

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q**

(Mark One)

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

For the Quarterly Period Ended September 30, 2022

OR

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

For the transition period from to

Commission File Number 000-24435

MICROSTRATEGY INCORPORATED

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

51-0323571

(I.R.S. Employer

Identification Number)

1850 Towers Crescent Plaza, Tysons Corner, VA

(Address of Principal Executive Offices)

22182

(Zip Code)

(703) 848-8600

(Registrant's telephone number, including area code)

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

Title of Each Class	Trading Symbol	Name of Each Exchange on which Registered
Class A common stock, par value \$0.001 per share	MSTR	The Nasdaq Global Select Market

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

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

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

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

As of October 25, 2022, the registrant had 9,353,694 and 1,964,025 shares of class A common stock and class B common stock outstanding, respectively.

MICROSTRATEGY INCORPORATED

FORM 10-Q

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

MICROSTRATEGY INCORPORATED
CONSOLIDATED BALANCE SHEETS
(in thousands, except per share data)

	September 30, 2022 (unaudited)	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	\$ 60,390	\$ 63,356
Restricted cash	6,578	1,078
Accounts receivable, net	109,926	189,280
Prepaid expenses and other current assets	25,399	14,251
Total current assets	202,293	267,965
Digital assets	1,993,032	2,850,210
Property and equipment, net	33,033	36,587
Right-of-use assets	62,902	66,760
Deposits and other assets	20,992	15,820
Deferred tax assets, net	233,034	319,782
Total assets	\$ 2,545,286	\$ 3,557,124
Liabilities and Stockholders' (Deficit) Equity		
Current liabilities:		
Accounts payable, accrued expenses, and operating lease liabilities	\$ 36,846	\$ 46,084
Accrued compensation and employee benefits	46,346	54,548
Accrued interest	11,394	1,493
Deferred revenue and advance payments	165,934	209,860
Total current liabilities	260,520	311,985
Long-term debt, net	2,376,935	2,155,151
Deferred revenue and advance payments	8,754	8,089
Operating lease liabilities	69,278	76,608
Other long-term liabilities	30,088	26,224
Deferred tax liabilities	0	109
Total liabilities	2,745,575	2,578,166
Commitments and Contingencies		
Stockholders' (Deficit) Equity		
Preferred stock undesignated, \$0.001 par value; 5,000 shares authorized; no shares issued or outstanding	0	0
Class A common stock, \$0.001 par value; 330,000 shares authorized; 18,038 shares issued and 9,354 shares outstanding, and 18,006 shares issued and 9,322 shares outstanding, respectively	18	18
Class B convertible common stock, \$0.001 par value; 165,000 shares authorized; 1,964 shares issued and outstanding, and 1,964 shares issued and outstanding, respectively	2	2
Additional paid-in capital	1,778,660	1,727,143
Treasury stock, at cost; 8,684 shares	(782,104)	(782,104)
Accumulated other comprehensive loss	(18,179)	(7,543)
(Accumulated deficit) retained earnings	(1,178,686)	41,442
Total stockholders' (deficit) equity	(200,289)	978,958
Total liabilities and stockholders' (deficit) equity	\$ 2,545,286	\$ 3,557,124

The accompanying notes are an integral part of these Consolidated Financial Statements.

MICROSTRATEGY INCORPORATED
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Three Months Ended September 30,	
	2022	2021
	(unaudited)	(unaudited)
Revenues:		
Product licenses	\$ 22,286	\$ 25,830
Subscription services	16,414	10,853
Total product licenses and subscription services	38,700	36,683
Product support	66,010	70,387
Other services	20,650	20,924
Total revenues	125,360	127,994
Cost of revenues:		
Product licenses	406	383
Subscription services	6,395	4,282
Total product licenses and subscription services	6,801	4,665
Product support	5,224	4,679
Other services	13,360	12,975
Total cost of revenues	25,385	22,319
Gross profit	99,975	105,675
Operating expenses:		
Sales and marketing	35,409	38,209
Research and development	30,498	28,211
General and administrative	27,283	23,751
Digital asset impairment losses	727	65,165
Total operating expenses	93,917	155,336
Income (loss) from operations	6,058	(49,661)
Interest expense, net	(14,073)	(10,723)
Other income, net	4,897	1,264
Loss before income taxes	(3,118)	(59,120)
Provision for (benefit from) income taxes	23,961	(22,984)
Net loss	\$ (27,079)	\$ (36,136)
Basic loss per share (1)	\$ (2.39)	\$ (3.61)
Weighted average shares outstanding used in computing basic loss per share	11,308	9,999
Diluted loss per share (1)	\$ (2.39)	\$ (3.61)
Weighted average shares outstanding used in computing diluted loss per share	11,308	9,999

(1) Basic and fully diluted loss per share for class A and class B common stock are the same.

The accompanying notes are an integral part of these Consolidated Financial Statements.

MICROSTRATEGY INCORPORATED
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Nine Months Ended September 30,	
	2022	2021
	(unaudited)	(unaudited)
Revenues:		
Product licenses	\$ 58,928	\$ 69,261
Subscription services	43,276	31,221
Total product licenses and subscription services	102,204	100,482
Product support	199,682	212,063
Other services	64,824	63,702
Total revenues	366,710	376,247
Cost of revenues:		
Product licenses	1,314	1,290
Subscription services	17,303	11,720
Total product licenses and subscription services	18,617	13,010
Product support	15,542	14,353
Other services	42,107	40,543
Total cost of revenues	76,266	67,906
Gross profit	290,444	308,341
Operating expenses:		
Sales and marketing	105,511	116,728
Research and development	95,811	86,242
General and administrative	82,491	68,397
Digital asset impairment losses	1,088,656	684,034
Total operating expenses	1,372,469	955,401
Loss from operations	(1,082,025)	(647,060)
Interest expense, net	(38,299)	(17,520)
Other income, net	12,242	1,631
Loss before income taxes	(1,108,082)	(662,949)
Provision for (benefit from) income taxes	112,046	(217,446)
Net loss	\$ (1,220,128)	\$ (445,503)
Basic loss per share (1)	\$ (107.99)	\$ (45.47)
Weighted average shares outstanding used in computing basic loss per share	11,299	9,798
Diluted loss per share (1)	\$ (107.99)	\$ (45.47)
Weighted average shares outstanding used in computing diluted loss per share	11,299	9,798

(1) Basic and fully diluted loss per share for class A and class B common stock are the same.

The accompanying notes are an integral part of these Consolidated Financial Statements.

MICROSTRATEGY INCORPORATED
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands)

	Three Months Ended	
	September 30,	
	2022	2021
	(unaudited)	(unaudited)
Net loss	\$ (27,079)	\$ (36,136)
Other comprehensive loss, net of applicable taxes:		
Foreign currency translation adjustment	(4,514)	(1,457)
Total other comprehensive loss	(4,514)	(1,457)
Comprehensive loss	\$ (31,593)	\$ (37,593)

	Nine Months Ended	
	September 30,	
	2022	2021
	(unaudited)	(unaudited)
Net loss	\$ (1,220,128)	\$ (445,503)
Other comprehensive loss, net of applicable taxes:		
Foreign currency translation adjustment	(10,636)	(2,896)
Total other comprehensive loss	(10,636)	(2,896)
Comprehensive loss	\$ (1,230,764)	\$ (448,399)

The accompanying notes are an integral part of these Consolidated Financial Statements.

MICROSTRATEGY INCORPORATED
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' (DEFICIT) EQUITY
(in thousands, unaudited)

		Class A Common Stock		Class B Convertible Common Stock		Additional Paid-in Capital	Treasury Stock		Accumulated Other Comprehensive Loss	(Accumulated Deficit) Retained Earnings
	Total	Shares	Amount	Shares	Amount		Shares	Amount		
Balance at January 1, 2021	<u>\$ 446,192</u>	<u>16,307</u>	<u>\$ 16</u>	<u>1,964</u>	<u>\$ 2</u>	<u>\$ 655,241</u>	<u>(8,684)</u>	<u>\$ (782,104)</u>	<u>\$ (3,885)</u>	<u>\$ 576,922</u>
Net loss	(110,020)	0	0	0	0	0	0	0	0	(110,020)
Other comprehensive loss	(1,836)	0	0	0	0	0	0	0	(1,836)	0
Issuance of class A common stock upon exercise of stock options	23,854	159	0	0	0	23,854	0	0	0	0
Share-based compensation expense	6,848	0	0	0	0	6,848	0	0	0	0
Balance at March 31, 2021	<u>\$ 365,038</u>	<u>16,466</u>	<u>\$ 16</u>	<u>1,964</u>	<u>\$ 2</u>	<u>\$ 685,943</u>	<u>(8,684)</u>	<u>\$ (782,104)</u>	<u>\$ (5,721)</u>	<u>\$ 466,902</u>
Net loss	(299,347)	0	0	0	0	0	0	0	0	(299,347)
Other comprehensive income	397	0	0	0	0	0	0	0	397	0
Issuance of class A common stock upon exercise of stock options	244	2	0	0	0	244	0	0	0	0
Share-based compensation expense	11,087	0	0	0	0	11,087	0	0	0	0
Balance at June 30, 2021	<u>\$ 77,419</u>	<u>16,468</u>	<u>\$ 16</u>	<u>1,964</u>	<u>\$ 2</u>	<u>\$ 697,274</u>	<u>(8,684)</u>	<u>\$ (782,104)</u>	<u>\$ (5,324)</u>	<u>\$ 167,555</u>
Net loss	(36,136)	0	0	0	0	0	0	0	0	(36,136)
Other comprehensive loss	(1,457)	0	0	0	0	0	0	0	(1,457)	0
Issuance of class A common stock upon exercise of stock options	7,282	50	0	0	0	7,282	0	0	0	0
Issuance of class A common stock under employee stock purchase plan	2,854	5	0	0	0	2,854	0	0	0	0
Issuance of class A common stock under public offerings, net of issuance costs	399,469	555	1	0	0	399,468	0	0	0	0
Share-based compensation expense	11,883	0	0	0	0	11,883	0	0	0	0
Balance at September 30, 2021	<u>\$ 461,314</u>	<u>17,078</u>	<u>\$ 17</u>	<u>1,964</u>	<u>\$ 2</u>	<u>\$ 1,118,761</u>	<u>(8,684)</u>	<u>\$ (782,104)</u>	<u>\$ (6,781)</u>	<u>\$ 131,419</u>
Net loss	(89,977)	0	0	0	0	0	0	0	0	(89,977)
Other comprehensive loss	(762)	0	0	0	0	0	0	0	(762)	0
Issuance of class A common stock upon exercise of stock options	9,271	58	0	0	0	9,271	0	0	0	0
Issuance of class A common stock upon vesting of restricted stock units, net of withholding taxes	(4,754)	11	0	0	0	(4,754)	0	0	0	0
Issuance of class A common stock under public offerings, net of issuance costs	590,994	859	1	0	0	590,993	0	0	0	0
Share-based compensation expense	12,872	0	0	0	0	12,872	0	0	0	0
Balance at December 31, 2021	<u>\$ 978,958</u>	<u>18,006</u>	<u>\$ 18</u>	<u>1,964</u>	<u>\$ 2</u>	<u>\$ 1,727,143</u>	<u>(8,684)</u>	<u>\$ (782,104)</u>	<u>\$ (7,543)</u>	<u>\$ 41,442</u>
Net loss	(130,751)	0	0	0	0	0	0	0	0	(130,751)
Other comprehensive loss	(2,009)	0	0	0	0	0	0	0	(2,009)	0
Issuance of class A common stock upon exercise of stock options	288	2	0	0	0	288	0	0	0	0
Issuance of class A common stock under employee stock purchase plan	2,805	7	0	0	0	2,805	0	0	0	0
Issuance of class A common stock upon vesting of restricted stock units, net of withholding taxes	(501)	3	0	0	0	(501)	0	0	0	0
Share-based compensation expense	14,209	0	0	0	0	14,209	0	0	0	0
Balance at March 31, 2022	<u>\$ 862,999</u>	<u>18,018</u>	<u>\$ 18</u>	<u>1,964</u>	<u>\$ 2</u>	<u>\$ 1,743,944</u>	<u>(8,684)</u>	<u>\$ (782,104)</u>	<u>\$ (9,552)</u>	<u>\$ (89,309)</u>
Net loss	(1,062,298)	0	0	0	0	0	0	0	0	(1,062,298)
Other comprehensive loss	(4,113)	0	0	0	0	0	0	0	(4,113)	0
Issuance of class A common stock upon exercise of stock options	423	3	0	0	0	423	0	0	0	0
Issuance of class A common stock upon vesting of restricted stock units, net of withholding taxes	(49)	0	0	0	0	(49)	0	0	0	0
Share-based compensation expense	15,970	0	0	0	0	15,970	0	0	0	0
Balance at June 30, 2022	<u>\$ (187,068)</u>	<u>18,021</u>	<u>\$ 18</u>	<u>1,964</u>	<u>\$ 2</u>	<u>\$ 1,760,288</u>	<u>(8,684)</u>	<u>\$ (782,104)</u>	<u>\$ (13,665)</u>	<u>\$ (1,151,607)</u>
Net loss	(27,079)	0	0	0	0	0	0	0	0	(27,079)
Other comprehensive loss	(4,514)	0	0	0	0	0	0	0	(4,514)	0
Issuance of class A common stock upon exercise of stock options	621	4	0	0	0	621	0	0	0	0
Issuance of class A common stock under employee stock purchase plan	1,668	9	0	0	0	1,668	0	0	0	0
Issuance of class A common stock upon vesting of restricted stock units, net of withholding taxes	(642)	4	0	0	0	(642)	0	0	0	0
Share-based compensation expense	16,725	0	0	0	0	16,725	0	0	0	0
Balance at September 30, 2022	<u>\$ (200,289)</u>	<u>18,038</u>	<u>\$ 18</u>	<u>1,964</u>	<u>\$ 2</u>	<u>\$ 1,778,660</u>	<u>(8,684)</u>	<u>\$ (782,104)</u>	<u>\$ (18,179)</u>	<u>\$ (1,178,686)</u>

