,583	6,964,588	9,231,891	2,086,980
Market stock units	1,822,258	793,212	1,799,804	284,942
ESPP	202,951	—	45,348	—
Total	16,621,163	12,927,503	16,869,295	6,865,057

15. Fair value disclosures

Assets and liabilities measured at fair value on a recurring basis

The Company invests in money market funds, which are measured and recorded at fair value on a recurring basis at each reporting period. Money market funds are valued based on quoted market prices in active markets and classified within Level 1 of the fair value hierarchy.

The following table summarizes our cash equivalents measured at fair value on a recurring basis:

	Fair value hierarchy	Fair value
Money market funds		
September 30, 2023	Level 1	$ 15,132

There were no money market funds included in cash and cash equivalents as of December 31, 2022.

The carrying value of cash and cash equivalents, restricted cash, accounts receivable and accounts payable approximated fair value due to their short maturities.

Financial instruments

Financial instruments are valued based on observable inputs and classified within Level 2 of the fair value hierarchy. The carrying value of long-term debt approximates its fair value based on Level 2 inputs as the principal amounts outstanding are subject to variable interest rates that are based on market rates (see Note 8).

16. Related-party transactions

The Company incurs expenses for consulting services and other expenses related to services provided by Vista Consulting Group, LLC ("VCG"). For the three months ended September 30, 2023 and 2022, the Company incurred expenses of $0 and $18, respectively. For the nine months ended September 30, 2023 and 2022, the Company incurred expenses of $0 and $82, respectively. These costs were included in general and administrative expenses in the Condensed Consolidated Statements of Operations and Comprehensive Loss. Amounts due to VCG as of September 30, 2023 and December 31, 2022 were $0 in both periods.

The Company incurs various travel and other expenses related to services provided by Vista Equity Partners Management, LLC ("VEP"). For the three months ended September 30, 2023 and 2022, the Company incurred expenses of $21 and $19, respectively. For the nine months ended September 30, 2023 and 2022, the Company incurred expenses of $64 and $56, respectively. These costs were included in general and administrative expenses in the Condensed Consolidated Statements of Operations and Comprehensive Loss. Amounts due to VEP as of September 30, 2023 and December 31, 2022 were $2 and $13, respectively.

In May 2023, funds affiliated with Vista conducted an underwritten secondary offering of 11,500,000 shares of the Company's common stock. In June 2023, funds affiliated with Vista sold 5,220,000 shares of the Company's common stock in a block trade in compliance with Rule 144 of the Securities Act of 1933, as amended (the "Securities Act"). The Company did not receive any proceeds from these sales, but bore the costs associated with therewith (other than underwriting discounts and commissions), which were $1,404 and were recorded within General and administrative expenses in the Condensed Consolidated Statement of Operations and Comprehensive Loss.

The Company had other related party transactions with companies owned by Vista Equity Partners that are immaterial individually and in aggregate to the Condensed Consolidated Balance Sheets and Condensed Consolidated Statements of Operations and Comprehensive Loss.

17. Restructuring

On December 7, 2022, the Company announced a reduction in workforce of approximately 120 employees to better align resources, consistent with the Company's strategy of increasing operational efficiency and improving productivity. The Company expects to pay the remaining balance of restructuring costs by the end of 2023. The Company recognized a liability and the related expense for these restructuring costs when the liability was incurred and could be measured. Restructuring accruals are based upon management estimates at the time and can change depending upon changes in facts and circumstances subsequent to the date the original liability was recorded.

Activity impacting the Company's restructuring reserves, recorded within Accounts payable and accrued expenses on the Consolidated Balance Sheets, for the nine months ended September 30, 2023, was as follows:

Balance at December 31, 2022	$	4,315
Restructuring reserve increase		69
Payments and impact of FX		(4,112)
Balance at September 30, 2023	$	272

FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q (“Quarterly Report”) contains forward-looking statements that are subject to risks and uncertainties. All statements other than statements of historical fact included in this Quarterly Report are forward-looking statements. Forward-looking statements give our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance and business. You can identify forward-looking statements by the fact that they do not relate strictly to historical or current facts. These statements may include words such as “anticipate,” “estimate,” “expect,” “project,” “plan,” “intend,” “believe,” “may,” “will,” “should,” “can have,” “likely,” and other words and terms of similar meaning in connection with any discussion of the timing or nature of future operating or financial performance or other events. For example, all statements we make relating to our estimated and projected costs, expenditures, cash flows, growth rates and financial results or our plans and objectives for future operations, growth initiatives, or strategies are forward-looking statements. All forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those that we expected, including:

- the adverse effect on our business, operating results, financial condition, and prospects from various macroeconomic factors, including inflation, rising interest rates, potential recessions, instability in geopolitical or market conditions generally and instability in the financial markets and banking industry;
- our dependence on the overall demand for advertising;
- a failure to innovate or make the right investment decisions;
- our failure to maintain or achieve industry accreditation standards;
- our ability to compete successfully with our current or future competitors in an intensely competitive market;
- our dependence on integrations with advertising platforms, demand-side providers (“DSPs”), and proprietary platforms that we do not control;
- our ability to expand into new channels;
- our ability to sustain our profitability and revenue growth rate decline;
- risks that our customers do not pay or choose to dispute their invoices;
- risks of material changes to revenue share agreements with certain DSPs;
- our ability to effectively manage our growth;
- the impact that any acquisitions we have completed in the past and may consummate in the future, strategic investments, or alliances may have on our business, financial condition, and results of operations;
- our ability to successfully execute our international plans;
- the risks associated with the seasonality of our market;
- our ability to maintain high impression volumes;
- the difficulty in evaluating our future prospects given our short operating history;
- uncertainty in how the market for buying digital advertising verification solutions will evolve;
- our ability to provide digital or cross-platform analytics;
- our ability to maintain our corporate culture;
- public health outbreaks, epidemics or pandemics, such as the COVID-19 pandemic;
- risks posed by earthquakes, fires, floods, and other natural catastrophic events;
- interruption by man-made problems such as terrorism, computer viruses or social disruption;
- risks that our existing indebtedness could adversely affect our business and growth prospects;
- the risk of failures in the systems and infrastructure supporting our solutions and operations;
- our ability to avoid operational, technical, and performance issues with our platform;
- risks associated with any unauthorized access to user, customer, or inventory and third-party provider data;
- our inability to use software licensed from third parties;
- our ability to provide the non-proprietary technology, software, products, and services that we use;

- the risk that we are sued by third parties for alleged infringement, misappropriation, or other violation of their proprietary rights;
- our ability to obtain, maintain, protect, or enforce intellectual property and proprietary rights that are important to our business;
- our involvement in lawsuits to protect or enforce our intellectual property;
- risks that our employees, consultants, or advisors have wrongfully used or disclosed alleged trade secrets of their current or former employers;
- risks that our trademarks and trade names are not adequately protected;
- the impact of unforeseen changes to privacy and data protection laws and regulation on digital advertising;
- the risk that a perceived failure to comply with laws and industry self-regulation may damage our reputation; and
- other factors disclosed in the section entitled “Risk Factors” and elsewhere in our Annual Report on Form 10-K and this Quarterly Report on Form 10-Q.

We derive many of our forward-looking statements from our operating budgets and forecasts, which are based on many detailed assumptions. While we believe that our assumptions are reasonable, we caution that it is very difficult to predict the impact of known factors, and it is impossible for us to anticipate all factors that could affect our actual results. Important factors that could cause actual results to differ materially from our expectations, or cautionary statements, are disclosed under the sections entitled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report on Form 10-K, as well as in the section entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in this Quarterly Report. All written and oral forward-looking statements attributable to us, or persons acting on our behalf, are expressly qualified in their entirety by these cautionary statements as well as other cautionary statements that are made from time to time in our other SEC filings and public communications. You should evaluate all forward-looking statements made in this Quarterly Report in the context of these risks and uncertainties.

