UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

☑ QUARTERLY REPORT PURSUANT T EXCHANGE ACT OF 1934	O SECTION 13 OR 15(d) O	OF THE SECURITIES
For the quarterly	y period ended March 31, 2023	
TRANSITION REPORT PURSUANT EXCHANGE ACT OF 1934	TO SECTION 13 OR 15(d)	OF THE SECURITIES
For the transition period f	rom to	
Commission	n File Number: 001-40557	
I/A	S Integral Ad Science	
	CIENCE HOLDING istrant as specified in its charter)	CORP.
Delaware		83-0731995
(State or other jurisdiction of incorporation or organization)		(I.R.S. Employer Identification No.)
Not Applicable ¹ (Address of principal executive offices)		(Zip Code)
(Registrant's telep	(646) 278-4871 phone number, including area code)	
Securities registered p	oursuant to Section 12(b) of the A	ct:
make of each description	Trading	Name of each exchange
Title of each class Common Stock, \$0.001 par value per share	symbol IAS	on which registered The NASDAQ Stock Market LLC (Nasdaq Global Select Market)
ndicate by check mark whether the registrant (1) has filed all reports required to be filed by Section that the registrant was required to file such reports), and (2) has been subject to such filing require.		et of 1934 during the preceding 12 months (or for such shorter period
indicate by check mark whether the registrant has submitted electronically every Interactive Data preceding 12 months (or for such shorter period that the registrant was required to submit such file		le 405 of Regulation S-T (§ 232.405 of this chapter) during the
ndicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth compan		any, or an emerging growth company. See the definitions of "large
Large accelerated filer	Accelerated filer	
Non-accelerated filer	Smaller reporting company	
	Emerging growth company	\boxtimes
if an emerging growth company, indicate by check mark if the registrant has elected not to use the o Section 13(a) of the Exchange Act. \Box	extended transition period for complying wi	ith any new or revised financial accounting standards provided pursuant
indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the	9 /	
On May 2, 2023, the Registrant had 154,927,770 shares of common stock, \$0.001 par value, outst	· ·	
		ll Street, #1950, New York, NY 10005

Table of Contents

		Page No.
PART I.	FINANCIAL INFORMATION	
Item 1.	Condensed Consolidated Financial Statements (Unaudited)	
	Condensed Consolidated Balance Sheets as of March 31, 2023 (Unaudited) and December 31,	
	2022	<u>3</u>
	<u>Condensed Consolidated Statements of Operations and Comprehensive Income for the Three Months Ended March 31, 2023 and 2022 (Unaudited)</u>	<u>4</u>
	Condensed Consolidated Statements of Changes in Stockholders' Equity for the Three Months Ended March 31, 2023 and 2022 (Unaudited)	<u>5</u>
	Condensed Consolidated Statements of Cash Flows for the Three Months Ended March 31, 2023	<u> </u>
	and 2022 (Unaudited)	<u>6</u>
	Notes to the Condensed Consolidated Financial Statements (Unaudited)	<u>7</u>
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	<u>23</u>
Item 3.	Quantitative and Qualitative Disclosures about Market Risk	<u>35</u>
Item 4.	Controls and Procedures	<u>36</u>
PART II.	OTHER INFORMATION	
Item 1.	<u>Legal Proceedings</u>	<u>39</u>
Item 1A.	Risk Factors	<u>39</u>
Item 2.	<u>Unregistered Sale of Equity Securities and Use of Proceeds</u>	<u>39</u>
Item 3.	<u>Defaults Upon Senior Securities</u>	<u>39</u>
Item 4.	Mine Safety Disclosures	<u>39</u>
Item 5.	Other Information	<u>39</u>
Item 6.	<u>Exhibits</u>	<u>40</u>
	Signatures	<u>41</u>

${\bf PART~I-FINANCIAL~INFORMATION}$

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

(IN THOUSANDS, EXCEPT SHARE DATA) ASSETS	Ma	arch 31, 2023	December 31, 2022		
Current assets:					
Cash and cash equivalents	\$	94,427	\$	86,877	
Restricted cash		308		45	
Accounts receivable, net		62,739		67,884	
Unbilled receivables		40,376		41,550	
Prepaid expenses and other current assets		21,368		24,761	
Due from related party		20		29	
Total current assets	-	219,238		221,146	
Property and equipment, net		3,871		2,412	
Internal use software, net		27,543		23,642	
Intangible assets, net		207,968		217,558	
Goodwill		674,754		674,094	
Operating lease right-of-use assets		21,246		22,787	
Deferred tax asset, net		1,718		2,020	
Other long-term assets		5,083		5,024	
Total assets	\$	1,161,421	\$	1,168,683	
LIABILITIES AND STOCKHOLDERS' EQUITY	<u> </u>		_		
Current liabilities:					
Accounts payable and accrued expenses	\$	47,518	\$	60,799	
Due to related party	•	179	•	122	
Deferred revenue		622		99	
Operating lease liabilities, current		6,387		6,749	
Total current liabilities		54,706		67,769	
Net deferred tax liability		42,740		45,495	
Long-term debt		213,378		223,262	
Operating lease liabilities, non-current		21,720		22,875	
Other long-term liabilities		1,113		1,066	
Total liabilities		333,657	_	360,467	
Commitments and Contingencies (Note 14)		333,037		500,107	
Stockholders' Equity					
Preferred Stock, \$0.001 par value, 50,000,000 shares authorized at March 31, 2023; 0 shares issued and outstanding at March 31, 2023 and December 31, 2022.		_		_	
Common Stock, \$0.001 par value, 500,000,000 shares authorized, 154,811,980 and 153,990,128 shares issued and outstanding at March 31, 2023 and December 31, 2022, respectively.		154		154	
Additional paid-in-capital		824,498		810,186	
Accumulated other comprehensive loss		(1,750)		(2,899)	
Retained earnings		4,862		775	
Total stockholders' equity	_	827,764	_	808,216	
Total liabilities and stockholders' equity	\$	1,161,421	\$	1,168,683	