The accompanying notes are an integral part of these Consolidated Financial Statements.

MICROSTRATEGY INCORPORATED
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Nine Months Ended September 30,	
	2022 (unaudited)	2021 (unaudited)
Operating activities:		
Net loss	\$ (1,220,128)	\$ (445,503)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization	6,917	8,639
Reduction in carrying amount of right-of-use assets	6,020	6,190
Credit losses and sales allowances	1,189	748
Deferred taxes	90,166	(221,328)
Release of liabilities for unrecognized tax benefits	0	(152)
Share-based compensation expense	46,587	30,973
Digital asset impairment losses	1,088,656	684,034
Amortization of issuance costs on long-term debt	6,490	5,084
Changes in operating assets and liabilities:		
Accounts receivable	5,586	10,634
Prepaid expenses and other current assets	(7,837)	(1,693)
Deposits and other assets	(8,314)	(594)
Accounts payable and accrued expenses	(8,880)	(10,788)
Accrued compensation and employee benefits	(13,105)	(1,698)
Accrued interest	9,901	10,182
Deferred revenue and advance payments	25,401	24,385
Operating lease liabilities	(7,390)	(7,714)
Other long-term liabilities	150	(813)
Net cash provided by operating activities	21,409	90,586
Investing activities:		
Purchases of digital assets	(231,478)	(2,035,471)
Purchases of property and equipment	(1,851)	(1,882)
Net cash used in investing activities	(233,329)	(2,037,353)
Financing activities:		
Proceeds from convertible senior notes	0	1,050,000
Issuance costs paid for convertible senior notes	0	(24,742)
Proceeds from senior secured notes	0	500,000
Issuance costs paid for senior secured notes	0	(12,792)
Proceeds from secured term loan, net of lender fees	204,693	0
Issuance costs paid for secured term loan, excluding lender fees	(107)	0
Proceeds from other long-term secured debt	11,100	0
Issuance costs paid for other long-term secured debt	(214)	0
Repayments of other long-term secured debt	(121)	0
Proceeds from sale of common stock under public offerings	0	403,970
Issuance costs paid related to sale of common stock under public offerings	0	(4,501)
Proceeds from exercise of stock options	1,332	31,380
Proceeds from sales under employee stock purchase plan	4,473	2,854
Payment of withholding tax on vesting of restricted stock units	(1,105)	0
Net cash provided by financing activities	220,051	1,946,169
Effect of foreign exchange rate changes on cash, cash equivalents, and restricted cash	(5,597)	(2,037)
	2,534	(2,635)
Net increase (decrease) in cash, cash equivalents, and restricted cash		
Cash, cash equivalents, and restricted cash, beginning of period	64,434	60,759
Cash, cash equivalents, and restricted cash, end of period	\$ 66,968	\$ 58,124

The accompanying notes are an integral part of these Consolidated Financial Statements.

MICROSTRATEGY INCORPORATED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

(1) Summary of Significant Accounting Policies

(a) Basis of Presentation

The accompanying Consolidated Financial Statements of MicroStrategy Incorporated (“MicroStrategy” or the “Company”) are unaudited. In the opinion of management, all adjustments necessary for a fair statement of financial position and results of operations have been included. All such adjustments are of a normal recurring nature, unless otherwise disclosed. Interim results are not necessarily indicative of results for a full year.

In the prior year’s Consolidated Statements of Cash Flows, accrued interest related to the Company’s long-term debt has been reclassified from “Accounts payable and accrued expenses” to “Accrued interest” within operating activities to conform to current year presentation.

The balances presented in the Consolidated Statements of Stockholders’ Equity as of January 1, 2021 include the opening balance adjustments due to the adoption of Accounting Standards Update No. 2020-06, *Debt – Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging – Contracts in Entity’s Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity’s Own Equity* (“ASU 2020-06”), as described in the Company’s Annual Report on Form 10-K for the year ended December 31, 2021.

The Consolidated Financial Statements and Notes to Consolidated Financial Statements are presented as required by the United States Securities and Exchange Commission (“SEC”) and do not contain certain information included in the Company’s annual financial statements and notes. These financial statements should be read in conjunction with the Company’s audited financial statements and the notes thereto filed with the SEC in the Company’s Annual Report on Form 10-K for the year ended December 31, 2021. There have been no significant changes in the Company’s accounting policies since December 31, 2021.

The accompanying Consolidated Financial Statements include the accounts of the Company and its subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. The Company is not aware of any subsequent event that would require recognition or disclosure.

(2) Digital Assets

The Company accounts for its digital assets, which are comprised solely of bitcoin, as indefinite-lived intangible assets in accordance with Accounting Standards Codification (“ASC”) 350, *Intangibles—Goodwill and Other*. The Company’s digital assets are initially recorded at cost. Subsequently, they are measured at cost, net of any impairment losses incurred since acquisition. Impairment losses are recognized as “Digital asset impairment losses” in the Company’s Consolidated Statement of Operations in the period in which the impairment occurs.

The following table summarizes the Company’s digital asset holdings (in thousands, except number of bitcoins), as of:

	September 30, 2022	December 31, 2021
Approximate number of bitcoins held	130,000	124,391
Digital assets carrying value	\$ 1,993,032	\$ 2,850,210
Cumulative digital asset impairment losses	\$ 1,989,975	\$ 901,319

The carrying value represents the lowest fair value (based on Level 1 inputs in the fair value hierarchy) of the bitcoins at any time since their acquisition. Therefore, these fair value measurements were made during the period from their acquisition through September 30, 2022 or December 31, 2021, respectively, and not as of September 30, 2022 or December 31, 2021, respectively.

The following table summarizes the Company's digital asset purchases and digital asset impairment losses (in thousands, except number of bitcoins) for the periods indicated:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Approximate number of bitcoins purchased	301	8,957	5,609	43,573
Digital asset purchases	\$ 5,978	\$ 419,865	\$ 231,478	\$ 2,035,471
Digital asset impairment losses	\$ 727	\$ 65,165	\$ 1,088,656	\$ 684,034

From time to time, the Company may be extended short-term credits from Coinbase to purchase bitcoin in advance of using cash funds in the Company's trading account. The trade credits are due and payable in cash within days after they are extended. As of September 30, 2022, the Company had no outstanding trade credits payable. The Company did not sell any of its bitcoins during the three and nine months ended September 30, 2022 and 2021, respectively.

As of September 30, 2022, approximately 14,890 of the bitcoins held by the Company serve as part of the collateral for the Company's 6.125% Senior Secured Notes due 2028 (the "2028 Secured Notes"), as further described in Note 4, Long-term Debt, to the Consolidated Financial Statements and in Note 8, Long-term Debt, to the Consolidated Financial Statements of the Company's Annual Report on Form 10-K for the year ended December 31, 2021. As of September 30, 2022, approximately 30,051 of the bitcoins held by the Company serve as part of the collateral for a \$205.0 million term loan (the "2025 Secured Term Loan") issued to MacroStrategy LLC ("MacroStrategy"), a wholly-owned subsidiary of the Company, by Silvergate Bank ("Silvergate"), as further described in Note 4, Long-term Debt, to the Consolidated Financial Statements.

(3) Contract Balances

The Company invoices its customers in accordance with billing schedules established in each contract. The Company's rights to consideration from customers are presented separately in the Company's Consolidated Balance Sheets depending on whether those rights are conditional or unconditional.

The Company presents unconditional rights to consideration from customers within "Accounts receivable, net" in its Consolidated Balance Sheets. All of the Company's contracts are generally non-cancellable and/or non-refundable, and therefore an unconditional right generally exists when the customer is billed or amounts are billable per the contract.

Accounts receivable (in thousands) consisted of the following, as of:

	September 30, 2022	December 31, 2021
Billed and billable	\$ 113,031	\$ 192,055
Less: allowance for credit losses	(3,105)	(2,775)
Accounts receivable, net	<u>\$ 109,926</u>	<u>\$ 189,280</u>

Changes in the allowance for credit losses were not material for the three and nine months ended September 30, 2022.