We caution you that the important factors referenced above may not contain all of the factors that are important to you. In addition, we cannot assure you that we will realize the results or developments we expect or anticipate or, even if substantially realized, that they will result in the consequences or affect us or our operations in the way we expect. The forward-looking statements included in this Quarterly Report are made only as of the date hereof. We undertake no obligation to update or revise any forward-looking statement as a result of new information, future events or otherwise, except as otherwise required by law.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q. The following discussion and analysis contains forward-looking statements that involve risks and uncertainties. When reviewing the discussion below, you should keep in mind the substantial risks and uncertainties that could impact our business. In particular, we encourage you to review the risks and uncertainties described in the sections titled “Risk Factors” and "Forward-Looking Statements" included in our Annual Report on Form 10-K for the year ended December 31, 2022 and in this Quarterly Report on Form 10-Q. These risks and uncertainties could cause actual results to differ materially from those projected in forward-looking statements contained in this report or implied by past results and trends. Our historical results are not necessarily indicative of the results that may be expected for any period in the future, and our interim results are not necessarily indicative of the results we expect for the full fiscal year or any other period. Unless the context otherwise requires, the terms “Company,” “Integral Ad Science Holding Corp.,” “IAS,” “we,” “us,” “our,” or similar terms refer to Integral Ad Science Holding Corp. and, where appropriate, its subsidiaries.

Overview

We are a leading global media measurement and optimization platform that delivers the industry's most actionable data to drive superior results for the world's largest advertisers, publishers, and media platforms. We deliver independent measurement and verification of digital advertising to over 2,000 advertising customers across all devices, channels, and formats, including desktop, mobile, connected TV (“CTV”), social, display, audio, video and emerging media like audio and gaming. Our Quality Impressions® is a proprietary metric that helps ensure media quality standards. To be counted as a Quality Impression, a digital ad must be viewable, by a real person rather than a bot, in a brand-safe and suitable environment within the correct geography. The viewability and invalid traffic filtration aspects of Quality Impression are accredited by the Media Rating Council across desktop and mobile platforms.

Without an independent evaluation of digital advertising quality, brands and their agencies previously relied on a wide range of publishers and ad platforms to self-report and measure the effectiveness of campaigns without a global benchmark to understand success. We are an independent, trusted partner for buyers and sellers of digital advertising to increase accountability, transparency, and effectiveness in the market. We help advertisers optimize their ad spend and better measure consumer engagement with campaigns across platforms, while enabling publishers to improve their inventory yield and revenue.

As a leading global media measurement and optimization platform, we have deep integrations with all the major advertising and technology platforms including Facebook, Instagram, Google, YouTube, LinkedIn, Amazon, Microsoft, Pinterest, Snap, Spotify, TikTok, The Trade Desk, X (formerly known as Twitter), Xandr, and Yahoo. Our platform uses advanced artificial intelligence (“AI”) and machine learning (“ML”) technologies to process over 280 billion daily digital interactions globally on average. With this data, we deliver actionable data to our global customers through our easy-to-use reporting platform, IAS Signal™, helping brands, agencies, publishers, and platform partners improve media quality and drive superior results.

Our pre-bid optimization and post-bid measurement solutions enable advertisers to measure campaign performance and value across viewability, ad fraud prevention, brand safety and suitability, and contextual targeting for ads on desktop, mobile in-app, social, and CTV platforms. Our pre-bid optimization solution is directly integrated with DSPs to help optimize return on ad spend (“ROAS”) by directing budget to the best available inventory. Our contextual ability is enabled through our deep integrations with all major DSPs. In addition, our targeting and pre-bid solutions extend to the social platforms. Additionally, our Total Visibility® offering provides marketers with actionable insights to optimize their campaign spend and drive higher yield by focusing on the most efficient and cost-effective pathways. Our solutions help hundreds of publishers globally maximize their yield by delivering high quality ad inventory that is fraud free, viewable, brand safe, and suitable, and geographically targeted.

Macroeconomic and Geopolitical Conditions

Current adverse macroeconomic and geopolitical conditions, including high interest rates, currency fluctuations, high inflation, changes to fiscal and monetary policy, instability in the financial markets and disruptions in European economies as a result of the war in Ukraine, may adversely affect our results. In response to high levels of inflation, central banks, including the U.S. Federal Reserve and the European Central Bank, have increased interest rates. Our operating expenses are denominated in the currencies of the countries in which our operations are located, and our consolidated results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates. For the three and nine months ended September 30, 2023, we incurred foreign exchange gains resulting from fluctuations primarily attributable to the British Pound and Euro currency movements relative to the U.S. dollar. In addition, as a result of increased interest rates, the interest rate under our debt instruments has increased from 4.6% at September 30, 2022 to 7.3% at September 30, 2023, increasing our cost of capital.

Our business depends on the overall demand for advertising and on the economic health of advertisers that benefit from our platform. Economic downturns, recessions, or unstable market conditions cause advertisers to decrease their advertising budgets, which in turn reduces spend through our platform.

Our Business Model

We generate revenue based on the volume of purchased digital ads that our solution measures. Advertisers and publishers use our media quality solutions for ad viewability, brand safety and suitability, optimization, context control, and ad fraud prevention. Our customers primarily pay us based on usage, where the customer pays a fee based on the total volume of ads measured. Certain contracts with customers utilize other pricing arrangements, including minimum commitments, overages based on tiered pricing or flat fees. We maintain an expansive set of integrations across the digital advertising ecosystem, including with leading programmatic and social platforms, which enables us to cover all key channels, formats and devices.

Key Factors Affecting Our Performance

Our historical financial performance has been, and we expect our financial performance in the future to be, driven by our ability to:

Innovate and Develop New Products for Key High-Growth Segments

- *Optimization*. We aim to deliver greater performance on programmatic ad buying via innovative solutions including contextual targeting and brand safety and suitability. These solutions include traditional open web media buying and select retail media platforms.
- *Social*. We aim to develop deeper integrations with social platforms, also known as Walled Gardens, including video-based brand safety and suitability, to deliver continued transparency to our customers.
- *CTV*. We plan to continue to expand our CTV-specific verification solutions and context control capabilities to address the fast-growing CTV segment. In 2022, we integrated data from our Publica LLC ("Publica") acquisition to power new methods of measuring and optimizing performant CTV impressions.
- *Adjacent product expansion*. We plan to expand our platforms and integrations to address new measurement and optimization needs for our clients.

Increase Sales Within Our Existing Customer Base

We aim to increase the use of our products among existing customers across more campaigns and impressions. Given our comprehensive product portfolio, we believe we can cross-sell additional or new solutions to provide end-to-end coverage to more clients from pre-bid viewability to post-bid verification, fraud prevention, safety, suitability, and targeting.

Acquire New Customers and Increase Market Share

Our ability to acquire new customers and increase our market share is dependent upon a number of factors, including the effectiveness of our solutions, marketing and sales to drive new business prospects and execution, client digital marketing investment adoption, new products and feature offerings, global reach and the growth of the market for digital ad verification. There is a market opportunity to provide advertisers directly or through advertising agencies with verification services, specifically around ad viewability, ad fraud prevention and brand safety and suitability. We plan to work with the top 500 global advertisers by targeting high-spend verticals and brands with a natural sensitivity for brand safety, brand suitability, and ROAS needs. We believe we will increase our market share by strengthening our relationships with the leading social platforms, enhancing our optimization solutions, deriving benefit from our broad global position, and leveraging our differentiated data science and market-leading contextual capabilities.

Expand Customer Base Internationally

Our ability to expand our customer base internationally is dependent upon a number of factors, including effectively implementing our business processes and go-to-market strategy, our ability to adapt to market or cultural differences, the general competitive landscape, our ability to invest in our sales and marketing channels, the maturity and growth trajectory of our services by region and our brand awareness and perception. Global marketers are becoming increasingly cognizant of the value of sophisticated verification strategies and, as such, we believe there is growing demand for our services internationally. Our investments in international markets resulted in an 8% growth in revenue year-over-year for the year ended December 31, 2022. We believe that Latin America, the Nordics and the APAC region may represent substantial growth opportunities, and we are investing in developing our business in those markets by way of expanded in-market customer service investment and by leveraging our global relationships. We aim to continue to grow in EMEA and APAC. We view ourselves as well-positioned to continue penetrating these markets given our market-leading global footprint.