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

	Three Months Ended March 31,				
(IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA)		2023		2022	
Revenue	\$	106,092	\$	89,242	
Operating expenses:					
Cost of revenue (excluding depreciation and amortization shown below)		21,682		16,561	
Sales and marketing		26,260		23,080	
Technology and development		15,529		16,988	
General and administrative		20,723		16,794	
Depreciation and amortization		12,825		12,458	
Foreign exchange gain, net (1)		(516)		(49)	
Total operating expenses		96,503		85,832	
Operating income		9,589		3,410	
Interest expense, net		(3,417)		(1,426)	
Net income before income taxes		6,172		1,984	
Provision for income taxes		(3,026)		(825)	
Net income	\$	3,146	\$	1,159	
Net income per share – basic and diluted	\$	0.02	\$	0.01	
Weighted average shares outstanding:					
Basic		154,315,219		154,477,403	
Diluted	===	157,884,615		157,159,026	
Other comprehensive income:			_		
Foreign currency translation adjustments		1,149		(974)	
Total comprehensive income	\$	4,295	\$	185	

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

Three Months Ended March 31, 2023

	Common Stock										
(IN THOUSANDS, EXCEPT SHARE DATA)	Shares		Amount		Additional paid-in capital	c	Accumulated other omprehensive income (loss)	Retained earnings		sto	Total ockholders' equity
Balance, December 31, 2022	153,990,128	\$	154	5	\$ 810,186	\$	(2,899)	\$	775	\$	808,216
RSUs vested	371,740		_		_		_		_		_
Option exercises	338,949		_		2,115		_		_		2,115
ESPP purchase	111,163		_		882		_		_		882
Stock-based compensation	_		_		11,315		_		_		11,315
Foreign currency translation adjustment	_		_		_		1,149		_		1,149
Adoption of ASC 326, net of tax	_		_		_		_		941		941
Net income	_		_		_		_		3,146		3,146
Balance, March 31, 2023	154,811,980	\$	154	5	\$ 824,498	\$	(1,750)	\$	4,862	\$	827,764

Three Months Ended March 31, 2022

	Comme	on St	tock													
(IN THOUSANDS, EXCEPT SHARE DATA)	Shares		Amount	Additional paid-in capital		paid-in		paid-in capital		Additional oth paid-in compre		Accumulated other comprehensive Accumulated loss deficit		Accumulated deficit	st	Total ockholders' equity
Balance, December 31, 2021	154,398,495	\$	154	\$	781,951	\$	(315)	\$	(14,600)	\$	767,190					
RSUs vested	12,094		_		_		_		_		_					
Option exercises	605,682		1		2,531		_		_		2,532					
Stock-based compensation	_		_		8,134		_		_		8,134					
Foreign currency translation adjustment	_		_		_		(974)		_		(974)					
Net income	_		_		_		_		1,159		1,159					
Balance, March 31, 2022	155,016,271	\$	155	\$	792,616	\$	(1,289)	\$	(13,441)	\$	778,041					

See notes to the unaudited condensed consolidated financial statements. \\

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

	Three Months Ended M				
(IN THOUSANDS)		2023	2022		
Cash flows from operating activities:					
Net income	\$	3,146	\$	1,159	
Adjustments to reconcile net income to net cash provided by operating activities					
Depreciation and amortization		12,825		12,458	
Stock-based compensation		11,306		8,139	
Foreign currency gain, net		(678)		_	
Deferred tax benefit		(2,767)		(719	
Amortization of debt issuance costs		116		116	
Allowance for credit losses		514		314	
Impairment of assets		_		49	
Changes in operating assets and liabilities:					
Decrease (increase) in accounts receivable		6,642		(1,673	
Decrease in unbilled receivables		1,292		649	
Decrease (increase) in prepaid expenses and other current assets		3,063		(2,612	
Decrease (increase) in operating leases, net		20		(195	
Increase in other long-term assets		(19)		(185	
Decrease in accounts payable and accrued expenses		(13,073)		(6,520	
Increase in deferred revenue		522		173	
Increase in due to/from related party		47		34	
Net cash provided by operating activities		22,956		11,187	
Cash flows from investing activities:					
Purchase of property and equipment		(1,282)		(328	
Acquisition and development of internal use software and other		(7,060)		(2,677	
Net cash used in investing activities		(8,342)		(3,005	
Cash flows from financing activities:					
Proceeds from the Revolver		75,000		_	
Repayment of long-term debt		(85,000)		_	
Repayment of short-term debt		_		(1,934	
Exercise of stock options		2,115		2,532	
Cash received from Employee Stock Purchase Program		787		_	
Net cash (used in) provided by financing activities		(7,098)		598	
Net increase in cash, cash equivalents and restricted cash		7,516		8,780	
Effect of exchange rate changes on cash, cash equivalents and restricted cash		305		278	
Cash, cash equivalents and restricted cash at beginning of period		89,671		76,078	
Cash, cash equivalents, and restricted cash, at end of period	\$	97,492	\$	85,137	
Supplemental Disclosures:			_		
Cash paid during the period for:					
Interest	\$	3,004	\$	1,298	
Taxes	\$	935	\$	977	
Non-cash investing and financing activities:					
Property and equipment acquired included in accounts payable	\$	433	\$	16	
Internal use software acquired included in accounts payable	\$	1,309	\$	1,128	
Lease liabilities arising from right of use assets	\$	28,107	\$	27,650	

See notes to the unaudited condensed consolidated financial statements.