Rights to consideration that are subject to a condition other than the passage of time are considered contract assets and presented within "Prepaid expenses and other current assets" in the Consolidated Balance Sheets since the rights to consideration are expected to become unconditional and transfer to accounts receivable within one year. Contract assets generally consist of accrued sales and usage-based royalty revenue. In these arrangements, consideration is not billed or billable until the royalty reporting is received, generally in the subsequent quarter, at which time the contract asset transfers to accounts receivable and a true-up adjustment is recorded to revenue. These true-up adjustments are generally not material. During the three and nine months ended September 30, 2022 and 2021, there were no significant impairments to the Company's contract assets, nor were there any significant changes in the timing of the Company's contract assets being reclassified to accounts receivable. Contract assets included in "Prepaid expenses and other current assets" in the Consolidated Balance Sheets consisted of \$0.7 million and \$1.1 million in accrued sales and usage-based royalty revenue as of September 30, 2022 and December 31, 2021, respectively.

Contract liabilities are amounts received or due from customers in advance of the Company transferring the software or services to the customer. In the case of multi-year service contract arrangements, the Company generally does not invoice more than one year in advance of services and does not record deferred revenue for amounts that have not been invoiced. Revenue is subsequently recognized in the period(s) in which control of the software or services is transferred to the customer. The Company's contract liabilities are

presented as either current or non-current “Deferred revenue and advance payments” in the Consolidated Balance Sheets, depending on whether the software or services are expected to be transferred to the customer within the next year.

The Company’s “Accounts receivable, net” and “Deferred revenue and advance payments” balances in the Consolidated Balance Sheets include unpaid amounts related to contracts under which the Company has an enforceable right to invoice the customer for non-cancellable and/or non-refundable software and services. Changes in accounts receivable and changes in deferred revenue and advance payments are presented net of these unpaid amounts in “Operating activities” in the Consolidated Statements of Cash Flows.

Deferred revenue and advance payments (in thousands) from customers consisted of the following, as of:

	September 30, 2022	December 31, 2021
Current:		
Deferred product licenses revenue	\$ 442	\$ 993
Deferred subscription services revenue	38,272	35,589
Deferred product support revenue	123,203	166,477
Deferred other services revenue	4,017	6,801
Total current deferred revenue and advance payments	<u>\$ 165,934</u>	<u>\$ 209,860</u>
Non-current:		
Deferred product licenses revenue	\$ 70	\$ 68
Deferred subscription services revenue	2,943	1,064
Deferred product support revenue	5,172	6,203
Deferred other services revenue	569	754
Total non-current deferred revenue and advance payments	<u>\$ 8,754</u>	<u>\$ 8,089</u>

During the three and nine months ended September 30, 2022, the Company recognized revenues of \$42.5 million and \$176.3 million, respectively, from amounts included in the total deferred revenue and advance payments balances at the beginning of 2022. During the three and nine months ended September 30, 2021, the Company recognized revenues of \$38.9 million and \$164.9 million, respectively, from amounts included in the total deferred revenue and advance payments balances at the beginning of 2021. For the three and nine months ended September 30, 2022 and 2021, there were no significant changes in the timing of revenue recognition on the Company’s deferred balances.

The Company’s remaining performance obligation represents all future revenue under contract and includes deferred revenue and advance payments and billable non-cancelable amounts that will be invoiced and recognized as revenue in future periods. The remaining performance obligation excludes contracts that are billed in arrears, such as certain time and materials contracts. The portions of multi-year contracts that will be invoiced in the future are not presented on the balance sheet within contract balances and are instead included in the following remaining performance obligation disclosure. As of September 30, 2022, the Company had an aggregate transaction price of \$255.9 million allocated to the remaining performance obligation related to product support, subscription services, product licenses, and other services contracts. The Company expects to recognize \$190.6 million within the next 12 months and the remainder thereafter.

(4) Long-term Debt

The net carrying value of the Company’s long-term debt (in thousands) consisted of the following, as of:

	September 30, 2022	December 31, 2021
2025 Convertible Notes	\$ 640,133	\$ 637,882
2027 Convertible Notes	1,032,272	1,029,263
2028 Secured Notes	489,152	488,006
2025 Secured Term Loan	204,654	0
Other long-term secured debt	10,724	0
Total	<u>\$ 2,376,935</u>	<u>\$ 2,155,151</u>

Convertible Senior Notes

In December 2020, the Company issued \$650.0 million aggregate principal amount of 0.750% Convertible Senior Notes due 2025 (the “2025 Convertible Notes”) in a private offering. The 2025 Convertible Notes are senior unsecured obligations of the Company and bear interest at a fixed rate of 0.750% per annum, payable semiannually in arrears on June 15 and December 15 of each year, beginning on June 15, 2021. Holders of the 2025 Convertible Notes may receive additional interest under specified circumstances as outlined in the indenture relating to the issuance of the 2025 Convertible Notes. The 2025 Convertible Notes will mature on December 15, 2025, unless earlier converted, redeemed, or repurchased in accordance with their terms. The total net proceeds from the 2025 Convertible Notes offering, after deducting initial purchaser discounts and issuance costs, were approximately \$634.7 million.

In February 2021, the Company issued \$1.050 billion aggregate principal amount of 2027 Convertible Notes in a private offering. The 2027 Convertible Notes are senior unsecured obligations of the Company and do not bear regular interest. However, holders of the 2027 Convertible Notes may receive special interest under specified circumstances as outlined in the indenture relating to the issuance of the 2027 Convertible Notes. Any special interest is payable semiannually in arrears on February 15 and August 15 of each year, beginning on August 15, 2021. The 2027 Convertible Notes will mature on February 15, 2027, unless earlier converted, redeemed, or repurchased in accordance with their terms. The total net proceeds from the 2027 Convertible Notes offering, after deducting initial purchaser discounts and issuance costs, were approximately \$1.026 billion.

The terms of the 2025 Convertible Notes and 2027 Convertible Notes (collectively, the “Convertible Notes”) are discussed more fully in Note 8, Long-term Debt, to the Consolidated Financial Statements of the Company’s Annual Report on Form 10-K for the year ended December 31, 2021.

There have been no adjustments to the initial conversion rates for each of the Convertible Notes as of September 30, 2022. As of September 30, 2022, the maximum number of shares into which the Convertible Notes could be potentially converted if the conversion features are triggered are 1,633,190 and 733,005 shares for the 2025 Convertible Notes and 2027 Convertible Notes, respectively.

During the nine months ended September 30, 2022, the 2025 Convertible Notes were convertible at the option of the holders of the 2025 Convertible Notes during the first quarter of 2022 only. During the nine months ended September 30, 2021, the 2025 Convertible Notes were convertible during the second quarter of 2021 only. During the nine months ended September 30, 2022 and 2021, the 2027 Convertible Notes were not convertible at any time. No conversions of the Convertible Notes occurred during the nine months ended September 30, 2022 or 2021. The Convertible Notes may be convertible in future periods if one or more of the conversion conditions is satisfied during future measurement periods.

As of September 30, 2022 and December 31, 2021, the net carrying value of the Convertible Notes was classified as a long-term liability in the “Long-term debt, net” line item in the Company’s Consolidated Balance Sheets.

The following is a summary of the Company’s convertible debt instruments as of September 30, 2022 (in thousands):

	Outstanding Principal Amount	Unamortized Issuance Costs	Net Carrying Value	Fair Value	
				Amount	Leveling
2025 Convertible Notes	\$ 650,000	\$ (9,867)	\$ 640,133	\$ 485,141	Level 2
2027 Convertible Notes	1,050,000	(17,728)	1,032,272	480,648	Level 2
Total	<u>\$ 1,700,000</u>	<u>\$ (27,595)</u>	<u>\$ 1,672,405</u>	<u>\$ 965,789</u>	

The following is a summary of the Company’s convertible debt instruments as of December 31, 2021 (in thousands):

	Outstanding Principal Amount	Unamortized Issuance Costs	Net Carrying Value	Fair Value	
				Amount	Leveling
2025 Convertible Notes	\$ 650,000	\$ (12,118)	\$ 637,882	\$ 1,056,679	Level 2
2027 Convertible Notes	1,050,000	(20,737)	1,029,263	774,375	Level 2
Total	<u>\$ 1,700,000</u>	<u>\$ (32,855)</u>	<u>\$ 1,667,145</u>	<u>\$ 1,831,054</u>	

The fair value of the Convertible Notes is determined using observable market data other than quoted prices, specifically the last traded price at the end of the reporting period of identical instruments in the over-the-counter market (Level 2).

For the three months ended September 30, 2022 and 2021, interest expense related to the Convertible Notes was as follows (in thousands):

	Three Months Ended September 30, 2022			Three Months Ended September 30, 2021		
	Contractual Interest Expense	Amortization of Issuance Costs	Total	Contractual Interest Expense	Amortization of Issuance Costs	Total
2025 Convertible Notes	\$ 1,218	\$ 753	\$ 1,971	\$ 1,218	\$ 744	\$ 1,962
2027 Convertible Notes	0	1,004	1,004	0	1,000	1,000
Total	\$ 1,218	\$ 1,757	\$ 2,975	\$ 1,218	\$ 1,744	\$ 2,962

For the nine months ended September 30, 2022 and 2021, interest expense related to the Convertible Notes was as follows (in thousands):

	Nine Months Ended September 30, 2022			Nine Months Ended September 30, 2021		
	Contractual Interest Expense	Amortization of Issuance Costs	Total	Contractual Interest Expense	Amortization of Issuance Costs	Total
2025 Convertible Notes	\$ 3,656	\$ 2,251	\$ 5,907	\$ 3,656	\$ 2,224	\$ 5,880
2027 Convertible Notes	0	3,009	3,009	0	2,432	2,432
Total	\$ 3,656	\$ 5,260	\$ 8,916	\$ 3,656	\$ 4,656	\$ 8,312

The Company did not pay any interest expense related to the 2025 Convertible Notes during the three months ended September 30, 2022 and 2021. For the nine months ended September 30, 2022 and 2021, the Company paid \$2.4 million and \$2.5 million, respectively, in interest related to the 2025 Convertible Notes. The Company has not paid any special interest expense related to the 2027 Convertible Notes to date.

Senior Secured Notes

On June 14, 2021, the Company issued \$500.0 million aggregate principal amount of 2028 Secured Notes in a private offering. The 2028 Secured Notes bear interest at a fixed rate of 6.125% per annum, payable semiannually in arrears on June 15 and December 15 of each year, beginning on December 15, 2021. The 2028 Secured Notes have a stated maturity date of June 15, 2028, unless earlier redeemed or repurchased in accordance with their terms and subject to a springing maturity date of September 15, 2025 or November 16, 2026. The total net proceeds from the 2028 Secured Notes, after deducting initial purchaser discounts and issuance costs, were approximately \$487.2 million.