Seasonality

We experience fluctuations in revenue that coincide with seasonal fluctuations in the digital ad spending of our customers. 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 of each calendar year. We expect seasonality trends to continue, and our ability to manage our resources in anticipation of these trends will affect our operating results. Consequently, the fourth quarter usually reflects the highest level of measurement activity, and the first quarter reflects the lowest level of activity. Our revenue, cash flow, operating results and other key operating and performance metrics may vary from quarter to quarter due to the seasonal nature of our clients' spending on advertising campaigns. While our revenue is highly re-occurring, seasonal fluctuations in ad spend may impact quarter-over-quarter results. We believe that the year-over-year comparison of results more appropriately reflects the overall performance of the business.

Key Business Metrics

In addition to our U.S. GAAP financial information, we review a number of operating and financial metrics, including the following key metrics, to evaluate our business, measure our performance, identify trends affecting our business, formulate business plans and make strategic decisions. The key business metrics presented are based on our advertising customers, as revenue from these customers represents substantially all the revenue. We previously provided the number of total advertising customers (as of the end of the applicable period) as a key business metric, however, starting with the second quarter of 2023, we have discontinued this metric as we no longer use it to evaluate our business or measure our performance.

The following table sets forth our key performance indicators for the periods set forth below:

	September 30,	
	2023	**2022**
Net revenue retention of advertising customers (%) (as of the end of the period)	116 %	120 %
Total number of large advertising customers (as of the end of the period)	219	184

Net revenue retention of advertising customers

We define net revenue retention of advertising customers as a metric to reflect the expansion or contraction of our advertising customers' revenue by measuring the period-over-period change in trailing-twelve-month revenues from customers who were also advertising customers in the prior trailing-twelve-month period. As such, this metric includes the impact of any churned, or lost, advertising customers from the prior trailing-twelve-month period as well as any increases or decreases in their spend, including the positive revenue impacts of selling new services to an existing advertising customer. The numerator and denominator include revenue from all advertising customers that we served and from which we recognized revenue in the earlier of the two trailing-twelve-month periods being compared. For purposes of discussing our key business metrics, we define an advertising customer as any advertiser account that spends at least $3,000 in the applicable trailing-twelve-month periods. We calculate our net revenue retention of advertising customers as follows:

Numerator: The total revenue earned during the current trailing-twelve-month period from the cohort of advertising customers in the prior trailing-twelve-month period.

Denominator: The total revenue earned during the immediately preceding trailing-twelve-month period from such cohort of advertising customers in such trailing-twelve-month period.

The quotient obtained from this calculation is our net revenue retention rate of advertising customers.

Our calculation of net revenue retention of advertising customers may differ from similarly titled metrics presented by other companies.

Our net revenue retention of advertising customers decreased from 120% as of September 30, 2022 to 116% as of September 30, 2023. The decrease in the net revenue retention of advertising customers as of September 30, 2022 compared to September 30, 2023 was primarily due lower advertising revenue growth during the trailing-twelve-month period of 19% in 2023 compared to 25% in 2022.

Total number of large advertising customers

Historically, our revenue has been primarily driven by large advertising customers. Increasing awareness of our solutions, further developing our sales and marketing expertise, and continuing to build solutions that address the unique needs of the top 500 global advertisers have increased our number of large advertising customers. We determine our number of large advertising customers by counting the total number of advertising accounts who have spent at least $200,000 per year. We believe our ability to recruit and cross-sell our products to large advertising customers is critical to our long-term success. Our total number of large advertising customers increased from 184 as of September 30, 2022 to 219 as of September 30, 2023. As macroeconomic conditions fluctuate, there is no guarantee that we will continue to see an increase of large advertising customers. Revenue from large advertising customers represented 85% of our total advertising revenue (measurement and optimization revenue) for the trailing-twelve-month period ended September 30, 2023, 84% for the trailing-twelve-month period ended December 31, 2022, and 81% for the trailing-twelve-month period ended September 30, 2022.

Components of Results of Operations

Revenue

We derive revenue from advertisers (buy-side) and publishers (sell-side). Our post-bid measurement (formerly referred to as advertiser direct) solutions enable advertisers to measure campaign performance and value across viewability, ad fraud prevention, brand safety and suitability for ads on desktop, mobile, CTV, social, display, audio, gaming and video platforms. Our pre-bid optimization (formerly referred to as programmatic) solutions are directly integrated with DSPs to help optimize return on ad spend by directing budgets to the best available inventory. Our publisher solutions drive yield by identifying high quality ad inventory that is fraud free, viewable, brand safe and suitable, and geographically targeted on a global basis.

We recognize revenue when control of the promised services is transferred to customers. We recognize revenue by multiplying the cost per thousand impressions ("CPM") and the number of impressions measured. An impression is measured by the platform when a digital ad is served to a real person rather than a bot, viewable on-screen, and presented in a brand-safe and suitable environment in the correct geography. Contracts with our customers primarily utilize a usage-based structure, in which the customer pays a fee to the Company based on the total number of ads measured. Depending on our customer needs, our contracts may also utilize other pricing arrangements, including minimum commitments, overages based on tiered pricing or flat fees.

Operating Expenses

Cost of revenue. Cost of revenue consists of data center costs, hosting fees, revenue share with our DSP partners and personnel costs. Personnel costs include salaries, bonuses, equity-based compensation, and employee benefit costs, attributable to our customer operations group. Our customer operations group is responsible for onboarding, integration of new clients and providing support for existing customers, including technical support for our technology platform and product offering. We allocate overhead such as rent and occupancy and information technology infrastructure charges based on headcount.

Sales and marketing. Sales and marketing expense consists of personnel costs, including salaries, bonuses, equity-based compensation, employee benefits costs and commission costs, for our sales and marketing personnel. Sales and marketing expense also includes costs for advertising, promotional and other marketing activities. We allocate overhead such as rent and occupancy and information technology infrastructure charges based on headcount. Sales commissions are expensed as incurred.

Technology and development. Technology and development expense consists of personnel costs of our engineering, product, and data sciences activities. Personnel costs including salaries, bonuses, equity-based compensation and employee benefits costs, third-party consultant costs associated with the ongoing development and maintenance of our technology platform and product offering. We allocate overhead such as rent and occupancy and information technology infrastructure charges based on headcount. Technology and development costs are expensed as incurred, except to the extent that such costs are associated with software development that qualifies for capitalization, which are then recorded as capitalized software development costs included in internal use software, net on our Condensed Consolidated Balance Sheet.

General and administrative. General and administrative expense consist of personnel costs, including salaries, bonuses, equity-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 intra-office travel and conferences.

Depreciation and amortization. Depreciation and amortization expense consists of depreciation and amortization expenses related to customer relationships, developed technologies, trademarks, favorable leases, equipment, leasehold improvements and other tangible and intangible assets. We depreciate and amortize our assets in accordance with our accounting policies. Maintenance and repairs, which do not extend the useful life of the respective assets, are charged to expense as incurred. Intangible assets are amortized on a straight-line basis over their estimated useful lives or using an accelerated method. Useful lives of intangible assets range from four years to fifteen years.

Foreign exchange loss, net. Foreign exchange loss, net, is impacted by fluctuations in exchange rates and the amount of foreign-currency denominated cash, receivables, intercompany balances, and payables.

Interest expense, net

Interest expense, net. Interest expense, net consists primarily of interest payments on our outstanding borrowings under our Credit Agreement (as defined below) and amortization of related debt issuance costs net of interest income.

Employee retention tax credit

Employee retention tax credit. Employee retention tax credit was recognized in 2022 in connection with our submission for employee retention credits under the CARES Act.

Benefit (provision) from income taxes

Benefit (provision) from income taxes. The benefit (provision) from income taxes resulted primarily from the current period book income (loss) multiplied by the effective tax rate.