INTEGRAL AD SCIENCE HOLDING CORP. NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA) (UNAUDITED)

1. Description of business

Integral Ad Science Holding Corp. and its wholly-owned subsidiaries (together, the "Company"), formerly known as Kavacha Topco, LLC, is a leading global digital advertising verification company by revenue. 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 cloud-based technology platform provides actionable insights and delivers independent measurement and verification of digital advertising across all devices, channels, and formats, including desktop, mobile, connected TV ("CTV"), social, display, 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 countries such as the United Kingdom ("U.K."), France, Germany, Italy, 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 sheet as of March 31, 2023, the condensed consolidated statements of operations and comprehensive income, of cash flows and of stockholders' equity for the three months ended March 31, 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 months ended March 31, 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 three months ended March 31, 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 Statement of Operations and Comprehensive Income as a separate line item "Foreign currency translation adjustments" presented on the Condensed Consolidated Statement of Operations and Comprehensive Income. Corresponding prior period amounts have also been reclassified to conform to current period presentation.

(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 banking industry, challenges in the supply chain and disruptions in European economies as a result of the war in Ukraine.

(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 Company recorded an employee retention credit totaling \$6,981, within Employee retention tax credit on the Company's Condensed Consolidated Statements of Operations and Comprehensive Income. As of March 31, 2023, the tax credit receivable has been included within Prepaid expenses and other current assets on the Company's Condensed Consolidated Balance Sheets.

(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 income (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 gain (loss) in the Condensed Consolidated Statement of Operations and Comprehensive Income.

Foreign exchange loss, net consists of unrealized foreign exchange gains, net of \$678 and \$86 for the months ended March 31, 2023, and 2022, respectively, adjusted for realized transaction losses of \$162 and \$37 for the three months ended March 31, 2023, and 2022, respectively.

(f) Cash, cash equivalents, and restricted cash

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.

	Mar	ch 31, 2023	Dece	ember 31, 2022
Cash and cash equivalents	\$	94,427	\$	86,877
Short term restricted cash		308		45
Long term restricted cash (held in other long-term assets)		2,757		2,749
Total cash, cash equivalents, and restricted cash shown in the Condensed Consolidated Statements of Cash Flows	\$	97,492	\$	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 Consolidated Statements of Operations and Comprehensive Income.

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

	Marcl	h 31, 2023	March 31, 2022
Balance, beginning of period	\$	6,691	5,883
Additional provision		514	314
Receivables written off and impact of exchange rates		26	(207)
Adoption of ASC 326		(1,271)	_
Balance, end of period	\$	5,960	5,990

(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 (the "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 Vista Equity Partners ("Vista"), the Company's equity sponsor and funds controlled by Vista.

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 —Prior to the Company's initial public offering ("IPO"), because there was no public market for the Company's common stock/units, the Company's board of directors (the "Board") determined the best estimate of the fair value of the Company's option grants, based on reasonable judgment and numerous objective and subjective factors, including independent third-party valuations of the Company's common stock/units, operating and financial performance, and general and industry-specific economic outlook, among other factors. Following the pricing of the IPO, 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:

	March 31, 2023	March 31, 2		2022
Estimated fair value	\$3.35	\$8.16		\$14.04
Expected volatility (%)	60%	65%	-	80%
Expected term (in years)	0.50	3.00	-	10.00
Risk-free interest rate (%)	4.79%	0.46%	-	0.98%
Dividend yield	<u> </u>		_	

(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 Income or the Consolidated Statement of Cash Flows. Expanded disclosures around the Company's lease agreements under ASU No. 2016-2 are included in Note 13, Leases.

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.

(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.

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 is 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. The optional amendments are effective for all entities as of March 12, 2020, through December 31, 2022. The Company intends to elect to apply certain of the optional expedients when evaluating the impact of reference rate reform on its debt instruments that reference LIBOR. The Company does not expect the adoption of ASU No. 2020-4 to have a material impact on its consolidated financial statements.

3. Property and equipment, net

Property and equipment consisted of the following:

	Estimated useful life (in years)	Marc	ch 31, 2023	Dec	cember 31, 2022
Computer and office equipment	1 - 3 years	\$	3,824	\$	3,761
Computer software	3 - 5 years		218		218
Leasehold improvements	Various		2,160		1,060
Furniture	5 years		492		308
Total property and equipment			6,694		5,347
Less: accumulated depreciation			(2,823)		(2,935)
Total property and equipment, net		\$	3,871	\$	2,412

Depreciation expense of property and equipment for the three months ended March 31, 2023 and 2022 was \$198 and \$218, respectively. During the three months ended March 31, 2023, the Company wrote off fully depreciated assets of \$267.

4. Internal use software, net

Internal use software consisted of the following:

	Estimated useful life (in years)	Mar	ch 31, 2023	D	ecember 31, 2022
Internal use software	3 - 5 years	\$	54,487	\$	47,658
Less: Assets written off			_		(199)
Less: Accumulated amortization			(26,944)		(23,817)
Total internal use software, net		\$	27,543	\$	23,642

Amortization expense for the three months ended March 31, 2023 and 2022 was \$2,924 and \$2,227, respectively.