The 2028 Secured Notes include a springing maturity feature that will cause the stated maturity date to spring ahead to: (1) September 15, 2025 (the “First Springing Maturity Date”), unless on the First Springing Maturity Date (i) the Company has liquidity (as defined in the 2028 Secured Notes Indenture) in excess of 130% of the amount required to pay in full in cash the then outstanding aggregate principal amount of, and accrued interest on, the 2025 Convertible Notes or (ii) less than \$100,000,000 of the aggregate principal amount of the 2025 Convertible Notes remains outstanding, (2) November 16, 2026 (the “Second Springing Maturity Date”), unless on the Second Springing Maturity Date (i) the Company has liquidity in excess of 130% of the amount required to pay in full in cash the then outstanding aggregate principal amount of, and accrued interest on, the 2027 Convertible Notes or (ii) less than \$100,000,000 of the aggregate principal amount of the 2027 Convertible Notes remains outstanding, or (3) the date (such date, an “FCCR Springing Maturity Date”) that is 91 days prior to the maturity date of any FCCR Convertible Indebtedness (as defined in the indenture for the 2028 Secured Notes), unless on the FCCR Springing Maturity Date (i) the Company has liquidity in excess of 130% of the amount required to pay in full in cash the then outstanding aggregate principal amount of and accrued interest on such FCCR Convertible Indebtedness or (ii) less than \$100,000,000 of the aggregate principal amount of such FCCR Convertible Indebtedness remains outstanding.

The terms of the 2028 Secured Notes are discussed more fully in Note 8, Long-term Debt, to the Consolidated Financial Statements of the Company’s Annual Report on Form 10-K for the year ended December 31, 2021.

The 2028 Secured Notes are governed by an indenture containing certain covenants with which the Company must comply, including covenants with respect to limitations on (i) additional indebtedness, (ii) liens, (iii) certain payments and investments, (iv) the ability to merge or consolidate with another person, or sell or otherwise dispose of substantially all the Company’s assets, and (v) certain transactions with affiliates. The Company was in compliance with its debt covenants as of September 30, 2022.

As of September 30, 2022 and December 31, 2021, the net carrying value of the 2028 Secured Notes was classified as a long-term liability in the “Long-term debt, net” line item in the Company’s Consolidated Balance Sheets.

The following is a summary of the 2028 Secured Notes as of September 30, 2022 (in thousands):

	Outstanding	Unamortized	Net Carrying	Fair Value	
	Principal Amount	Issuance Costs	Value	Amount	Leveling
2028 Secured Notes	\$ 500,000	\$ (10,848)	\$ 489,152	\$ 413,295	Level 2

The following is a summary of the 2028 Secured Notes as of December 31, 2021 (in thousands):

	Outstanding	Unamortized	Net Carrying	Fair Value	
	Principal Amount	Issuance Costs	Value	Amount	Leveling
2028 Secured Notes	\$ 500,000	\$ (11,994)	\$ 488,006	\$ 502,530	Level 2

The fair value of the 2028 Secured Notes is determined using observable market data other than quoted prices, specifically the last traded price at the end of the reporting period of identical instruments in the over-the-counter market (Level 2).

For the three months ended September 30, 2022 and 2021, interest expense related to the 2028 Secured Notes was as follows (in thousands):

	Three Months Ended September 30, 2022			Three Months Ended September 30, 2021		
	Contractual Interest Expense	Amortization of Issuance Costs	Total	Contractual Interest Expense	Amortization of Issuance Costs	Total
2028 Secured Notes	\$ 7,657	\$ 388	\$ 8,045	\$ 7,656	\$ 363	\$ 8,019

For the nine months ended September 30, 2022 and 2021, interest expense related to the 2028 Secured Notes was as follows (in thousands):

	Nine Months Ended September 30, 2022			Nine Months Ended September 30, 2021		
	Contractual Interest Expense	Amortization of Issuance Costs	Total	Contractual Interest Expense	Amortization of Issuance Costs	Total
2028 Secured Notes	\$ 22,969	\$ 1,146	\$ 24,115	\$ 9,017	\$ 428	\$ 9,445

The Company did not pay any interest expense related to the 2028 Secured Notes during the three months ended September 30, 2022 and 2021. For the nine months ended September 30, 2022, the Company paid \$15.3 million in interest expense related to the 2028 Secured Notes. The Company did not pay any interest expense related to the 2028 Secured Notes during the nine months ended September 30, 2021.

Secured Term Loan

On March 23, 2022, MacroStrategy LLC, a wholly-owned subsidiary of the Company, entered into a Credit and Security Agreement (the “Credit and Security Agreement”) with Silvergate pursuant to which Silvergate issued the \$205.0 million 2025 Secured Term Loan to MacroStrategy. The 2025 Secured Term Loan is a senior secured obligation of MacroStrategy and bears interest at a floating rate equal to the Secured Overnight Financing Rate 30 Day Average as published by the Federal Reserve Bank of New York’s website plus 3.70%, with a floor of 3.75%, and is payable monthly in arrears beginning May 2022. The 2025 Secured Term Loan will mature on March 23, 2025, unless earlier prepaid or repaid in accordance with the terms of the Credit and Security Agreement. The total net proceeds from the 2025 Secured Term Loan, after deducting lender fees and third-party costs, were approximately \$204.6 million.

Under the terms of the Credit and Security Agreement, the 2025 Secured Term Loan proceeds may be used (i) by MacroStrategy to purchase bitcoins, (ii) by MacroStrategy to pay fees, interest, and expenses related to the 2025 Secured Term Loan transaction, or (iii) for MacroStrategy’s or the Company’s general corporate purposes. The 2025 Secured Term Loan may be prepaid at any time, subject to a prepayment premium of 0.50% or 0.25% of the principal balance being prepaid, if such prepayment is made during the first year or second year, respectively, of the 2025 Secured Term Loan. There is no premium or penalty for prepayments made after March 23, 2024.

In accordance with the terms of the Credit and Security Agreement, the 2025 Secured Term Loan was collateralized at closing by bitcoin with a value of approximately \$820.0 million placed in a collateral account (the “Bitcoin Collateral Account”) with a custodian mutually authorized by Silvergate and MacroStrategy. While the 2025 Secured Term Loan is outstanding, MacroStrategy is required to maintain a loan to collateral value ratio (“LTV Ratio”) of less than 50% (the “Maximum LTV Ratio”). As a result, MacroStrategy is required to maintain more than \$410.0 million of bitcoin in the Bitcoin Collateral Account, assuming the full \$205.0 million of 2025 Secured Term Loan principal remains outstanding. If the price of bitcoin drops such that the LTV Ratio equals or exceeds the Maximum LTV Ratio, MacroStrategy will be required to either deposit additional bitcoin in the Bitcoin Collateral Account or prepay a portion of the 2025 Secured Term Loan such that the LTV Ratio is reduced to 25% or less (or 35% or less, provided that in such case the interest rate on the 2025 Secured Term Loan will be increased by 25 basis points until such time as the LTV Ratio is reduced to 25% or less). In June 2022, as the price of bitcoin declined causing the LTV Ratio to increase, MacroStrategy deposited 10,585 additional bitcoins into the Bitcoin Collateral Account to help ensure that the LTV Ratio remained below the Maximum LTV Ratio. If at any time the LTV Ratio is less than 25% as a result of excess collateral in the Bitcoin Collateral Account, MacroStrategy is entitled to a return of such excess collateral so long as the LTV Ratio would not exceed 25% after giving effect to such return.

Separate and apart from the requirements associated with the LTV Ratio, MacroStrategy established a \$5.0 million cash reserve account (the “Reserve Account”) with Silvergate to serve as additional collateral for the 2025 Secured Term Loan. MacroStrategy is required to maintain at least \$5.0 million in the Reserve Account until the last six months of the 2025 Secured Term Loan term, at which time funds in the Reserve Account may be used to make interest payments on the 2025 Secured Term Loan at MacroStrategy’s request, with the amount required to be held in the Reserve Account correspondingly reduced to the extent such payments are made. The collateral for the 2025 Secured Term Loan does not extend beyond assets in the Bitcoin Collateral Account and the Reserve Account. As of September 30, 2022, the Reserve Account is presented within “Restricted cash” in the Company’s Consolidated Balance Sheet and the Bitcoin Collateral Account is presented within “Digital assets” in the Company’s Consolidated Balance Sheet as further described in Note 2, Digital Assets, to the Consolidated Financial Statements.

The 2025 Secured Term Loan is not guaranteed by any party. The Credit and Security Agreement contains customary affirmative and negative covenants for credit facilities of this type, including, among others, limitations on MacroStrategy with respect to the sale of collateral and the incurrence of liens on the collateral. The Credit and Security Agreement, however, does not restrict MacroStrategy from incurring additional debt, incurring additional liens on assets not serving as collateral for the 2025 Secured Term Loan, or selling assets not serving as collateral for the 2025 Secured Term Loan. There are no restrictions in the Credit and Security Agreement on utilizing bitcoin that is not in the Bitcoin Collateral Account. The Credit and Security Agreement has customary change-of-control provisions, providing Silvergate with a right to accelerate the 2025 Secured Term Loan in full in connection with a change of control of the Company, including the sale of all or substantially all of the Company’s or MacroStrategy’s assets. The Credit and Security Agreement also contains customary events of default with customary grace periods, as applicable. Upon an event of default, Silvergate has the right to accelerate the 2025 Secured Term Loan in full, increase the interest accrual rate by an additional 2%, and liquidate the collateral to pay the 2025 Secured Term Loan.

MacroStrategy was in compliance with its debt covenants as of September 30, 2022.

The Company incurred approximately \$0.4 million in lender fees and third-party costs (“issuance costs”) associated with the 2025 Secured Term Loan. The Company accounts for these issuance costs as a reduction to the principal amount of the 2025 Secured Term Loan and amortizes the issuance costs to interest expense over the contractual term of the 2025 Secured Term Loan at an effective interest rate of 3.87%. As of September 30, 2022, the net carrying value of the 2025 Secured Term Loan was classified as a long-term liability in the “Long-term debt, net” line item in the Company’s Consolidated Balance Sheets.

The following is a summary of the 2025 Secured Term Loan as of September 30, 2022 (in thousands):

	Outstanding Principal Amount	Unamortized Issuance Costs	Net Carrying Value	Fair Value	
				Amount	Leveling
2025 Secured Term Loan	\$ 205,000	\$ (346)	\$ 204,654	\$ 205,000	Level 3

The principal or par value of the 2025 Secured Term Loan approximates its fair value as of September 30, 2022. The fair value of the 2025 Secured Term Loan is determined using unobservable inputs provided by the lender, specifically hypothetical lending terms attainable as of the end of the reporting period, which are comparable to the loan’s original terms (Level 3).

For the three and nine months ended September 30, 2022, interest expense related to the 2025 Secured Term Loan was as follows (in thousands):

	Three Months Ended September 30, 2022			Nine Months Ended September 30, 2022		
	Contractual Interest Expense	Amortization of Issuance Costs	Total	Contractual Interest Expense	Amortization of Issuance Costs	Total
2025 Secured Term Loan	\$ 2,931	\$ 33	\$ 2,964	\$ 5,314	\$ 69	\$ 5,383

The Company paid \$2.7 million and \$4.3 million in interest expense related to the 2025 Secured Term Loan during the three and nine months ended September 30, 2022, respectively.

Other long-term secured debt

In June 2022, the Company, through a wholly-owned subsidiary, entered into a secured term loan agreement in the amount of \$11.1 million, bearing interest at an annual rate of 5.2%, and maturing in June 2027. The loan is secured by certain non-bitcoin assets of the Company that are not otherwise serving as collateral for any of the Company's other indebtedness. As of September 30, 2022, the loan had a net carrying value of \$10.7 million and an outstanding principal balance of \$11.0 million, after monthly payments made under the terms of the agreement.