Results of Operations

The following table sets forth our consolidated statement of operations for the periods indicated:

(in thousands, except percentages)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Revenue	$ 120,331	$ 101,343	$ 340,074	$ 290,913
Operating expenses:				
Cost of revenue (excluding depreciation and amortization shown below)	25,599	19,171	71,100	53,864
Sales and marketing	29,604	28,190	87,566	77,961
Technology and development	17,211	19,459	53,850	54,071
General and administrative	22,611	20,150	85,673	56,081
Depreciation and amortization	14,027	12,617	40,373	37,585
Foreign exchange loss, net	2,078	4,064	931	3,503
Total operating expenses	111,130	103,651	339,493	283,065
Operating income (loss)	9,201	(2,308)	581	7,848
Interest expense, net	(3,109)	(2,619)	(9,747)	(5,859)
Employee retention tax credit	—	6,981	—	6,981
Net income (loss) before income taxes	6,092	2,054	(9,166)	8,970
Benefit (provision) from income taxes	(19,841)	(1,287)	6,240	(5,083)
Net income (loss)	$ (13,749)	$ 767	$ (2,926)	$ 3,887
Net income (loss) margin	(11)%	1 %	(1)%	1 %

The following table sets forth our consolidated statement of operations data expressed as a percentage of total revenue for the periods indicated:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Revenue	100 %	100 %	100 %	100 %
Operating expenses:				
Cost of revenue (excluding depreciation and amortization shown below)	21 %	19 %	21 %	19 %
Sales and marketing	25 %	28 %	26 %	27 %
Technology and development	14 %	19 %	16 %	19 %
General and administrative	19 %	20 %	25 %	19 %
Depreciation and amortization	12 %	12 %	12 %	13 %
Foreign exchange loss, net	2 %	4 %	— %	1 %
Total operating expenses	92 %	102 %	100 %	97 %
Operating income (loss)	8 %	(2)%	— %	3 %
Interest expense, net	(3)%	(3)%	(3)%	(2)%
Employee retention tax credit	— %	7 %	— %	2 %
Net income (loss) before income taxes	5 %	2 %	(3)%	3 %
Benefit (provision) from income taxes	(16)%	(1)%	2 %	(2)%
Net income (loss)	(11)%	1 %	(1)%	1 %

Comparison of the Three Months Ended September 30, 2023 and 2022

(in thousands, except percentages)	Three Months Ended September 30,			
	2023	2022	$ change	% change
Revenue	$ 120,331	$ 101,343	$ 18,988	19 %
Operating expenses:				
Cost of revenue (excluding depreciation and amortization shown below)	25,599	19,171	6,428	34 %
Sales and marketing	29,604	28,190	1,414	5 %
Technology and development	17,211	19,459	(2,248)	(12)%
General and administrative	22,611	20,150	2,461	12 %
Depreciation and amortization	14,027	12,617	1,410	11 %
Foreign exchange loss, net	2,078	4,064	(1,986)	(49)%
Total operating expenses	111,130	103,651	7,479	7 %
Operating income (loss)	9,201	(2,308)	11,509	(499)%
Interest expense, net	(3,109)	(2,619)	(490)	19 %
Employee retention tax credit	—	6,981	(6,981)	(100)%
Net income before income taxes	6,092	2,054	4,038	197 %
Provision for income taxes	(19,841)	(1,287)	(18,554)	1,442 %
Net income (loss)	$ (13,749)	$ 767	$ (14,516)	(1,893)%

Revenue

Total revenue increased by $19.0 million, or 19%, for the three months ended September 30, 2023 as compared to the three months ended September 30, 2022.

(in thousands, except percentages)	Three Months Ended September 30,			
	2023	2022	$ change	% change
Optimization revenue (f/k/a programmatic revenue)	$ 56,998	$ 47,067	$ 9,931	21 %
Measurement revenue (f/k/a advertiser direct revenue)	47,822	38,955	8,867	23 %
Publisher revenue (f/k/a supply side revenue)	15,511	15,321	190	1 %
Total revenue	$ 120,331	$ 101,343	$ 18,988	19 %

Total revenue for the three months ended September 30, 2023 as compared to the three months ended September 30, 2022 increased due to a significant increase in our optimization revenue (formerly referred to as programmatic) of $9.9 million, or 21%, attributable to growth in volume of impressions of 19% and the acquisition of a number of new large customers. Revenue from our measurement customers (formerly referred to as advertiser direct) of $8.9 million, or 23%, reflecting growth in volume of impressions of 25% and the acquisition of a number of new large customers. The average CPMs for both measurement and optimization customers were consistent for the three months ended September 30, 2023 compared to the three months ended September 30, 2022.

Operating expenses

Cost of Revenue. Cost of revenue increased by $6.4 million, or 34%, for the three months ended September 30, 2023 as compared to the three months ended September 30, 2022. This increase was driven by an increase in hosting fees of $3.7 million, and an increase of $2.6 million in revenue share to our DSP partners on account of our growth in optimization revenue.

Sales and marketing. Sales and marketing expenses increased by $1.4 million, or 5%, for the three months ended September 30, 2023 as compared to the three months ended September 30, 2022. This increase was due to an increase in stock-based compensation expense of $1.3 million, an increase in compensation expenses of $0.6 million due to higher revenue growth, and increases in advertising and travel expenses of $0.7 million with the return to in-person events. These increases were partially offset by a decrease in restructuring costs of $1.0 million. The remaining increase in sales and marketing expenses is aggregated from several immaterial variances.

Technology and development. Technology and development expenses decreased by $2.2 million, or 12%, for the three months ended September 30, 2023 as compared to the three months ended September 30, 2022. This decrease was due to a decrease in compensation expenses of $2.8 million, as a result of higher capitalization of labor due to long-term investments in our product, a decrease in stock-based compensation expense of $0.3 million and a decrease of $0.5 million in professional service fees. These decreases were partially offset by increases in software application expenses of $0.7 million, and increases in restructuring costs of $0.8 million. The remaining decrease in technology and development expenses is aggregated from several immaterial variances.

General and administrative. General and administrative expenses increased by $2.5 million, or 12%, for the three months ended September 30, 2023 as compared to the three months ended September 30, 2022. This increase was due to an increases in compensation expenses of $2.0 million, an increase in professional and contractor fees incurred for accounting, legal and other services of $0.6 million, an increase in bad debt expense of $0.8 million and an increase of $0.3 million in software application expenses. This was partially offset by decreases in stock-based compensation expense of $1.4 million. The remaining increase in general and administrative expenses is aggregated from several immaterial variances.

Depreciation and amortization. Depreciation and amortization expenses increased by $1.4 million, or 11%, for the three months ended September 30, 2023 as compared to the three months ended September 30, 2022. This increase results from an increase in amortization expense related to capitalization of internal-use software of $1.6 million, offset by a decrease in amortization expense for intangible assets of $0.2 million.

Foreign exchange loss, net. Foreign exchange loss, net decreased $2.0 million, or 49% for the three months ended September 30, 2023 as compared to the three months ended September 30, 2022. The loss resulted from fluctuations primarily attributable to the British Pound and Euro currency movements relative to the U.S. Dollar.

Interest expense, net

Interest expense, net. Interest expense, net increased by $0.5 million, or 19%, for the three months ended September 30, 2023 as compared to the three months ended September 30, 2022. The increase in interest expense, net was attributable to increases in the interest rate on the Revolver from 4.6% at September 30, 2022 to 7.3% at September 30, 2023 driven by the macroeconomic environment, partially offset by lower interest due to repayment on our outstanding debt and higher interest income on our cash balances.

Employee retention tax credit

Employee retention tax credit. There was no Employee retention tax credit for the three months ended September 30, 2023. For the three months ended September 30, 2022, the Employee retention tax credit was $7.0 million. The employee retention tax credits were filed in 2022 pursuant to the CARES Act.

Provision for income taxes

Provision for income taxes. Provision for income taxes increased by $18.6 million, or 1,442%, for the three months ended September 30, 2023 as compared to the three months ended September 30, 2022. The tax provision increased mainly due to non-deductible executive compensation pursuant to Section 162(m) of the Internal Revenue Code and discrete items, including stock-based compensation.