5. Intangible assets, net

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

				Mar	ch 31, 2023			
	Estimated useful life	(Gross book value		.ccumulated mortization	Ne	et book value	Weighted average remaining useful life
Customer relationships	5 - 15 years	\$	301,977	\$	(119,982)	\$	181,995	9.3 years
Developed technology	4 - 5 years		137,250		(120,352)		16,898	3.3 years
Trademarks	5 - 9 years		19,700		(10,667)		9,033	4.1 years
Favorable leases	6 years		198		(156)		42	1.3 years
Total		\$	459,125	\$	(251,157)	\$	207,968	

			D)ecen	ıber 31, 2022			
	Estimated useful life	G	Gross book value		ccumulated mortization	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 March 31, 2023 and 2022 was \$9,703 and \$10,013, 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	660
Goodwill as of March 31, 2023	\$ 674,754

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

Accounts payable and accrued expenses consisted of the following:

	March 31, 2023		Dec	cember 31, 2022
Accounts payable	\$	13,310	\$	10,487
Accrued payroll		7,196		12,623
Accrued professional fees		3,525		3,150
Accrued bonuses and commissions		7,792		16,527
Accrued revenue sharing		3,367		3,522
Taxes payable		2,971		3,130
Accrued hosting fees		3,685		5,949
Other accrued expenses		5,672		5,411
Total accounts payable and accrued expenses	\$	47,518	\$	60,799

Other long-term liabilities consisted of the following:

	Marc	h 31, 2023	Decembe 2022	
Security deposit received		672		672
Fin 48 liability		441		394
Total Other long-term liabilities	\$	1,113	\$	1,066

8. Long-term debt

On September 29, 2021, the Company entered into a credit agreement with various lenders (the "Credit Agreement"), that 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 three months ended March 31, 2023, the Company drew down \$75,000 and paid \$85,000 under 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 proceeds of the Revolver, 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 Revolver, the Company incurred costs of \$2,318 that are included in Long-term debt, net, in the Condensed Consolidated Balance Sheets. In connection with the extinguishment of the Term Loan and Revolving Loan under the prior credit agreement, the Company wrote off deferred financing costs of \$3,721 as a loss on extinguishment.

The interest rates for the Revolver under the Credit Agreement for U.S. dollar loans are equal to (i) the applicable rate for base rate loans range from 0.75% to 1.50% per annum, (ii) for LIBO Rate (as defined in the Credit Agreement) loans range from 1.75% to 2.50% per annum, (iii) for RFR Loans (as defined in the Credit Agreement) 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 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 March 31, 2023 was 6.74%.

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 Net Leverage Ratio (as defined in the Credit Agreement) of 3.50:1.00 or lower and maintaining a minimum Interest Coverage Ratio (as defined in the Credit Agreement) of 2.50 to 1.00. As of March 31, 2023, the Company was in compliance with all covenants contained in the Credit Agreement.

	Ma	arch 31, 2023	December 31, 2022		
Revolver	\$	215,000	\$	225,000	
Less: Unamortized debt issuance costs		(1,622)		(1,738)	
Total carrying amount	\$	213,378	\$	223,262	

Amortization of debt issuance costs for both the three months ended March 31, 2023 and 2022 were \$116. Amortization of debt issuance costs is recorded to interest expense, net on the Company's Condensed Consolidated Statements of Operations and Comprehensive Income.

The Company recognized interest expense of \$3,830 and \$1,312 during the three months ended March 31, 2023 and 2022, respectively. Future principal payments of long-term debt as of March 31, 2023 are as follows:

Year Ending	
2023	\$ _
2024	_
2025	_
2026	215,000
	\$ 215,000

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 March 31, 2023 and 2022, the Company recorded an income tax provision of \$3,026 and \$825, respectively. The Company's effective tax rate for the three months ended March 31, 2023 and 2022 was 49.0% and 41.6%, respectively. The Company's effective tax rate for the three months ended March 31, 2023 is higher than for the respective three months ended March 31, 2022 primarily due to non-deductible stock-based 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 March 31,			
	2023		2022	
North and South America ("Americas")	\$	74,201	\$	60,559
Europe, Middle East and Africa ("EMEA")		24,063		21,658
Asia and Pacific Rim ("APAC")		7,828		7,025
Total	\$	106,092	\$	89,242

For the three months ended March 31, 2023 and 2022, revenue in the U.S. was \$70,615 and \$57,432, respectively.

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

	March 31, 2023		Decem	ber 31, 2022
Long lived assets				
Americas	\$	14,720	\$	16,016
EMEA		7,890		6,419
APAC		2,507		2,764
Total	\$	25,117	\$	25,199

11. Stock-based compensation

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 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 can 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.

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*. During the three months ended March 31, 2023, the Company recognized stock compensation expense of \$1,093 related to the Time-Based Options.

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. As of March 31, 2023, the condition relating to Vista's cash return was not deemed probable and therefore, no stock-based compensation expense was recognized relating to the Return-Target Options.

Vesting of the Time-Based Options accelerate 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 it becomes probable that the Return-Target Options would vest.

The total number of Time-Based Options and Return Target Options outstanding under the Amended and Restated 2018 Plan as of March 31, 2023 were 2,898,235 and 1,526,777, 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 March 31, 2023, there were 35,121,308 shares reserved for issuance under the 2021 Plan and 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 31 immediately prior to the date of increase or (ii) such number of shares of common stock determined by our Board or compensation committee.

During the three months ended March 31, 2023, the Company recognized stock compensation expense of \$671 related to the stock options. As of March 31, 2023, there are 1,232,850 total options outstanding under the 2021 Plan, consisting of two-thirds or 849,912 Time-Based Options and one-third or 382,938 Return-Target Options. The vesting conditions for the options issued under the 2021 Plan are identical to the those described under the Amended and Restated 2018 Plan.

Stock option activity for the three months ended March 31, 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
Granted	_	_	_		_
Canceled or forfeited	(164,194)	14.85	_		_
Exercised	(338,949)	6.24	_		_
Outstanding at March 31, 2023	3,748,147	\$ 7.94	6.71	\$	27,201
Vested and expected to vest at March 31, 2023	3,748,147	\$ 7.94	6.71		27,201
Exercisable as of March 31, 2023	2,957,245	\$ 6.51	6.32	\$	24,525

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
Granted	_	_	_	_
Canceled or forfeited	(243,549)	11.00	_	_
Exercised				
Outstanding at March 31, 2023	1,909,715	\$ 7.66	6.56	\$ 15,219
Vested and expected to vest at March 31, 2023	1,909,715	\$ 7.66	6.56	 15,219
Exercisable as of March 31, 2023	_	_	_	_

As of March 31, 2023, unamortized stock-based compensation expense related to the Time-Based Options was \$8,756, which will be recognized over the weighted average vesting term of 1.9 years. In addition, unamortized stock-based compensation expense related to the Return-Target Options of \$23,450 will be recognized when events that trigger vesting are deemed probable.