Maturities

The following table shows the maturities of the Company's debt instruments as of September 30, 2022 (in thousands). The principal payments related to the 2028 Secured Notes are included in the table below based on the First Springing Maturity Date of September 15, 2025, as if the springing maturity feature discussed above were triggered. The Company's expectation is that the springing maturity feature of the 2028 Secured Notes will not be triggered.

Payments due by period ended September 30,	2025 Convertible Notes	2027 Convertible Notes	2028 Secured Notes	2025 Secured Term Loan	Other long-term secured debt	Total
2023	\$ 0	\$ 0	\$ 0	\$ 0	\$ 506	\$ 506
2024	0	0	0	0	532	532
2025	0	0	500,000	205,000	562	705,562
2026	650,000	0	0	0	592	650,592
2027	0	1,050,000	0	0	8,787	1,058,787
Thereafter	0	0	0	0	0	0
Total	\$ 650,000	\$ 1,050,000	\$ 500,000	\$ 205,000	\$ 10,979	\$ 2,415,979

(5) Commitments and Contingencies

(a) Commitments

From time to time, the Company enters into certain types of contracts that require it to indemnify parties against third-party claims. These contracts primarily relate to agreements under which the Company assumes indemnity obligations for intellectual property infringement, as well as other obligations from time to time depending on arrangements negotiated with customers and other third parties. The conditions of these obligations vary. Thus, the overall maximum amount of the Company's indemnification obligations cannot be reasonably estimated. Historically, the Company has not been obligated to make significant payments for these obligations and does not currently expect to incur any material obligations in the future. Accordingly, the Company has not recorded an indemnification liability on its Balance Sheets as of September 30, 2022 or December 31, 2021.

(b) Contingencies

Following an internal review initiated in 2018, the Company believes that its Brazilian subsidiary failed or likely failed to comply with local procurement regulations in conducting business with certain Brazilian government entities.

On February 6, 2020, the Company learned that a Brazilian court authorized the Brazilian Federal Police to use certain investigative measures in its investigation into alleged corruption and procurement fraud involving certain government officials, pertaining to a particular transaction. The transaction at issue is part of the basis of the previously reported failure or likely failure of the Brazilian subsidiary to comply with local procurement regulations. The Company is not aware of any allegations that any former employee or the Company made any payments to Brazilian government officials. The Brazilian Federal Police expanded the investigation to include other possible cases of procurement fraud involving Brazilian government entities. Criminal penalties may be imposed against individuals; however, neither employees of the Company's Brazilian subsidiary nor the subsidiary itself have been targets of the Federal Police investigation.

The Company has also learned that Brazil's Federal Comptroller General filed an administrative action against the Company's Brazilian subsidiary with respect to the alleged procurement violations. These matters remain the subject of investigation by Brazilian authorities. The Company is taking measures to attempt to resolve these matters.

While the Company believes that it is probable that the resolution of these Brazilian matters will result in a loss, the amount or range of loss is not reasonably estimable at this time. Given the stage of these matters, the outcome may result in a material impact on the Company's earnings and financial results for the period in which any such liability is accrued. However, the Company believes that the outcome of these matters will not have a material effect on the Company's financial position.

On November 4, 2020, a complaint was filed against the Company in the U.S. District Court for the Eastern District of Virginia by a patent assertion entity called Daedalus Blue, LLC ("Daedalus"). In its complaint, Daedalus alleges that the Company has infringed U.S. Patent Nos. 8,341,172 (the "'172 Patent") and 9,032,076 (the "'076 Patent") based on specific functionality in the MicroStrategy platform. The '172 Patent relates to a method for providing aggregate data access in response to a query, whereas the '076 Patent relates to a role-based access control system.

On March 1, 2021, Daedalus provided its formal infringement contentions which included additional accused functionality as part of its infringement allegations from the complaint, materially expanding the scope of its case. The Company has filed a motion to dismiss the complaint with prejudice, asking the court to rule that the asserted claims are invalid as being directed to patent ineligible matter. This matter is in the latter stage of factual discovery. The court conducted a claim construction hearing on July 15, 2021. The court appointed a special master on October 28, 2021 and directed the special master to submit a Report and Recommendation as to the issue of claim construction and the pending motion to dismiss by February 1, 2022. On January 21, 2022, the special master issued two separate Reports and Recommendations. The first Report and Recommendation recommended constructions of certain patent claim terms and the second Report and Recommendation recommended, without reaching the merits, dismissing the Company's motion to dismiss without prejudice to re-filing after discovery ends. The parties filed their respective objections to the special master's Reports and Recommendations on February 4, 2022, and their oppositions to the other party's objections on February 18, 2022. On March 9, 2022, the court issued an order overruling all parties' objections and adopting the special master's Reports and Recommendations in full. As per court order, the parties submitted a joint proposed schedule, which the court adopted on April 7, 2022, providing new deadlines for the close of fact discovery, expert reports, expert discovery, and dispositive motions. Fact discovery reopened on April 18, 2022 and closed on June 1, 2022. In July 2022, the case proceeded to expert discovery and the parties exchanged their opening expert reports on issues for which they bear the burden of proof on July 1, 2022, their rebuttal reports on July 29, 2022, and their reply reports on August 12, 2022. The parties engaged in expert depositions the weeks of August 22 and August 29, 2022 and on September 21, 2022, the parties filed their respective motions for summary judgment. The outcome of this matter is not presently determinable.

On August 31, 2022, the District of Columbia (the "District"), through its Office of the Attorney General, filed a civil complaint in the Superior Court of the District of Columbia naming as defendants (i) Michael J. Saylor, the Chairman of the Company's Board of Directors and the Company's Executive Chairman, in his personal capacity, and (ii) the Company. The District is seeking, among other relief, monetary damages under the District's False Claims Act for the alleged failure of Mr. Saylor to pay personal income taxes to the District over a number of years together with penalties, interest, and treble damages. The complaint alleges that the amount of personal income taxes purportedly involved is more than \$25 million. The complaint also alleges that the Company has violated the District's False Claims Act by conspiring to assist Mr. Saylor's alleged failure to pay personal income taxes. The Company believes that the District's claims against the Company have no merit and is defending itself aggressively against these allegations. On October 26, 2022, the Company filed a motion to dismiss the District's complaint. The Company filed a motion to stay discovery on September 28, 2022, and the court granted this motion on October 28, 2022. The outcome of this matter is not presently determinable.

The Company is also involved in various legal proceedings arising in the normal course of business. Although the outcomes of these legal proceedings are inherently difficult to predict, management does not expect the resolution of these legal proceedings to have a material adverse effect on the Company's financial position, results of operations, or cash flows.

The Company has contingent liabilities that, in management's judgment, are not probable of assertion. If such unasserted contingent liabilities were to be asserted, or become probable of assertion, the Company may be required to record significant expenses and liabilities in the period in which these liabilities are asserted or become probable of assertion.

(6) Treasury Stock

The Board of Directors has authorized the Company's repurchase of up to an aggregate of \$800.0 million of its class A common stock from time to time on the open market through April 29, 2023 (the "Share Repurchase Program"), although the program may be suspended or discontinued by the Company at any time. The timing and amount of any shares repurchased will be determined by the Company's management based on its evaluation of market conditions and other factors. The Share Repurchase Program may be funded using the Company's working capital, as well as proceeds from any other funding arrangements that the Company may enter into in the future.

During the three and nine months ended September 30, 2022 and 2021, the Company did not repurchase any shares of its class A common stock pursuant to the Share Repurchase Program. As of September 30, 2022, the Company had repurchased an aggregate of 5,674,226 shares of its class A common stock at an average price per share of \$104.13 and an aggregate cost of \$590.9 million pursuant to the Share Repurchase Program. As of September 30, 2022, \$209.1 million of the Company's class A common stock remained available for repurchase pursuant to the Share Repurchase Program. The average price per share and aggregate cost amounts disclosed above include broker commissions.

(7) Income Taxes

The Company computes its year-to-date provision for (benefit from) income taxes by applying the estimated annual effective tax rate to year-to-date pretax income or loss and adjusts the provision for (benefit from) income taxes for discrete tax items recorded in the period. The estimated effective tax rate is subject to fluctuation based on the level and mix of earnings and losses by tax jurisdiction, foreign tax rate differentials, and the relative impact of permanent book to tax differences. Each quarter, a cumulative adjustment is recorded for any fluctuations in the estimated annual effective tax rate as compared to the prior quarter. As a result of these factors, and due to potential changes in the Company's period-to-period results, fluctuations in the Company's effective tax rate and respective tax provisions or benefits may occur. For the nine months ended September 30, 2022, the Company recorded a provision for income taxes of \$112.0 million on a pretax loss of \$1.108 billion, which resulted in an effective tax rate of (10.1)%. For the nine months ended September 30, 2021, the Company recorded a benefit from income taxes of \$217.4 million on a pretax loss of \$662.9 million, which resulted in an effective tax rate of 32.8%. The change in the effective tax rate, as compared to the same period in the prior year, is primarily due to the establishment of a valuation allowance on the Company's deferred tax asset related to the impairment on its bitcoin holdings, attributable to the decrease in the market value of bitcoin as of September 30, 2022.

As of September 30, 2022, the Company had a valuation allowance of \$411.8 million primarily related to the Company's deferred tax asset related to the impairment on its bitcoin holdings that, in the Company's present estimation, more likely than not will not be realized. If the market value of bitcoin continues to decline or the Company is unable to regain profitability in future periods, the Company may be required to increase further the valuation allowance against its deferred tax assets, which could result in a charge that would materially adversely affect net income (loss) in the period in which the charge is incurred. To the extent the market value of bitcoin rises, the Company may decrease the valuation allowance against its deferred tax asset. The Company will continue to regularly assess the realizability of deferred tax assets.

The Company records liabilities related to its uncertain tax positions. As of September 30, 2022, the Company had gross unrecognized tax benefits of \$6.3 million, which was recorded in "Other long-term liabilities" in the Company's Consolidated Balance Sheet. As of December 31, 2021, the Company had gross unrecognized tax benefits of \$6.2 million, of which \$2.1 million was recorded in "Other long-term liabilities" and \$4.1 million was recorded in "Deferred tax assets, net" in the Company's Consolidated Balance Sheet.

(8) Share-based Compensation

2013 Stock Incentive Plan

The Company's 2013 Stock Incentive Plan (as amended, the "2013 Equity Plan") authorizes the issuance of various types of share-based awards to the Company's employees, officers, directors, and other eligible participants. As of September 30, 2022, a total of 2,750,000 shares of the Company's class A common stock were authorized for issuance under the 2013 Equity Plan. As of September 30, 2022, there were 121,221 shares of class A common stock reserved and available for future issuance under the 2013 Equity Plan.

Stock option awards

As of September 30, 2022, there were options to purchase 1,539,279 shares of class A common stock outstanding under the 2013 Equity Plan.