Comparison of the Nine Months Ended September 30, 2023 and 2022

(in thousands, except percentages)	Nine Months Ended September 30,			
	2023	2022	$ change	% change
Revenue	$ 340,074	$ 290,913	$ 49,161	17 %
Operating expenses:				
Cost of revenue (excluding depreciation and amortization shown below)	71,100	53,864	17,236	32 %
Sales and marketing	87,566	77,961	9,605	12 %
Technology and development	53,850	54,071	(221)	— %
General and administrative	85,673	56,081	29,592	53 %
Depreciation and amortization	40,373	37,585	2,788	7 %
Foreign exchange loss, net	931	3,503	(2,572)	(73)%
Total operating expenses	339,493	283,065	56,428	20 %
Operating income (loss)	581	7,848	(7,267)	(93)%
Interest expense, net	(9,747)	(5,859)	(3,888)	66 %
Employee retention tax credit	—	6,981	(6,981)	(100)%
Net income (loss) before income taxes	(9,166)	8,970	(18,136)	(202)%
Benefit (provision) from income taxes	6,240	(5,083)	11,323	(223)%
Net income (loss)	$ (2,926)	$ 3,887	$ (6,813)	(175)%

Revenue

Total revenue increased by $49.2 million, or 17%, for the nine months ended September 30, 2023 as compared to the nine months ended September 30, 2022.

(in thousands, except percentages)	Nine Months Ended September 30,			
	2023	2022	$ change	% change
Optimization revenue (f/k/a programmatic revenue)	$ 160,847	$ 135,537	$ 25,310	19 %
Measurement revenue (f/k/a advertiser direct revenue)	133,433	110,210	23,223	21 %
Publisher revenue (f/k/a supply side revenue)	45,794	45,166	628	1 %
Total revenue	$ 340,074	$ 290,913	$ 49,161	17 %

Total revenue for the nine months ended September 30, 2023 as compared to the nine months ended September 30, 2022 increased due to an increase in our optimization revenue of $25.3 million, or 19%, attributable to growth in volume of impressions of 14% as well as the acquisition of a number of new large customers. Revenue from our measurement customers increased $23.2 million, or 21%, reflecting growth in volume of impressions of 23% as well as the acquisition of a number of new large customers. The average CPMs for both measurement and optimization customers were consistent for the nine months ended September 30, 2023 compared to the nine months ended September 30, 2022.

Operating expenses

Cost of Revenue. Cost of revenue increased by $17.2 million, or 32%, for the nine months ended September 30, 2023 as compared to the nine months ended September 30, 2022. This increase was driven by an increase in hosting fees of $11.2 million, an increase in revenue share to our DSP partners related to our growth in optimization revenue of $4.9 million and an increase in compensation expenses of $0.5 million.

Sales and marketing. Sales and marketing expenses increased by $9.6 million, or 12%, for the nine months ended September 30, 2023 as compared to the nine months ended September 30, 2022. This increase was due to an increase in stock-based compensation expense of $7.2 million, an increase in compensation expenses of $2.5 million due to higher revenue growth, and increases in advertising and travel expenses of $2.2 million with the return to in-person events. These increases were partially offset by a decrease in restructuring costs of $2.3 million. The remaining increase in sales and marketing expenses is aggregated from several immaterial variances.

Technology and development. Technology and development expenses were relatively flat for the nine months ended September 30, 2023 as compared to the nine months ended September 30, 2022. This was due to a decrease in compensation expenses of $8.4 million, as a result of higher capitalization of labor due to long-term investments in our product and decreases in professional and other fees of $0.7 million. Partially offset by increased stock-based compensation expense of $6.5 million, increases in software application expenses of $1.3 million and an increase in restructuring costs of $1.2 million. The remaining increase in technology and development expenses is aggregated from several immaterial variances.

General and administrative. General and administrative expenses increased by $29.6 million, or 53%, for the nine months ended September 30, 2023 as compared to the nine months ended September 30, 2022. This increase was attributable to increases in stock-based compensation expense of $18.8 million, compensation expenses of $5.8 million, professional fees incurred for audit, tax, legal and other services, including our Form S-3 filing and the secondary underwritten offering, of $4.0 million, and an increase in bad debt expense of $1.6 million. These increases were partially offset by a decrease in restructuring severance costs of $0.5 million. The remaining increase in general and administrative expenses is aggregated from several immaterial variances.

Depreciation and amortization. Depreciation and amortization expenses increased by $2.8 million, or 7%, for the nine months ended September 30, 2023 as compared to the nine months ended September 30, 2022. This increase results from an increase in amortization expense related to capitalization of internal-use software of $3.5 million, offset by a decrease in amortization expense for intangible assets of $0.8 million and depreciation expense for property, plant and equipment of $0.1 million.

Foreign exchange loss, net. Foreign exchange loss, net decreased $2.6 million, or 73% for the nine months ended September 30, 2023 as compared to the nine months ended September 30, 2022. The loss resulted from fluctuations primarily attributable to the British Pound and Euro currency movements relative to the U.S. Dollar.

Interest expense, net

Interest expense, net. Interest expense, net increased by $3.9 million, or 66%, for the nine months ended September 30, 2023 as compared to the nine months ended September 30, 2022. The increase in interest expense, net was attributable to increases in the interest rate on the Revolver from 4.6% at September 30, 2022 to 7.3% at September 30, 2023 driven by the macroeconomic environment, partially offset by lower interest due to repayment on our outstanding debt and higher interest income on our cash balances.

Employee retention tax credit

Employee retention tax credit. There was no Employee retention tax credit for the nine months ended September 30, 2023. For the nine months ended September 30, 2022, the Employee retention tax credit was $7.0 million. The employee retention tax credits were filed in 2022 pursuant to the CARES Act.

Benefit (provision) from income taxes

Benefit (provision) from income taxes. Benefit (provision) from income taxes increased by $11.3 million, or 223%, for the nine months ended September 30, 2023 as compared to the nine months ended September 30, 2022. The tax benefit increased mainly due to generation of book loss for the nine months ended September 30, 2023 as compared to book income for the nine months ended September 30, 2022, and non-deductible executive compensation pursuant to Section 162(m) of the Internal Revenue Code and discrete items including stock-based compensation.

Non-GAAP Financial Measures

We use supplemental measures of our performance, which are derived from our consolidated financial information, but which are not presented in our consolidated financial statements prepared in accordance with U.S. GAAP. Adjusted EBITDA is the primary financial performance measure used by management to evaluate our business and monitor ongoing results of operations. We define Adjusted EBITDA as net income (loss) before depreciation and amortization, stock-based compensation, interest expense, income taxes, acquisition, restructuring and integration costs, employee retention tax credit, foreign exchange gains and losses and other one-time, non-recurring costs. Adjusted EBITDA margin represents the Adjusted EBITDA for the applicable period divided by the revenue for that period presented in accordance with U.S. GAAP.

We use non-GAAP financial measures to supplement financial information presented on a U.S. GAAP basis. We believe that excluding certain items from our U.S. GAAP results allows management to better understand our consolidated financial performance from period to period, and better project our future consolidated financial performance, as forecasts are developed at a level of detail different from that used to prepare U.S. GAAP-based financial measures. Moreover, we believe these non-GAAP financial measures provide our shareholders with useful information to help them evaluate our operating results by facilitating an enhanced understanding of our operating performance and enabling them to make more meaningful period-to-period comparisons. Although we believe these measures are useful to investors and analysts for the same reasons they are useful to management, these measures are not a substitute for, or superior to, U.S. GAAP financial measures or disclosures and should be read only in conjunction with financial information presented on a GAAP basis. Our non-GAAP financial measures may not be comparable to similarly titled measures of other companies. Other companies, including companies in our industry, may calculate non-GAAP financial measures differently than we do, limiting the usefulness of those measures for comparative purposes.

Reconciliation of Adjusted EBITDA to its most directly comparable U.S. GAAP financial measure, net income (loss), is presented below. We encourage you to review the reconciliations in conjunction with the presentation of the non-GAAP financial measures for each of the periods presented. In future fiscal periods, we may exclude such items and may incur income and expenses similar to these excluded items.