Restricted Stock Units

The majority of RSUs under the 2021 Plan vest 25% each year and become fully vested after 4 years of service. Beginning in April 2022, new RSU grants began to vest 6.25% at the end of each successive quarter and become fully vested after four years of service.

The RSU activity for the three months ended March 31, 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	431,444	9.63		
Canceled or forfeited	(128,156)	13.93		
Vested	(371,740)	12.46		
Outstanding as of March 31, 2023	8,016,915	\$ 11.70		
Expected to vest as of March 31, 2023	8,016,915			

During the three months ended March 31, 2023, the Company recognized \$7,261 of stock-based compensation expense related to these RSU awards. Unamortized stock-based compensation expense related to RSUs was \$79,248, which will be recognized over the weighted average vesting term of 3.1 years.

Performance Stock Units

The Company granted Performance Stock Units under the 2021 Plan, which are contingent upon achieving specified revenue performance goals by December 31, 2023. As of March 31, 2023, no stock-based compensation expense has been recognized as performance vesting conditions were not deemed probable to occur. The unrecognized compensation expense is \$6,000 assuming performance at the highest tier.

Market Stock Units

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 March 31, 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	_	_			
Canceled or forfeited	(209,568)	14.43			
Vested	_	_			
Outstanding as of March 31, 2023	999,694	\$ 14.58			
Expected to vest as of March 31, 2023	999,694				

During the three months ended March 31, 2023, the Company recognized stock-based compensation expense of \$1,887 related to the MSU awards. Unamortized stock-based compensation expense related to MSUs was \$7,615, which will be recognized over the weighted average vesting term of 3.3 years.

2021 Employee Stock Purchase Plan

The Company adopted the ESPP for the primary purpose of incentivizing employees in future periods. As of March 31, 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 1 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 \$25,000 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. After such purchase, 4,462,294 shares were available for future purchase under the ESPP. Stock-based compensation expense recognized in the three months ended March 31, 2023 was \$395.

Total stock-based compensation expense for all equity arrangements for the three months ended March 31, 2023 and 2022 were as follows:

	 Three Months Ended March 31,				
	2023	2022			
Cost of revenue	\$ 84	\$	56		
Sales and marketing	3,887		2,531		
Technology and development	3,170		1,536		
General and administrative	4,165		4,016		
Total	\$ 11,306	\$	8,139		

12. Stockholders' equity

As of March 31, 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 March 31, 2023, the Company issued 371,740 shares of common stock for vested RSUs, employees exercised stock options in exchange for 338,949 shares of common stock for \$2,115 and employees purchased 111,163 shares of common stock through the ESPP.

For the three months ended March 31, 2022, the Company issued 12,094 shares of common stock for vested RSUs and employees exercised stock options in exchange for 605,682 shares of common stock for \$2,532.

13. Leases

The Company leases office spaces under non-cancelable lease terms, and have a remaining lease term of up to 9.6 years, with a number of month-to-month leases that are accounted for as short-term leases. The weighted-average remaining term of the Company's operating leases was 4.7 years as of March 31, 2023. The weighted-average discount rate used to measure the present value of the operating lease liabilities was 5.6% as of March 31, 2023.

The following table presents components of lease cost recorded in the Condensed Consolidated Statement of Operations for the three months ended March 31, 2023 and 2022.

	Three Months Ended March 31,						
Lease costs:		2023	2022				
Operating lease costs	\$	2,032 \$	1,651				
Short-term lease costs		809	727				
Variable lease costs		123	85				
Sublease income		(656)	(656)				
Total lease costs	\$	2,308 \$	1,808				

For the three months ended March 31, 2023, operating cash flows included \$1,582 of cash paid for operating lease liabilities. For the three months ended March 31, 2023, there was \$689 cash received from the sublease. As of March 31, 2023, there is one additional operating lease not yet commenced with a lease liability of \$1,149 and a term of 3.6 years.

As of March 31, 2023, the Company has provided \$2,326 in security deposits, recorded within Other long-term assets on the Company's Condensed Consolidated Balance Sheets.

As of March 31, 2023, the maturities of remaining lease payments included in the measurement of operating leases are as follows:

Year Ended December 31,	
2023 (remaining nine months)	5,751
2024	7,263
2025	7,338
2026	6,107
2027	2,116
Thereafter	4,027
Total lease payments	32,602
Less: imputed interest	4,495
Total operating lease liability	\$ 28,107

14. 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 March 31, 2023 were approximately \$108,107 for periods through 2026.

15. Net income per share

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

	Three Months Ended March 31,					
		2023		2022		
	\$	3,146	\$	1,159		
outstanding	1	154,315,219		154,477,403		
hares outstanding	1	154,315,219		154,477,403		
sed awards		3,569,396		2,681,623		
shares	1	157,884,615		157,159,026		
	\$	0.02	\$	0.01		
	\$	0.02	\$	0.01		
	outstanding hares outstanding ised awards shares	substanding shares outstanding seed awards shares	2023 \$ 3,146 outstanding	2023		

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

	Three months ended March 31,					
	2023 2022					
Options to purchase common stock	3,624,277	1,655,206				
Restricted stock units	1,806,679	1,034,418				
Total	5,430,956	2,689,624				

16. Fair value disclosures

Financial instruments

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

17. 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 March 31, 2023 and 2022, the Company incurred expenses of \$0 and \$15, respectively. These costs were included in general and administrative expenses in the Condensed Consolidated Statements of Operations and Comprehensive Income. Amounts due to VCG as of March 31, 2023 and December 31, 2022 were \$0.