The following table summarizes the Company's stock option activity (in thousands, except per share data and years) for the three months ended September 30, 2022:

	Stock Options Outstanding			
	Shares	Weighted Average Exercise Price Per Share	Aggregate Intrinsic Value	Weighted Average Remaining Contractual Term (Years)
Balance as of July 1, 2022	1,489	\$ 294.42		
Granted	60	\$ 231.25		
Exercised	(4)	\$ 141.84	\$ 491	
Forfeited/Expired	(6)	\$ 381.84		
Balance as of September 30, 2022	1,539	\$ 292.07		
Exercisable as of September 30, 2022	727	\$ 183.43	\$ 53,146	3.6
Expected to vest as of September 30, 2022	812	\$ 389.31	\$ 13,107	8.7
Total	1,539	\$ 292.07	\$ 66,253	6.3

Stock options outstanding as of September 30, 2022 are comprised of the following range of exercise prices per share (in thousands, except per share data and years):

Stock Options Outstanding at September 30, 2022			
Range of Exercise Prices per Share	Shares	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Term (Years)
\$121.43 - \$200.00	879	\$ 136.87	4.2
\$200.01 - \$300.00	80	\$ 239.61	9.9
\$400.01 - \$500.00	322	\$ 408.66	9.3
\$600.01 - \$691.23	258	\$ 691.23	8.4
Total	1,539	\$ 292.07	6.3

An aggregate of 15,625 stock options with an aggregate grant date fair value of \$0.7 million vested during the three months ended September 30, 2022. The weighted average grant date fair value of stock option awards using the Black-Scholes valuation model was \$153.74 and \$334.40 for each share subject to a stock option granted during the three months ended September 30, 2022 and 2021, respectively, based on the following assumptions:

	Three months ended September 30,	
	2022	2021
Expected term of options in years	6.3	6.3
Expected volatility	70.9%	57.6%
Risk-free interest rate	3.5%	1.0%
Expected dividend yield	0.0%	0.0%

For the three and nine months ended September 30, 2022, the Company recognized approximately \$12.7 million and \$35.4 million, respectively, in share-based compensation expense from stock options granted under the 2013 Equity Plan. For the three and nine months ended September 30, 2021, the Company recognized approximately \$8.9 million and \$23.0 million, respectively, in share-based compensation expense from stock options granted under the 2013 Equity Plan. As of September 30, 2022, there was approximately \$141.4 million of total unrecognized share-based compensation expense related to unvested stock options, which the Company expects to recognize over a weighted average vesting period of approximately 2.9 years.

Share-settled restricted stock units

As of September 30, 2022, there were 129,969 share-settled restricted stock units outstanding under the 2013 Equity Plan. The following table summarizes the Company's share-settled restricted stock unit activity (in thousands) for the periods indicated:

	Share-Settled Restricted Stock Units Outstanding	
	Units	Aggregate Intrinsic Value
Balance as of July 1, 2022	132	
Granted	7	
Vested	(6)	\$ 1,907
Forfeited	(3)	
Balance as of September 30, 2022	130	
Expected to vest as of September 30, 2022	130	\$ 27,587

During the three months ended September 30, 2022, 5,975 share-settled restricted stock units having an aggregate grant date fair value of \$4.5 million vested, and 2,012 shares were withheld to satisfy tax obligations, resulting in 3,963 issued shares. The weighted average grant date fair value of share-settled restricted stock units granted during the three months ended September 30, 2022 and 2021 was \$249.20 and \$747.77, respectively, based on the fair value of the Company's class A common stock. For the three and nine months ended September 30, 2022, the Company recognized approximately \$3.6 million and \$10.0 million, respectively, in share-based compensation expense from share-settled restricted stock units granted under the 2013 Equity Plan. For the three and nine months ended September 30, 2021, the Company recognized approximately \$2.4 million and \$5.0 million, respectively, in share-based compensation expense from share-settled restricted stock units granted under the 2013 Equity Plan. As of September 30, 2022, there was approximately \$41.7 million of total unrecognized share-based compensation expense related to unvested share-settled restricted stock units, which the Company expects to recognize over a weighted average vesting period of approximately 2.9 years.

Other stock-based awards and cash-settled restricted stock units

From time to time the Company has granted "other stock-based awards" and "cash-settled restricted stock units" under the 2013 Equity Plan. Other stock-based awards are similar to stock options, and cash-settled restricted stock units are similar to the Company's share-settled restricted stock units, except in each case these awards are settled in cash only and not in shares of the Company's class A common stock. Due to their required cash settlement feature, these awards are classified as liabilities in the Company's Consolidated Balance Sheets and the fair value of the awards is remeasured each quarterly reporting period. For the three and nine months ended September 30, 2022, the Company recognized approximately \$0.2 million in share-based compensation expense and a reduction of approximately \$0.4 million in share-based compensation expense, respectively, from other stock-based awards and cash-settled restricted stock units. For the three and nine months ended September 30, 2021, the Company recognized \$0.3 million and \$1.2 million, respectively, in share-based compensation expense from other stock-based awards and cash-settled restricted stock units. As of September 30, 2022, there was approximately \$0.5 million of total unrecognized share-based compensation expense related to other stock-based awards and cash-settled restricted stock units, which the Company expects to recognize over a weighted average vesting period of approximately 2.4 years, subject to additional fair value adjustments through the earlier of settlement or expiration.

2021 ESPP

The Company also maintains the 2021 Employee Stock Purchase Plan (the "2021 ESPP"). The purpose of the 2021 ESPP is to provide eligible employees of the Company and certain of its subsidiaries with opportunities to purchase shares of the Company's class A common stock, commencing at such time and on such dates as the Board of Directors of the Company shall determine. The first offering period under the 2021 ESPP commenced on February 16, 2021 and ended on August 15, 2021. After this first offering period, the Board of Directors of the Company determined to provide subsequent 6-month offering periods commencing on each March 1 and September 1 for the remaining term of the 2021 ESPP. An aggregate of 100,000 shares of the Company's class A common stock has been authorized for issuance under the 2021 ESPP. During the three months ended September 30, 2022, 8,475 shares of class A common stock were issued in connection with the 2021 ESPP. As of September 30, 2022, 79,463 shares of the Company's class A common stock remained available for issuance under the 2021 ESPP.

For the three and nine months ended September 30, 2022, the Company recognized approximately \$0.5 million and \$1.6 million, respectively, in share-based compensation expense related to the 2021 ESPP. For the three and nine months ended September 30, 2021, the Company recognized approximately \$0.6 million and \$1.8 million, respectively, in share-based compensation expense related to the 2021 ESPP. As of September 30, 2022, there was approximately \$ 1.3 million of total unrecognized share-based compensation expense related to the 2021 ESPP, which the Company expects to recognize over a period of approximately 0.4 years.

Tax Benefits Related to Equity Plans

For the three and nine months ended September 30, 2022 and 2021, tax benefit related to the Company's equity plans was as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Tax (benefit) expense related to:				
Share-based compensation expense	\$ (2,906)	\$ (2,212)	\$ (9,146)	\$ (5,489)
Exercises of stock options and vesting of share-settled restricted stock units	680	(3,687)	790	(25,964)
Total tax benefit related to the Company's equity plans	\$ (2,226)	\$ (5,899)	\$ (8,356)	\$ (31,453)

(9) Basic and Diluted Loss per Share

The Company has two classes of common stock: class A common stock and class B common stock. Holders of class A common stock generally have the same rights, including rights to dividends, as holders of class B common stock, except that holders of class A common stock have one vote per share while holders of class B common stock have 10 votes per share. Each share of class B common stock is convertible at any time, at the option of the holder, into one share of class A common stock. As such, basic and fully diluted earnings per share for class A common stock and for class B common stock are the same. The Company has never declared or paid any cash dividends on either class A or class B common stock. As of September 30, 2022 and December 31, 2021, there were no shares of preferred stock issued or outstanding.

Potential common shares are included in the diluted earnings per share calculation when dilutive. Potential common shares consisting of class A common stock issuable upon the exercise of outstanding stock options, the vesting of restricted stock units, and in connection with the 2021 ESPP are computed using the treasury stock method. Potential common shares consisting of class A common stock issuable upon conversion of the Convertible Notes are computed using the if-converted method. In computing diluted earnings per share, the Company first calculates the earnings per incremental share ("EPIS") for each class of potential common shares and ranks the classes from the most dilutive (i.e., lowest EPIS) to the least dilutive (i.e., highest EPIS). Basic earnings per share is then adjusted for the effect of each class of shares, in sequence and cumulatively, until a particular class no longer produces further dilution.

For the three and nine months ended September 30, 2022 and 2021, the following weighted average shares of potential class A common stock were excluded from the diluted loss per share calculation because their impact would have been anti-dilutive (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Stock Options	1,497	1,252	1,428	1,246
Restricted Stock Units	130	103	118	91
Employee Stock Purchase Plan	5	2	2	1
2025 Convertible Notes	1,633	1,633	1,633	1,633
2027 Convertible Notes	733	733	733	601
Total	3,998	3,723	3,914	3,572

(10) At-the-Market Equity Offerings

2021 Open Market Offering

On June 14, 2021, the Company entered into an Open Market Sale Agreement (the "2021 Open Market Sale Agreement") with Jefferies LLC, as agent ("Jefferies"), pursuant to which the Company issued and sold shares of its class A common stock having an aggregate offering price of approximately \$1.0 billion from time to time through Jefferies (the "2021 Open Market Offering"). The Company agreed to pay Jefferies commissions for its services in acting as agent in the sale of the shares in the amount of up to 2.0% of gross proceeds from the sale of shares pursuant to the 2021 Open Market Sale Agreement. The Company also agreed to provide Jefferies with customary indemnification and contribution rights.

During the three and nine months ended September 30, 2021 the Company issued and sold 555,179 shares of its class A common stock under the 2021 Open Market Sale Agreement, at an average gross price per share of approximately \$727.64, for aggregate net proceeds (less \$4.5 million in sales commissions and expenses) of approximately \$399.5 million. The sales commissions and expenses related to the 2021 Open Market Sale Agreement were considered direct and incremental costs and were charged against "Additional paid-in capital" on the balance sheet in the period in which the related shares were issued and sold. As of December 31, 2021, the cumulative aggregate offering price of the shares of class A common stock sold under the 2021 Open Market Sale Agreement was approximately \$1.0 billion, inclusive of sales commissions, constituting the maximum program amount under the 2021 Open Market Sale Agreement.

2022 At-the-Market Equity Offering

On September 9, 2022, the Company entered into a Sales Agreement (the “2022 Sales Agreement”) with Cowen and Company LLC and BTIG, LLC, as agents (collectively, the “2022 Sales Agents”), pursuant to which the Company may issue and sell shares of its class A common stock having an aggregate offering price of up to \$500.0 million from time to time through the 2022 Sales Agents. The Company agreed to pay the 2022 Sales Agents commissions for their services in acting as agents in the sale of the shares in the amount of up to 2.0% of gross proceeds from the sale of shares pursuant to the 2022 Sales Agreement. The Company also agreed to provide the 2022 Sales Agents with customary indemnification and contribution rights.