Adjusted EBITDA

(in thousands, except percentages)	**Three Months Ended September 30,**		**Nine Months Ended September 30,**	
	2023	**2022**	**2023**	**2022**
Net income (loss)	$ (13,749)	$ 767	$ (2,926)	$ 3,887
Depreciation and amortization	14,027	12,617	40,373	37,585
Stock-based compensation	13,900	14,247	65,641	33,107
Interest expense, net	3,109	2,619	9,747	5,859
Provision (benefit) from income taxes	19,841	1,287	(6,240)	5,083
Acquisition, restructuring and integration costs	1,353	1,518	2,974	4,396
Foreign exchange loss, net[1]	2,078	4,064	931	3,551
Employee retention tax credit	—	(6,981)	—	(6,981)
Asset impairments and other costs	11	6	1,517	55
Adjusted EBITDA	$ 40,570	$ 30,144	$ 112,017	$ 86,542
Revenue	$ 120,331	$ 101,343	$ 340,074	$ 290,913
Net income (loss) margin	(11)%	1 %	(1)%	1 %
Adjusted EBITDA margin	34 %	30 %	33 %	30 %

[1]The adjustment for foreign exchange loss, net, was effective for the three months ended June 30, 2022 and periods thereafter. Adjusted EBITDA has not been recast for this adjustment for periods prior to June 30, 2022, because such adjustments would have been immaterial in such periods.

Liquidity and Capital Resources

General

We believe existing cash equivalents of $92.2 million, which includes cash generated from operations of $74.1 million in the nine months ended September 30, 2023 along with the $125.0 million available credit balance pursuant to our Revolving Credit agreement (as described further below) as of September 30, 2023, will be sufficient to meet working capital and capital expenditure requirements for at least the next 12 months.

Our principal commitments consist of obligations under operating leases for office space, our purchase commitments related to hosting and data services and repayments of long-term debt. We lease office space under operating leases, which expire on various dates through March 2027 and the total non-cancelable payments under these leases were $33.3 million as of September 30, 2023. Total non-cancelable purchase commitments related to hosting services as of September 30, 2023 were $163.9 million for periods through 2026.

We have financed our operations primarily through cash on our balance sheet and debt financing. We believe our existing cash and cash equivalents, our Revolver and cash provided by operations will be sufficient to meet our working capital and capital expenditure and cash needs for the next twelve months and beyond. We expect our operating cash flows to further improve as we increase our operational efficiency and experience economies of scale. Our future capital requirements will depend on many factors including our growth rate, the timing and extent of spending to support development efforts, the expansion of sales and marketing activities, the introduction of new and enhanced products and services offerings, and the continuing market acceptance of our products. In the future, we may enter into arrangements to acquire or invest in complementary businesses, services and technologies, including intellectual property rights.

We may be required to seek additional equity or debt financing. In the event that additional financing is required from outside sources, we may not be able to raise it on terms acceptable to us, or at all. If we are unable to raise additional capital or generate cash flows necessary to expand our operations and invest in new technologies, it could reduce our ability to compete successfully and harm our results of operations.

Credit Agreement

On September 29, 2021, we entered into a credit agreement with various lenders, which was amended on June 23, 2023 (as amended, the “Credit Agreement”). The Credit Agreement provides for $300.0 million in commitments for revolving credit loans (the “Revolver”), which amount may be increased or decreased under specific circumstances, with a $30.0 million letter of credit sublimit and a $100.0 million alternative currency sublimit. In addition, the Credit Agreement provides for the ability to request incremental term loan facilities, in a minimum amount of $5.0 million for each facility. Borrowings under the Credit Agreement may be used for working capital and other general corporate purposes, including for acquisitions permitted under the Credit Agreement. The Revolver matures in 2026.

On June 23, 2023, the Company entered into the First Amendment to Credit Agreement, which changed the market interest rate on outstanding borrowings from LIBOR to SOFR. The First Amendment to Credit Agreement became effective at the end of the applicable interest period for any LIBOR borrowings outstanding on the amendment effective date, which was June 30, 2023. Following the First Amendment, the interest rates applicable to the Revolver under the Credit Agreement are, at our option, either (i) in the case of U.S. dollar loans, (x) a base rate, which is equal to the greater of (a) the Prime Rate (as defined in the Credit Agreement), (b) the Federal Funds Effective Rate plus 0.5%, and (c) Adjusted Term SOFR, which is calculated as the sum of (i) term SOFR as published by the Federal Reserve Bank of New York for a one-month Interest Period and (ii) a credit spread adjustment of 0.10% per annum (subject to a floor of 0.0%) (each term as defined in the Credit Agreement) plus 1%, or (ii) in the case of RFR Loans (as defined in the Credit Agreement) denominated in sterling or euro, (x) the applicable RFR (as defined in the Credit Agreement) or (y) the applicable Term RFR (as defined in the Credit Agreement), plus in the case of each of clauses (i) and (ii), the Applicable Rate (as defined in the Credit Agreement). The Applicable Rate (i) for base rate loans range from 0.75% to 1.50% per annum, (ii) for Term SOFR Loans (as defined in the Credit Agreement) ranges from 1.75% to 2.50% per annum, (iii) for RFR Loans denominated in sterling range from 1.7826% to 2.5326%, and (iv) for RFR Loans denominated in euro range from 1.7965% to 2.5456%, in each case, based on the Senior Secured Net Leverage Ratio (as defined in the Credit Agreement). Base rate borrowings may only be made in dollars. The company also pays a commitment fee during the term of the Credit Agreement ranging from 0.20% to 0.35% per annum of the average daily undrawn portion of the revolving commitments based on the Senior Secured Net Leverage Ratio (as defined in the Credit Agreement). The interest rate at September 30, 2023 was 7.3%.

The Credit Agreement contains covenants requiring certain financial information to be submitted quarterly and annually. In addition, we are also required to comply with certain financial covenants such as maintaining a Total Net Leverage Ratio (as defined in the Credit Agreement) of 3.50 to 1.00 or lower and maintaining a minimum Interest Coverage Ratio (as defined in the Credit Agreement) of 2.50 to 1.00. As of September 30, 2023, the Company was in compliance with all covenants contained in the Credit Agreement. Based upon current facts and circumstances, we believe existing cash coupled with the cash flows generated from operations will be sufficient to meet our cash needs and comply with covenants.

Restrictions on Subsidiaries under the Credit Agreement

The Company is a holding company that conducts substantially all its activities through its subsidiaries and has no material operations of its own or direct outstanding debt obligations. The Company’s wholly owned subsidiaries are subject to the terms and restrictions set forth in the Credit Agreement, which among other things, limit the ability of Company’s subsidiaries to make loans or advances or pay dividends or distributions. As is customary, these restrictions are subject to specific exceptions set forth in the Credit Agreement. The restrictions placed on the Company’s subsidiaries under the Credit Agreement have not had, nor are they expected to have, an impact on the Company’s ability to meet its cash obligations because substantially all of the Company’s consolidated cash obligations are obligations of the Company’s subsidiaries, which payment is generally permitted under the terms of the Credit Agreement.

Cash Flows

The table below presents a summary of our consolidated cash flows from operating, investing and financing activities for the periods indicated.

(in thousands)	**Nine Months Ended September 30,**	
	2023	**2022**
Net cash provided by operating activities	$ 74,118	$ 47,560
Net cash used in investing activities	(25,493)	(12,472)
Net cash used in financing activities	(42,180)	(29,195)
Net increase in cash and cash equivalents, and restricted cash	$ 6,445	$ 5,893
Effect of exchange rate changes on cash and cash equivalents, and restricted cash	(1,330)	(5,396)
Cash, cash equivalents, and restricted cash, at beginning of period	89,671	76,078
Cash, cash equivalents and restricted cash, at end of period	$ 94,786	$ 76,575

Operating Activities

For the nine months ended September 30, 2023, net cash provided by operating activities was $74.1 million, resulting from a net loss of $2.9 million adjusted for non-cash expenses of depreciation and amortization of $40.4 million, stock-based compensation of $65.6 million, bad debt expense of $2.2 million, amortization of debt issuance costs of $0.3 million and unrealized foreign currency losses of $0.6 million, partially offset by a decrease in working capital of $14.1 million, and a deferred tax benefit of $18.0 million.