The Company incurs various travel and other expenses related to services provided by Vista Equity Partners Management, LLC ("VEP"). For the three months ended March 31, 2023 and 2022, the Company incurred expenses of \$25 and \$10, respectively. These costs were included in general and administrative expenses in the Condensed Consolidated Statements of Operations and Comprehensive Income. Amounts due to VEP as of March 31, 2023 and December 31, 2022 were \$25 and \$13, respectively.

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 Statement of Operations and Comprehensive Income.

18. 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 within the second quarter 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 three months ended March 31, 2023, was as follows:

Balance at December 31, 2022	\$ 4,315
Payments	(3,069)
Balance at March 31, 2023	\$ 1,246

19. Subsequent Events

Equity grants

Subsequent to March 31, 2023, the Company granted (i) RSUs with a grant date fair value aggregating \$36,708 to employees and (ii) MSUs with a grant date fair value aggregating \$29,672 to certain executive officers. The terms of the RSU and MSU awards are consistent with existing awards as described in Note 11.

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, digital service providers ("DSPs"), and proprietary platforms that we do not control;
- our international expansion;
- 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, social disruption;
- $\bullet \quad \text{risks that our existing indebtedness could adversely affect our business and growth prospects;}\\$
- 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 the section entitled "Forward-Looking Statement" included 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 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 digital media quality company. Through our cloud-based technology platform and the actionable insights it provides, we deliver independent measurement and verification of digital advertising across all devices, channels, and formats, including desktop, mobile, connected TV ("CTV"), social, display, and video. 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 media quality partner, 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, Twitter, Xandr, and Yahoo. Our platform uses advanced artificial intelligence ("AI") and machine learning ("ML") technologies to process over 100 billion daily digital interactions globally on average. With this data, we deliver actionable insights and analytics to our global customers through our easy-to-use reporting platform, IAS SignalTM, helping brands, agencies, publishers, and platform partners improve media quality and campaign performance.

Our pre-bid and post-bid verification 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 programmatic 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 banking industry, challenges in the supply chain 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. The U.S. dollar may continue to strengthen against these foreign currencies if the Federal Reserve further raises the federal funds rate, which may result in downstream impacts to global exchange rates and further adverse impacts to our reported results. For the three months ended March 31, 2023, we incurred a foreign exchange gain 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 2.5% at March 31, 2022 to 6.7% at March 31, 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

- *Programmatic*. 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.

In 2021, we acquired Publica, a leading CTV ad platform. We also launched our brand safety solution for in-feed video ads on TikTok in 2021, and in 2022, we expanded our advanced contextual targeting to over 50 languages on TikTok.

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 programmatic 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 a 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 outside the U.S. in Europe and other established markets such as Australia and Japan, and view ourselves as best 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 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.

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

	March 31	l,
	2023	2022
Net revenue retention of advertising customers (%) (as of the end of the period)	118 %	126 %
Total advertising customers (as of the end of the period)	2,100	2,104
Total number of large advertising customers (as of the end of the period)	204	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 126% as of March 31, 2022 to 118% as of March 31, 2023. The decrease in the net revenue retention of advertising customers as of March 31, 2022 compared to March 31, 2023 was primarily due to the decrease in revenue growth from our advertising customers of 22% versus 33% in the prior period.

Total advertising customers

We view the number of advertising customers as a key indicator of our scale and growth and the adoption of our platform. We determine our number of advertising customers by counting the total number of advertiser accounts who have spent at least \$3,000 in the trailing twelve months. The total number of advertising customers has limitations as an operating metric as it does not reflect the product mix chosen by our advertising customers, the order frequency, or the purchasing behavior of our advertising customers. Because of these and other limitations, we consider, and you should consider, advertising customers in conjunction with our other metrics, including net revenue retention, net income, adjusted EBITDA, and average revenue per advertising customer.

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 March 31, 2022 to 204 as of March 31, 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 84% of our total advertising revenue (advertiser direct revenue and programmatic revenue), for the trailing-twelve-month periods ended March 31, 2023, and December 31, 2022, and 80% for the trailing-twelve-month period ended March 31, 2022.

Components of Results of Operations

Revenue

We derive revenue from advertisers (buy-side) and publishers (sell-side). Our pre-bid and post-bid verification 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 programmatic solution is directly integrated with DSPs to help optimize return on ad spend by directing budgets to the best available inventory. Our solutions help publishers deliver 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 are 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 onscreen, 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 gain, net. Foreign exchange gain, 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 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.

Provision for income tax

Provision for income tax. Provision for income tax resulted primarily from the current period book income 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 March 31,			March 31,
		2023		2022
Revenue	\$	106,092	\$	89,242
Operating expenses:				
Cost of revenue (excluding depreciation and amortization shown below)		21,682		16,561
Sales and marketing		26,260		23,080
Technology and development		15,529		16,988
General and administrative		20,723		16,794
Depreciation and amortization		12,825		12,458
Foreign exchange gain, net ⁽¹⁾		(516)		(49)
Total operating expenses		96,503		85,832
Operating income		9,589		3,410
Interest expense, net		(3,417)		(1,426)
Net income before income taxes		6,172		1,984
Provision for income taxes		(3,026)		(825)
Net income	\$	3,146	\$	1,159
Net income margin		3 %		1 %

⁽¹⁾ Prior period amounts have been reclassified to conform to current period presentation.