As of September 30, 2022, the Company has not issued and sold any shares of class A common stock under the 2022 Sales Agreement. Expenses totaling \$0.4 million related to the 2022 Sales Agreement were considered direct and incremental costs and have been deferred on the balance sheet in “Prepaid expenses and other current assets” and will be charged against “Additional paid-in-capital” in future periods in which related shares are issued and sold.

(11) Segment Information

The Company manages its business in one reportable operating segment. The Company’s one reportable operating segment is engaged in the design, development, marketing, and sales of its software platform through licensing arrangements and cloud subscriptions and related services. The following table presents total revenues, gross profit, and long-lived assets (in thousands) according to geographic region. Long-lived assets are comprised of right-of-use assets and property and equipment, net.

Geographic regions:	Domestic	EMEA	Other Regions	Consolidated
Three months ended September 30, 2022				
Total revenues	\$ 77,629	\$ 36,065	\$ 11,666	\$ 125,360
Gross profit	\$ 62,908	\$ 28,798	\$ 8,269	\$ 99,975
Three months ended September 30, 2021				
Total revenues	\$ 74,530	\$ 40,886	\$ 12,578	\$ 127,994
Gross profit	\$ 62,526	\$ 33,571	\$ 9,578	\$ 105,675
Nine months ended September 30, 2022				
Total revenues	\$ 221,060	\$ 110,931	\$ 34,719	\$ 366,710
Gross profit	\$ 178,979	\$ 86,835	\$ 24,630	\$ 290,444
Nine months ended September 30, 2021				
Total revenues	\$ 213,507	\$ 122,537	\$ 40,203	\$ 376,247
Gross profit	\$ 178,485	\$ 99,246	\$ 30,610	\$ 308,341
As of September 30, 2022				
Long-lived assets	\$ 85,716	\$ 6,172	\$ 4,047	\$ 95,935
As of December 31, 2021				
Long-lived assets	\$ 89,817	\$ 7,874	\$ 5,656	\$ 103,347

The domestic region consists of the United States and Canada. The EMEA region includes operations in Europe, the Middle East, and Africa. The other regions include all other foreign countries, generally comprising Latin America and the Asia Pacific region. For the three and nine months ended September 30, 2022 and 2021, no individual foreign country accounted for 10% or more of total consolidated revenues.

For the three and nine months ended September 30, 2022 and 2021, no individual customer accounted for 10% or more of total consolidated revenues.

As of September 30, 2022 and December 31, 2021, no individual foreign country accounted for 10% or more of total consolidated assets.

(12) Related Party Transaction

In June 2021, Michael J. Saylor, the Company's Chairman of the Board of Directors and Executive Chairman and, at that time, the Company's Chief Executive Officer, entered into an indemnification agreement (the "Original Agreement") with the Company for an initial term of 90 days and subject to successive 90-day term extensions at the election of the Company. All term extensions were exercised, most recently in February 2022 for a final 90-day period that began in March 2022. Pursuant to the Original Agreement, Mr. Saylor provided during the term of the agreement, from his personal funds, indemnity coverage to the Company for the benefit of the directors and officers ("D&Os") of the Company and its subsidiaries in the event such coverage was not indemnifiable by the Company, up to a total of \$40 million. In return, the Company paid Mr. Saylor \$388,945 for each of the initial and successive 90-day terms.

On June 12, 2022, Mr. Saylor and the Company entered into a renewed indemnification agreement (the "Renewed Agreement") for an initial term of 90 days, which became effective upon the expiration of the final 90-day extension of the Original Agreement. In return, the Company paid Mr. Saylor a one-time fee of \$388,945 for the initial 90-day term (the "Renewal Payment").

On June 24, 2022, the Company bound D&O liability insurance policies (the "Initial Commercial Policies") with several third-party carriers for \$30 million in coverage. Concurrently, Mr. Saylor and the Company also entered into (i) an indemnification agreement (the "Excess Agreement") for Mr. Saylor to provide \$10 million in excess indemnity coverage payable only after the exhaustion of the Initial Commercial Policies, and (ii) an indemnification agreement (the "Tail Agreement") for Mr. Saylor to provide \$40 million in indemnity coverage for claims made at any time based on actions or omissions occurring prior to the inception date of the Initial Commercial Policies. The Company paid Mr. Saylor \$600,000 for a one-year term under the Excess Agreement, and \$150,000 for a 90-day term under the Tail Agreement. At the option of the Company, the Company may elect to extend the term under the Tail Agreement for up to a total of twenty-three additional 90-day periods, for \$150,000 per additional 90-day term. In connection with the execution of the Initial Commercial Policies and the release of his obligations under the Renewed Agreement, Mr. Saylor refunded the Company \$337,086, which is the pro rata portion of the Renewal Payment attributable to the period from the date of the Initial Commercial Policies through the end of the original term of the Renewed Agreement.

On August 30, 2022, the Company bound additional D&O liability insurance policies (the "Excess Commercial Policies") with third-party carriers for \$10 million in excess coverage payable only after the exhaustion of the Initial Commercial Policies. Effective as of the same date, the Company and Mr. Saylor executed an amendment (the "Amendment") to the Excess Agreement to limit Mr. Saylor's obligation to provide indemnification under the Excess Agreement to claims made during the term of the Excess Agreement which arise from wrongful acts occurring upon or after the commencement of the Excess Agreement but prior to the effective date of the Amendment. In connection with the Amendment, Mr. Saylor refunded \$489,863 to the Company, representing the pro rata portion of the \$600,000 originally paid by the Company to Mr. Saylor under the Excess Agreement attributable to the period from the date of the Amendment through the end of the original term of the Excess Agreement. Also during the third quarter of 2022, pursuant to the terms of the Tail Agreement, the Company elected to extend the term of the Tail Agreement for an additional 90-day period and paid Mr. Saylor \$150,000 for this extension.

Under the Excess Agreement and Tail Agreement, Mr. Saylor will provide, during the term of each agreement, from his personal funds, indemnity coverage to the Company for the benefit of the D&Os of the Company and its subsidiaries in the event such coverage is not provided by the Initial Commercial Policies, the Excess Commercial Policies or indemnifiable by the Company. The Excess Agreement and the Tail Agreement expressly supersede the Original Agreement and the Renewed Agreement.

Prior to entering into the Original Agreement, Renewed Agreement, Excess Agreement, and Tail Agreement with Mr. Saylor, the Company obtained and considered market quotes for D&O liability insurance policies. The Company determined that the policies considered at such times would have provided insufficient coverage and would have required substantial premiums to the extent coverage were available, and that obtaining indemnification coverage provided by Mr. Saylor was appropriate and in the best interests of the Company.

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

Forward-Looking Information

This Quarterly Report on Form 10-Q (this "Quarterly Report") contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). For this purpose, any statements contained herein that are not statements of historical fact, including without limitation, certain statements regarding industry prospects and our results of operations or financial position, may be deemed to be forward-looking statements. Without limiting the foregoing, the words "believes," "anticipates," "plans," "expects," and similar expressions are intended to identify forward-looking statements. The important factors discussed under "Part II. Item 1A. Risk Factors," among others, could cause actual results to differ materially from those indicated by forward-looking statements made herein and presented elsewhere by management from time to time. Such forward-looking statements represent management's current expectations and are inherently uncertain. Investors are warned that actual results may differ from management's expectations.

Business Overview

MicroStrategy® pursues two corporate strategies in the operation of its business. One strategy is to acquire and hold bitcoin and the other strategy is to grow our enterprise analytics software business. We believe that undertaking these two, interdependent corporate strategies serves as a key differentiator for our business, as our bitcoin acquisition strategy has raised our profile with potential software customers while our enterprise analytics software business has provided stable cash flows that allow us to acquire and hold bitcoin for the long-term.

Our bitcoin acquisition strategy involves acquiring bitcoin with our liquid assets that exceed working capital requirements, and from time to time, subject to market conditions, issuing debt or equity securities or engaging in other capital raising transactions with the objective of using the proceeds to purchase bitcoin. As part of our bitcoin acquisition strategy, we also periodically engage in activities to educate the market regarding bitcoin. We view our bitcoin holdings as long-term holdings, and we do not plan to engage in regular trading of bitcoin and have not hedged or otherwise entered into derivative contracts with respect to our bitcoin holdings, though we may sell bitcoin in future periods as needed to generate cash for treasury management and other general corporate purposes. We may consider entering into additional capital raising transactions that may be collateralized by our bitcoin holdings and may consider strategies to create income streams or otherwise generate funds using our bitcoin holdings, including lending bitcoin to creditworthy counterparties. We have not set any specific target for the amount of bitcoin we seek to hold, and we will continue to monitor market conditions in determining whether to engage in additional financings to purchase additional bitcoin.

We believe that bitcoin is attractive because it can serve as a store of value, supported by a robust and public open-source architecture, that is untethered to sovereign monetary policy and can therefore serve as a hedge against inflation in the long term. We also believe that bitcoin offers additional opportunity for appreciation in value with increasing adoption due to its limited supply. In addition, we believe that our bitcoin acquisition strategy is complementary to our enterprise analytics software business, as we believe that our bitcoin and related activities in support of the bitcoin network enhance awareness of our brand and can provide opportunities to secure new customers for our analytics software offerings. We are also exploring opportunities to apply bitcoin-related technologies into our software offerings.

Our Bitcoin Acquisition Strategy

In September 2020, our Board of Directors adopted a Treasury Reserve Policy (as amended to date, the "Treasury Reserve Policy") that updated our treasury management and capital allocation strategies, under which our treasury reserve assets will consist of:

- cash and cash equivalents and short-term investments ("Cash Assets") held by us that exceed working capital requirements; and
- bitcoin held by us, with bitcoin serving as the primary treasury reserve asset on an ongoing basis, subject to market conditions and anticipated needs of the business for Cash Assets.

In the first quarter of 2021, we adopted, in addition to and in conjunction with our Treasury Reserve Policy, a corporate strategy of acquiring and holding bitcoin. Pursuant to this corporate strategy, and from time to time, subject to market conditions, we issue debt or equity securities or engage in other capital raising transactions with the objective of using the proceeds to purchase bitcoin.

During 2021 and 2022, we used the proceeds of the following capital raising transactions to purchase bitcoin. The transactions are further described below under "—Liquidity and Capital Resources—Long-term Debt" and under "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Open Market Sale Agreement" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021:

- \$1.050 billion aggregate principal amount of the 2027 Convertible Notes issued in February 2021;

- \$500.0 million aggregate principal amount of the 2028 Secured Notes issued in June 2021;
- 1,413,767 shares of class A common stock issued during the second half of 2021, for aggregate gross proceeds of \$1.0 billion pursuant to an Open Market Sale Agreement (the “2021 Open Market Sale Agreement”) with Jefferies LLC, as agent (“Jefferies”); and
- \$205.0 million aggregate principal amount of the 2025 Secured Term Loan issued in March 2022.

As of September 30, 2022, we held an aggregate of approximately 130,000 bitcoins, with 14,890 bitcoins held directly by MicroStrategy Incorporated and 115,110 bitcoins held by MacroStrategy LLC, a wholly-owned subsidiary of MicroStrategy. The approximately 14,890 bitcoins held directly by MicroStrategy Incorporated serve as part of the collateral securing our 2028 Secured Notes, and approximately 30,051 of the 115,110 bitcoins held by MacroStrategy serve as part of the collateral securing our 2025 Secured Term Loan.