For the nine months ended September 30, 2022, net cash provided by operating activities was $47.6 million, resulting from a net income of $3.9 million adjusted for non-cash expenses of depreciation and amortization of $37.6 million, stock-based compensation of $33.1 million, foreign exchange losses of $3.5 million, bad debt expense of $0.6 million, amortization of debt issuance costs of $0.3 million partially offset by Employee retention tax credit of $7.0 million, a decrease in working capital of $24.0 million, and a deferred tax benefit of $0.7 million.

Investing Activities

Cash used in investing activities was $25.5 million for the nine months ended September 30, 2023, reflecting capitalized costs related to our internal use software of $23.5 million, and the purchase of property and equipment of $2.0 million.

Cash used in investing activities was $12.5 million for the nine months ended September 30, 2022, reflecting capitalized costs related to our internal use software of $10.0 million, payment of $1.6 million for Context and Amino Payments acquisitions, and the purchase of property and equipment of $0.9 million.

Financing Activities

Cash used in financing activities was $42.2 million for the nine months ended September 30, 2023, due to a net repayment of outstanding long-term debt of $50.0 million, offset by receipt of $5.6 million for stock options exercised and $2.2 million for share purchases under the ESPP.

Cash used in financing activities was $29.2 million for the nine months ended September 30, 2022, reflecting cash paid for share repurchases of $23.7 million, a repayment of outstanding short-term debt of $1.8 million, repayment of outstanding long-term debt of $25.0 million, offset by proceeds from issuance of debt of $15.0 million, proceeds of $5.9 million in stock options exercised and cash received from the ESPP of $0.4 million.

Indemnification Agreements

In the ordinary course of business, we enter into agreements of varying scope and terms pursuant to which we agree to indemnify customers, including, but not limited to, losses arising out of the breach of such agreements, services to be provided by us or from intellectual property infringement claims made by third parties. In addition, we have entered into indemnification agreements with our directors and certain officers and employees that will require us, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors, officers or employees. No demands have been made upon us to provide indemnification under such agreements and there are no claims that we are aware of that could have a material effect on our consolidated balance sheets, consolidated statements of operations and comprehensive loss, or consolidated statements of cash flows.

JOBS Act

We currently qualify as an “Emerging Growth Company” pursuant to the provisions of the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). For as long as we are an “emerging growth company,” we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not “Emerging Growth Companies,” including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, exemptions from the requirements of holding advisory “say-on-pay” votes on executive compensation and shareholder advisory votes on golden parachute compensation.

The JOBS Act also permits an Emerging Growth Company like us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. We have elected to “opt-in” to this extended transition period for complying with new or revised accounting standards and, therefore, we will not be subject to the same new or revised accounting standards as other public companies that comply with such new or revised accounting standards on a non-delayed basis.

On June 30, 2023, the last day of our second fiscal quarter in 2023, the market value of our common stock held by non-affiliates exceeded $700.0 million. Accordingly, we will be deemed a large accelerated filer as of December 31, 2023. As such, we will no longer (i) qualify as an Emerging Growth Company and (ii) be able to take advantage of the extended timeline to comply with new or revised accounting standards applicable to public companies beginning with our Annual Report on Form 10-K for the year ending December 31, 2023.

Critical Accounting Estimates

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets and liabilities, revenue and expenses and related disclosures of contingent assets and liabilities at the date of our financial statements. Actual results may differ from these estimates under different assumptions or conditions, impacting our reported results of operations and financial condition.

There have been no material changes to our critical accounting policies and estimates as compared to the critical accounting estimates described in “Note 2—Basis of presentation and summary of significant accounting policies” to our consolidated financial statements appearing in our Annual Report on Form 10-K for the year ended December 31, 2022.

Recent Accounting Pronouncements

For a description of our recently adopted accounting pronouncements and recently issued accounting standards not yet adopted, see Note 2(j) to our condensed consolidated financial statements: “Basis of presentation and summary of significant accounting policies—Accounting pronouncements not yet adopted” included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of exposure due to potential changes in inflation or interest rates. We do not hold financial instruments for trading purposes.

Foreign Currency Exchange Risk

The functional currencies of our foreign subsidiaries are the respective local currencies. Most of our sales are denominated in U.S. dollars, and therefore our revenue is not currently subject to significant foreign currency risk. Our operating expenses are denominated in the currencies of the countries in which our operations are located, which are primarily in the United States, U.K., Ireland, France, Germany, Italy, Spain, Singapore, Australia, Japan, India and the Nordics. Our consolidated results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates and may be adversely affected in the future due to changes in foreign exchange rates. To date, we have not entered into any hedging arrangements with respect to foreign currency risk or other derivative financial instruments. During the nine months ended September 30, 2023, a hypothetical 10% increase of the exchange rate between the U.S. Dollar and foreign currencies applicable to our business, with the U.S. Dollar strengthening, would have resulted in a negative impact on net loss of approximately $6.1 million.

Interest Rate Risk

Our primary market risk exposure is changing Eurodollar-based interest rates. Interest rate risk is highly sensitive due to many factors, including E.U. and U.S. monetary and tax policies, U.S. and international economic factors and other factors beyond our control. The Revolver carries interest at an applicable margin, for U.S. dollar loans (x) a base rate, which is equal to the greater of (a) the Prime Rate, (b) the Federal Funds Effective Rate plus 0.5%, and (c) Adjusted Term SOFR, which is calculated as the sum of (i) term SOFR as published by Federal Reserve Bank of New York for a the applicable Interest Period (as defined in the Credit Agreement) and (ii) a credit spread adjustment of 0.10% per annum (subject to a floor of 0.10%). For Eurodollar borrowings, the Revolver carries interest at an applicable margin equal to (a) the applicable RFR or (b) the applicable Term RFR, plus (i) the Applicable Rate for base rate loans range from 0.75% to 1.50% per annum, (ii) for SOFR loans range from 1.75% to 2.50% per annum, (iii) for RFR Loans denominated in sterling range from 1.7826% to 2.5326%, and (iv) for RFR Loans denominated in euro range from 1.7956% to 2.5456%, in each case, based on the Senior Secured Net Leverage Ratio. In addition, we will pay a commitment fee during the term of the Credit Agreement ranging from 0.20% to 0.35% per annum of the average daily undrawn portion of the revolving commitments based on the Senior Secured Net Leverage Ratio.

The Federal Reserve may further raise the federal funds rate, which may result in downstream impacts to global exchange rates and further adverse impacts to our reported results. As of September 30, 2023, we had total outstanding debt of $175.0 million under our Revolver. Based on these amounts outstanding, a 100-basis point increase or decrease in market interest rates over a twelve-month period would result in a change to interest expense of $1.8 million or a benefit of $1.8 million, respectively.

As of September 30, 2023, our exposure due to changes in interest rates related to investment income from our investment portfolio of cash equivalents is not material due to the nature and amount of our money market funds. A hypothetical 100-basis point increase or decrease in interest rates would have no material effect on our interest income and financial results.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 as of September 30, 2023.

Our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were not effective at a reasonable assurance level as of September 30, 2023 due to the material weaknesses in our internal control over financial reporting described below.

Material Weaknesses in Internal Control over Financial Reporting

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of a company's annual or interim financial statements will not be prevented or detected on a timely basis.

We previously identified material weaknesses in our internal control over financial reporting that continue to exist. We did not design policies to maintain evidence of the operation of key control procedures, nor were monitoring controls evidenced at a sufficient level to provide the appropriate oversight of activities related to our internal control over financial reporting. Additionally, we did not design and maintain controls to ensure (i) appropriate segregation of duties in the operation of manual controls and (ii) account reconciliations, journal entries, and balance sheet and income statement fluctuation analyses were reviewed at the appropriate level of precision. In addition, the Company did not design and maintain effective controls over information technology, or IT, general controls for information systems that are relevant to the preparation of the consolidated financial statements. Specifically, we did not design and maintain (i) program change management controls for financial systems to ensure that IT program and data changes affecting financial IT applications and underlying accounting records are identified, tested, authorized and implemented appropriately, (ii) user access controls to ensure appropriate segregation of duties and that adequately restrict user and privileged access to financial applications, programs, and data to appropriate personnel, (iii) computer operations to ensure that critical batch jobs are monitored, privileges are appropriately granted, and data backups are authorized and monitored, and (iv) testing and approval controls for program development to ensure that new software development is aligned with business and IT requirements for financially relevant IT systems.