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 March 31,		
	2023	2022	
Revenue	100 %	100 %	
Operating expenses:			
Cost of revenue (excluding depreciation and amortization shown below)	20 %	19 %	
Sales and marketing	25 %	26 %	
Technology and development	15 %	18 %	
General and administrative	20 %	19 %	
Depreciation and amortization	12 %	14 %	
Foreign exchange gain, net ⁽¹⁾	— %	— %	
Total operating expenses	91 %	95 %	
Operating income	9 %	4 %	
Interest expense, net	(3)%	(2)%	
Net income before income taxes	6 %	2 %	
Provision for income taxes	(3)%	(1)%	
Net income	3 %	1 %	

 $^{^{(1)}}$ Prior period amounts have been reclassified to conform to current period presentation.

Comparison of the Three Months Ended March 31, 2023 and 2022

(in thousands except percentages)	Three Months Ended March 31,						
		2023		2022		\$ change	% change
Revenue	\$	106,092	\$	89,242	\$	16,850	19 %
Operating expenses:							
Cost of revenue (excluding depreciation and amortization shown below)		21,682		16,561		5,121	31 %
Sales and marketing		26,260		23,080		3,180	14 %
Technology and development		15,529		16,988		(1,459)	(9)%
General and administrative		20,723		16,794		3,929	23 %
Depreciation and amortization		12,825		12,458		367	3 %
Foreign exchange gain, net(1)		(516)		(49)		(467)	953 %
Total operating expenses		96,503		85,832		10,671	12 %
Operating income		9,589		3,410		6,179	181 %
Interest expense, net		(3,417)		(1,426)		(1,991)	140 %
Net income before income taxes		6,172		1,984		4,188	211 %
Provision for income taxes		(3,026)		(825)		(2,201)	267 %
Net income	\$	3,146	\$	1,159	\$	1,987	171 %

⁽¹⁾ Prior period amounts have been reclassified to conform to current period presentation.

Revenue

Total revenue increased by \$16.9 million, or 19%, for the three months ended March 31, 2023 as compared to the three months ended March 31, 2022.

	Three Months Ended March 31,						
		2023		2022		\$ change	% change
(in thousands)							
Programmatic revenue	\$	51,033	\$	40,575	\$	10,458	26 %
Advertiser direct revenue		40,703		34,615		6,088	18 %
Supply side revenue		14,356		14,052		304	2 %
Total revenue	\$	106,092	\$	89,242	\$	16,850	19 %

Total revenue increased primarily due to a significant increase in our programmatic revenue of \$10.5 million, or 26%, attributable to growth in volume of impressions of 14% and an increase of 10% in average CPMs. The increase in average CPMs was attributable to significant growth of our Context Control solution. Revenue from our advertiser direct customers increased \$6.1 million, or 18%, reflecting growth in volume of impressions of 29% as well as the acquisition of a number of new large customers. These increases were partially offset by a decrease of 6% in average CPMs.

Operating expenses

Cost of Revenue. Cost of revenue increased by \$5.1 million, or 31%, for the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. This increase was driven by an increase in hosting fees of \$3.6 million and an increase in revenue share to our DSP partners related to our growth in programmatic revenue of \$1.3 million.

Sales and marketing. Sales and marketing expenses increased by \$3.2 million, or 14%, for the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. This increase was due to an increase in compensation expenses of \$2.0 million, including stock-based compensation, to support our growth, an increase in sales commissions of \$0.7 million due to higher revenue, increases in advertising and travel expenses of \$0.6 million with the return to in-person events, and an increase in \$0.5 million due to higher allocation of overhead costs. These increases were partially offset by a decrease in restructuring costs of \$0.5 million.

Technology and development. Technology and development expenses decreased by \$1.5 million, or 9%, for the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. This decrease was due to lower compensation expenses of \$2.5 million, as a result of savings from the December 2022 restructuring and higher capitalization of labor due to long-term investments in our product, and decreases in professional and other fees of \$0.2 million. These decreases were partially offset by an increase in stock-based compensation expense of \$1.6 million driven by new grants to employees. The remaining decrease in technology and development expenses is aggregated from several immaterial variances.

General and administrative. General and administrative expenses increased by \$3.9 million, or 23%, for the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. This increase was attributable to increases in compensation expenses of \$2.1 million, professional fees incurred for audit, tax, legal and other services of \$1.1 million, and an increase for restructuring severance costs of \$0.5 million.

Depreciation and amortization. Depreciation and amortization expenses increased by \$0.4 million, or 3%, for the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. This increase results from an increase in amortization expense related to capitalization of internal-use software of \$0.7 million, offset by a decrease in amortization expense for intangible assets of \$0.3 million.

Foreign exchange gain, net. Foreign exchange gain, net increased \$467, or 953% for the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. The gain results 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 increased by \$2.0 million, or 140%, for the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. The increase in interest expense was attributable to increases in the interest rate from 2.5%. at March 31, 2022 to 6.74% at March 31, 2023 driven by the macroeconomic environment.

Provision for income tax

Provision for income tax. Provision for income tax increased by \$2.2 million, or 267%, for the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. The tax provision increased due to higher book income for the three months ended March 31, 2023, 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 income (loss) before depreciation and amortization, stock-based compensation, interest expense, income taxes, acquisition, restructuring and integration costs, 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

	Three Months Ended March 31,			
(in thousands)	2023	2022		
Net income	\$ 3,146	\$	1,159	
Depreciation and amortization	12,825		12,458	
Stock-based compensation	11,306		8,139	
Interest expense, net	3,417		1,426	
Provision for income tax	3,026		825	
Acquisition, restructuring and integration costs	811		749	
Foreign exchange gain, net ⁽¹⁾	(516)		_	
Asset impairments and other costs	38		49	
Adjusted EBITDA	\$ 34,053	\$	24,805	
Revenue	\$ 106,092	\$	89,242	
Net income margin	3 %		1 %	
Adjusted EBITDA margin	32 %		28 %	

⁽¹⁾ The adjustment for foreign exchange gain, 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

As of March 31, 2023, our principal sources of liquidity were cash and cash equivalents totaling \$94.4 million, which was held for working capital purposes, as well as the available balance under our Revolver, defined below.

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 \$32.6 million as of March 31, 2023. Total non-cancelable purchase commitments related to hosting services as of March 31, 2023 were \$108.1 million for periods through 2026. The Revolver matures in 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.

In March 2023, Silicon Valley Bank ("SVB") was closed and placed in receivership. As of the date of this report, the Company maintains an immaterial amount of cash at SVB, which is fully accessible. As part of our liquidity contingency plan, in March 2023, the Company drew down \$75.0 million under the Revolver, but subsequently repaid a total of \$85.0 million. Our cash and cash equivalents are held at a diversified portfolio of global banks and money market investments, and we do not have material exposure to recent banking-sector events.

Credit Agreement

On September 29, 2021, we entered into a credit agreement with various lenders (the "Credit Agreement"), which provides for an initial \$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 to the Credit Agreement may be used for working capital and other general corporate purposes, including for acquisitions permitted under the Credit Agreement.

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) the Adjusted LIBOR (subject to a floor of 0.0%) for a one month Interest Period (each term as defined in the Credit Agreement) plus 1%, or (y) the Adjusted LIBOR (subject to a floor of 0.0%) equal to the LIBOR (as defined in the Credit Agreement) for the applicable Interest Period multiplied by the Statutory Reserve Rate (each term as defined in the Credit Agreement) 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 LIBOR 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 1.7965% 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. 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 March 31, 2023 was 6.74%.

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 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 March 31, 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.

	Three Months Ended March 31,			
		2023		2022
Net cash provided by operating activities	\$	22,956	\$	11,187
Net cash used in investing activities		(8,342)		(3,005)
Net cash provided by (used in) financing activities		(7,098)		598
Net increase in cash and cash equivalents, and restricted cash	\$	7,516	\$	8,780
Effect of exchange rate changes on cash and cash equivalents, and restricted cash		305		278
Cash, cash equivalents, and restricted cash, at beginning of period		89,671		76,078
Cash, cash equivalents and restricted cash, at end of period	\$	97,492	\$	85,137

Operating Activities

For the three months ended March 31, 2023, net cash provided by operating activities was \$23.0 million, resulting from a net income of \$3.1 million adjusted for non-cash expenses of depreciation and amortization of \$12.8 million, stock-based compensation of \$11.3 million, bad debt expense of \$0.5 million, partially offset by a decrease in working capital of \$1.5 million, foreign currency gains of \$0.7 million and a deferred tax benefit of \$2.8 million.

For the three months ended March 31, 2022, net cash provided by operating activities was \$11.2 million, resulting from a net loss of \$1.2 million adjusted for non-cash expenses of depreciation and amortization of \$12.5 million, stock-based compensation of \$8.1 million, bad debt expense of \$0.3 million, partially offset by a decrease in working capital of \$10.4 million, a decrease in net operating leases of \$0.2 million and a deferred tax benefit of \$0.7 million.

Investing Activities

Cash used in investing activities was \$8.3 million for the three months ended March 31, 2023, reflecting capitalized costs related to our internal use software of \$7.1 million and the purchase of property and equipment of \$1.3 million.

Cash used in investing activities was \$3.0 million for the three months ended March 31, 2022, reflecting capitalized costs related to our internal use software of \$2.7 million and the purchase of property and equipment of \$0.3 million.

Financing Activities

Cash used in financing activities was \$7.1 million for the three months ended March 31, 2023, due to a net repayment of outstanding long-term debt of \$10.0 million offset by receipt of \$2.1 million for stock options exercised and \$0.8 million for share purchases under the ESPP.

Cash provided by financing activities was \$0.6 million for the three months ended March 31, 2022, reflecting \$2.5 million in stock options exercised, offset by a repayment of outstanding short-term debt of \$1.9 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 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.

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., France, Germany, Italy, and Singapore. 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 three months ended March 31, 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 income of approximately \$5.0 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 LIBOR (subject to a floor of 0.0%) equal to the LIBOR for the applicable Interest Period multiplied by the Statutory Reserve Rate. 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 LIBO Rate loans 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. 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. At March 31, 2023, we had total outstanding debt of \$215 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 \$2.2 million or a benefit of \$2.2 million, respectively.

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 March 31, 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 March 31, 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 March 31, 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;
- Continued to formalize our control framework and establish the ongoing testing program in compliance with the Sarbanes-Oxley Act of 2022, as amended, that supports Management's assessment of internal controls;
- Delivered training to our team members on internal controls over financial reporting; and
- · Developed detailed action plans to address control deficiencies identified across business processes and financial systems impacting our financial reporting.

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 March 31, 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 design and 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

There have been no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting during the period ended March 31, 2023.

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

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.

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

None.

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).
10.1	Separation Agreement and Release of Claims, dated as of March 29, 2023, by and between Oleg Bershadsky and Integral Ad Science, Inc. (incorporated by reference to the Company's Exhibit 10.1 to the Company's Form 8-K filed on April 3, 2023).
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, filed herewith.
32.2**	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, filed 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: May 4, 2023 By: /s/ Tania Secor

Tania Secor

Chief Financial Officer (Principal Financial Officer)

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

Date: May 4, 2023

/s/ Lisa Utzschneider

Lisa Utzschneider Chief Executive Officer

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: May 4, 2023

/s/ Tania Secor

Tania Secor Chief Financial Officer

Certification of the Chief Executive Officer

Pursuant to Rule 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 March 31, 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: May 4, 2023 /s/ Lisa Utzschneider

Lisa Utzschneider Chief Executive Officer

Certification of the Chief Financial Officer

Pursuant to Rule 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 March 31, 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: May 4, 2023 /s/ Tania Secor

Tania Secor

Chief Financial Officer