Management's Remediation Efforts

We are continuing to implement measures to remediate the identified material weaknesses. The measures include (i) formalizing our accounting policies with respect to maintaining evidence in the operation of control procedures, (ii) improving our control framework to include both the appropriate segregation of duties and definition around the appropriate levels of precision for controls, including account reconciliations, journal entries, and balance sheet and income statement fluctuation analyses, and (iii) designing and documenting the execution of IT general controls for systems and applications relevant to internal control over financial reporting, specifically around user access, change management, computer operations, and program development controls.

We continued remediation efforts through the quarter ended September 30, 2023, with the following actions designed to strengthen our control environment:

- Continued to engage a global accounting advisory firm to assist with the documentation, evaluation, remediation and testing of our internal control over financial reporting;
- Worked with experienced personnel to oversee our internal controls program and work with management in its design and implementation of internal control over financial reporting;
- Hired additional experienced accounting and finance resources to support the operation of key internal control over financial reporting;
- Formalized the design of our control framework and established an ongoing testing program in compliance with the Sarbanes-Oxley Act of 2002, as amended, that supports Management's assessment of internal controls;
- Established an ongoing program to provide appropriate training to our team members on internal control over financial reporting;
- Developed detailed action plans to address control deficiencies identified across business processes and financial systems impacting our financial reporting;
- Implemented a new ERP system to help streamline processes, increase automated controls, and enforce segregation of duties; and
- Performed a comprehensive segregation of duties assessment over key systems for financial reporting and mitigating actions are in process of being implemented.

While we believe that these efforts will improve our internal control over financial reporting, we will not be able to conclude whether the steps we are taking will remediate the material weaknesses in our internal control over financial reporting until we have completed our remediation efforts and subsequent evaluation of their effectiveness.

As of September 30, 2023, there were instances where controls had not yet operated for a sufficient period of time to conclude that they are effective as of period-end. In addition, there are additional remedial actions in progress to further enhance systems and the related controls that support our internal control over financial reporting. These actions are subject to ongoing senior management review as well as audit committee oversight and we may conclude that additional measures are required to remediate the material weaknesses. We will continue to monitor progress and make any changes to the remediation plan as necessary.

While we are performing remediation activities to strengthen our controls, the material weaknesses will not be considered remediated until management completes the implementation of the measures described above and the controls operate for a sufficient period of time and management has concluded, through testing, that these controls are effective. We will continue to monitor the effectiveness of our remediation measures in connection with our future assessments of the effectiveness of internal control over financial reporting and disclosure controls and procedures, and we will make any changes to the remediation plan and take such other actions that we deem appropriate given the circumstances.

Changes in Internal Control over Financial Reporting

As described above in the “Management’s Remediation Efforts” section, there were changes during the three months ended September 30, 2023, in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Because of its inherent limitations, disclosure controls and procedures and internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PART II
OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we have been and may be involved in various legal proceedings and claims arising in our ordinary course of business. At this time, neither we nor any of our subsidiaries is a party to, and none of our respective property is the subject of, any legal proceeding that, if determined adversely to us, would have a material adverse effect on us.

ITEM 1A. RISK FACTORS

Other than as set forth below, there have been no material changes to the risk factors disclosed in Part 1, Item 1A "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2022.

We currently qualify as an "Emerging Growth Company"; however, we will cease to qualify as such as of December 31, 2023, and will be required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act.

We currently qualify as an "Emerging Growth Company" as defined in Section 2(a) of the Securities Act, as amended, and have elected to take advantage of the benefits of the extended transition period for new or revised financial accounting standards and certain other exemptions and reduced reporting requirements provided by the JOBS Act. Accordingly, we have not been required to provide an auditor's attestation report on our system of internal control over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act. Based on the Company's aggregate worldwide market value of voting and non-voting common equity held by non-affiliates as of June 30, 2023, the Company will become a "large accelerated filer" and lose Emerging Growth Company status as of December 31, 2023. Therefore, our independent registered public accounting firm will be required to provide the attestation report on our system of internal control over financial reporting in our Annual Report for the year ending December 31, 2023.

We previously identified material weaknesses in our internal control over financial reporting that continue to exist. We are working to remediate these material weaknesses as efficiently and effectively as possible and expect full remediation could potentially go beyond December 31, 2023. We cannot assure that the measures we have taken to date, and that we plan to take, will be sufficient to remediate the material weaknesses we have identified or to avoid additional material weaknesses in future periods. If we are not able to remediate the material weaknesses, our auditors will not be able to provide an unqualified auditor's attestation report on our system of internal control over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act. If we are unable to assert that our internal control over financial reporting is effective or if our independent registered public accounting firm is unable to express an unqualified opinion as to the effectiveness of our internal control over financial reporting, or expresses an adverse opinion, investors may lose confidence in the accuracy and completeness of our financial reports, and our stock price may be adversely affected.

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

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Insider Trading Arrangements

During the quarter ended September 30, 2023, none of our directors or officers (as defined in Section 16 of the Securities Exchange Act of 1934, as amended), adopted or terminated a “Rule 10b5-1 trading arrangement” or a “non-Rule 10b5-1 trading arrangement” (each as defined in Item 408(a) and (c) of Regulation S-K).

ITEM 6. EXHIBITS

The following is a list of all exhibits filed or furnished as part of this report:

Exhibit Number	Description
3.1	Certificate of Incorporation of Integral Ad Science Holding Corp., dated June 29, 2021 (incorporated by reference to Exhibit 3.1 to the Company’s Form 8-K filed on July 2, 2021).
3.2	Bylaws of Integral Ad Science Holding Corp., dated June 29, 2021 (incorporated by reference to the Company’s Exhibit 3.2 to the Company’s Form 8-K filed on July 2, 2021).
31.1	Certification of the Chief Executive Officer pursuant to Exchange Act Rules Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.
31.2	Certification of the Chief Financial Officer pursuant to Exchange Act Rules Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.
32.1**	Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, furnished herewith.
32.2**	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, furnished herewith.
101.INS	Inline XBRL Instance Document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)

** The certifications furnished in Exhibit 32.1 and Exhibit 32.2 hereto are deemed to accompany this Quarterly Report on Form 10-Q and will not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the registrant specifically incorporates it by reference.

SIGNATURES

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

Integral Ad Science Holding Corp. (Registrant)

Date: November 2, 2023	By:	/s/Tania Secor
		Tania Secor
		Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

Exhibit 31.1

Certification Pursuant to Section 302 of Sarbanes-Oxley Act of 2002

I, Lisa Utzschneider, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Integral Ad Science Holding Corp.;
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.

Date: November 2, 2023

/s/ Lisa Utzschneider

Lisa Utzschneider

Director and Chief Executive Officer

Exhibit 31.2

Certification Pursuant to Section 302 of Sarbanes-Oxley Act of 2002

I, Tania Secor, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Integral Ad Science Holding Corp.;
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.

Date: November 2, 2023

/s/ Tania Secor

Tania Secor

Chief Financial Officer

Exhibit 32.1

Certification of the Chief Executive Officer

Pursuant to 18 U.S.C. Section 1350

In connection with the Quarterly Report on Form 10-Q of Integral Ad Science Holding Corp. (the “Company”) for the period ended September 30, 2023, as filed with the U.S. Securities and Exchange Commission (the “Report”), I, Lisa Utzschneider, Chief Executive Officer of the Company, 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 Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 2, 2023

/s/ Lisa Utzschneider
Lisa Utzschneider
Director and Chief Executive Officer

Exhibit 32.2

Certification of the Chief Financial Officer

Pursuant to 18 U.S.C. Section 1350

In connection with the Quarterly Report on Form 10-Q of Integral Ad Science Holding Corp. (the “Company”) for the period ended September 30, 2023, as filed with the U.S. Securities and Exchange Commission (the “Report”), I, Tania Secor, Chief Financial Officer of the Company, 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 Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

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

Date: November 2, 2023

/s/ Tania Secor
Tania Secor
Chief Financial Officer