The following table presents a rollforward of our bitcoin holdings, including additional information related to our bitcoin purchases and digital asset impairment losses within the respective periods. We have not sold any of our bitcoin as of the date of this Quarterly Report.

	Source of Capital Used to Purchase Bitcoin	Digital Asset Original Cost Basis (in thousands)	Digital Asset Impairment Losses (in thousands)	Digital Asset Carrying Value (in thousands)	Approximate Number of Bitcoins Held	Approximate Average Purchase Price Per Bitcoin
Balance at December 31, 2020		\$ 1,125,000	\$ (70,698)	\$ 1,054,302	70,469	\$ 15,964
Digital asset purchases	(a)	1,086,375		1,086,375	20,857	52,087
Digital asset impairment losses			(194,095)	(194,095)		
Balance at March 31, 2021		\$ 2,211,375	\$ (264,793)	\$ 1,946,582	91,326	\$ 24,214
Digital asset purchases	(b)	529,231		529,231	13,759	38,464
Digital asset impairment losses			(424,774)	(424,774)		
Balance at June 30, 2021		\$ 2,740,606	\$ (689,567)	\$ 2,051,039	105,085	\$ 26,080
Digital asset purchases	(c)	419,865		419,865	8,957	46,876
Digital asset impairment losses			(65,165)	(65,165)		
Balance at September 30, 2021		\$ 3,160,471	\$ (754,732)	\$ 2,405,739	114,042	\$ 27,713
Digital asset purchases	(d)	591,058		591,058	10,349	57,113
Digital asset impairment losses			(146,587)	(146,587)		
Balance at December 31, 2021		\$ 3,751,529	\$ (901,319)	\$ 2,850,210	124,391	\$ 30,159
Digital asset purchases	(e)	215,500		215,500	4,827	44,645
Digital asset impairment losses			(170,091)	(170,091)		
Balance at March 31, 2022		\$ 3,967,029	\$ (1,071,410)	\$ 2,895,619	129,218	\$ 30,700
Digital asset purchases	(f)	10,000		10,000	481	20,790
Digital asset impairment losses			(917,838)	(917,838)		
Balance at June 30, 2022		\$ 3,977,029	\$ (1,989,248)	\$ 1,987,781	129,699	\$ 30,664
Digital asset purchases	(g)	5,978		5,978	301	19,860
Digital asset impairment losses			(727)	(727)		
Balance at September 30, 2022		\$ 3,983,007	\$ (1,989,975)	\$ 1,993,032	130,000	\$ 30,639

(a) In the first quarter of 2021, we purchased bitcoin using \$1.026 billion in net proceeds from our issuance of the 2027 Convertible Notes and Excess Cash.

(b) In the second quarter of 2021, we purchased bitcoin using \$487.2 million in net proceeds from our issuance of the 2028 Secured Notes and Excess Cash.

(c) In the third quarter of 2021, we purchased bitcoin using \$399.5 million in net proceeds from our sale of 555,179 shares of class A common stock offered under the 2021 Open Market Sale Agreement and Excess Cash.

(d) In the fourth quarter of 2021, we purchased bitcoin using \$591.0 million in net proceeds from our sale of 858,588 shares of class A common stock offered under the 2021 Open Market Sale Agreement and Excess Cash.

(e) In the first quarter of 2022, we purchased bitcoin using \$190.5 million of the net proceeds from the issuance of the 2025 Secured Term Loan and Excess Cash.

(f) In the second quarter of 2022, we purchased bitcoin using Excess Cash.

(g) In the third quarter of 2022, we purchased bitcoin using Excess Cash.

Excess Cash refers to cash in excess of the minimum Cash Assets that we are required to hold under our Treasury Reserve Policy, which may include cash generated by operating activities and cash from the proceeds of financing activities.

The following table shows the approximate number of bitcoins held at the end of each respective period, as well as market value calculations of our bitcoin holdings based on the lowest, highest, and ending market prices of one bitcoin on the Coinbase exchange (our principal market for bitcoin) for each respective quarter, as further defined below:

	Approximate Number of Bitcoins Held at End of Quarter	Lowest Market Price Per Bitcoin During Quarter (a)	Market Value of Bitcoin Held at End of Quarter Using Lowest Market Price (in thousands) (b)	Highest Market Price Per Bitcoin During Quarter (c)	Market Value of Bitcoin Held at End of Quarter Using Highest Market Price (in thousands) (d)	Market Price Per Bitcoin at End of Quarter (e)	Market Value of Bitcoin Held at End of Quarter Using Ending Market Price (in thousands) (f)
December 31, 2020	70,469	\$ 10,363.76	\$ 730,324	\$ 29,321.90	\$ 2,066,285	\$ 29,181.00	\$ 2,056,356
March 31, 2021	91,326	\$ 27,678.00	\$ 2,527,721	\$ 61,788.45	\$ 5,642,892	\$ 58,601.28	\$ 5,351,820
June 30, 2021	105,085	\$ 28,800.00	\$ 3,026,448	\$ 64,899.00	\$ 6,819,911	\$ 34,763.47	\$ 3,653,119
September 30, 2021	114,042	\$ 29,301.56	\$ 3,341,609	\$ 52,944.96	\$ 6,037,949	\$ 43,534.56	\$ 4,964,768
December 31, 2021	124,391	\$ 42,333.00	\$ 5,265,844	\$ 69,000.00	\$ 8,582,979	\$ 45,879.97	\$ 5,707,055
March 31, 2022	129,218	\$ 32,933.33	\$ 4,255,579	\$ 48,240.00	\$ 6,233,476	\$ 45,602.79	\$ 5,892,701
June 30, 2022	129,699	\$ 17,567.45	\$ 2,278,481	\$ 47,469.40	\$ 6,156,734	\$ 18,895.02	\$ 2,450,665
September 30, 2022	130,000	\$ 18,153.13	\$ 2,359,907	\$ 25,214.57	\$ 3,277,894	\$ 19,480.51	\$ 2,532,466

- (a) The "Lowest Market Price Per Bitcoin During Quarter" represents the lowest market price for one bitcoin reported on the Coinbase exchange during the respective quarter, without regard to when we purchased any of our bitcoin.
- (b) The "Market Value of Bitcoin Held at End of Quarter Using Lowest Market Price" represents a mathematical calculation consisting of the lowest market price for one bitcoin reported on the Coinbase exchange during the respective quarter multiplied by the number of bitcoins we held at the end of the applicable period.
- (c) The "Highest Market Price Per Bitcoin During Quarter" represents the highest market price for one bitcoin reported on the Coinbase exchange during the respective quarter, without regard to when we purchased any of our bitcoin.
- (d) The "Market Value of Bitcoin Held at End of Quarter Using Highest Market Price" represents a mathematical calculation consisting of the highest market price for one bitcoin reported on the Coinbase exchange during the respective quarter multiplied by the number of bitcoins we held at the end of the applicable period.
- (e) The "Market Price Per Bitcoin at End of Quarter" represents the market price of one bitcoin on the Coinbase exchange at 4:00 p.m. Eastern Time on the last day of the respective quarter.
- (f) The "Market Value of Bitcoin Held at End of Quarter Using Ending Market Price" represents a mathematical calculation consisting of the market price of one bitcoin on the Coinbase exchange at 4:00 p.m. Eastern Time on the last day of the respective quarter multiplied by the number of bitcoins we held at the end of the applicable period.

The amounts reported as "Market Value" in the above table represent only a mathematical calculation consisting of the price for one bitcoin reported on the Coinbase exchange (our principal market for bitcoin) in each scenario defined above multiplied by the number of bitcoins we held at the end of the applicable period. The Securities and Exchange Commission has previously stated that there has not been a demonstration that (i) bitcoin and bitcoin markets are inherently resistant to manipulation or that the spot price of bitcoin may not be subject to fraud and manipulation; and (ii) adequate surveillance-sharing agreements with bitcoin-related markets are in place, as bitcoin-related markets are either not significant, not regulated, or both. Accordingly, the Market Value amounts reported above may not accurately represent fair market value, and the actual fair market value of our bitcoin may be different from such amounts and such deviation may be material. Moreover, (i) the bitcoin market historically has been characterized by significant volatility in price, limited liquidity and trading volumes compared to sovereign currencies markets, relative anonymity, a developing regulatory landscape, potential susceptibility to market abuse and manipulation, and various other risks that are, or may be, inherent in its entirely electronic, virtual form and decentralized network and (ii) we may not be able to sell our bitcoins at the Market Value amounts indicated above, at the market price as reported on the Coinbase exchange (our principal market for bitcoin) on the date of sale, or at all.

Our digital asset impairment losses have significantly contributed to our operating expenses and net loss. While digital asset impairment losses of \$0.7 million were not significant for the three months ended September 30, 2022, digital asset impairment losses for the three months ended September 30, 2021 were \$65.2 million, representing 42.0% of our operating expenses and contributing to our net loss of \$36.1 million for the three months ended September 30, 2021. For the nine months ended September 30, 2022, digital asset impairment losses of \$1.089 billion represented 79.3% of our operating expenses, contributing to our net loss of \$1.220 billion for the nine months ended September 30, 2022, compared to digital asset impairment losses of \$684.0 million in the nine months ended September 30, 2021, representing 71.6% of our operating expenses and contributing to our net loss of \$445.5 million for the nine months ended September 30, 2021.

As of October 31, 2022, we held approximately 130,000 bitcoins that were acquired at an aggregate purchase price of \$3.983 billion and an average purchase price of approximately \$30,639 per bitcoin, inclusive of fees and expenses. As of October 31, 2022, at 4:00 p.m. Eastern Time, the market price of one bitcoin reported on the Coinbase exchange was \$20,369.41.

Our Enterprise Analytics Software Strategy

As a global leader in enterprise analytics software and services, our vision is to enable Intelligence Everywhere. Our core offering, the MicroStrategy platform, helps achieve this vision for our enterprise customers around the world. It delivers actionable intelligence and modern analytics on an open, comprehensive enterprise platform. The MicroStrategy platform empowers our customers to quickly build and deploy high-performance, governed, and secure applications that can scale across their enterprises.

Our core product offering is our software platform. In 2021, we moved to a monthly release cadence to enable the same functionality, security, and stability enhancements that we have historically delivered for our platform in annual releases, without the friction of a single, annual release. Our platform features the following:

- **Pervasive, Modern Analytics:** MicroStrategy delivers insights across multiple clients and devices to users via our HyperIntelligence® products, visualization and reporting capabilities, mobility features, and custom applications developed on our platform.
 - o *Data Visualization and Reporting* – Dossier®, our dashboarding and data-visualization tool, provides users with the formatting, layout, and input controls needed to quickly build low-code/no-code analytics applications, from infographic-style reports to high-impact productivity applications.
 - o *Transformational Mobility* – Our platform empowers the mobile workforce to make decisions and take action from any location. It delivers more ways to quickly deploy mobile productivity apps for a variety of business functions and roles on any standard smartphone or tablet.
 - o *HyperIntelligence* – Our platform offers the potential to radically improve business processes by enhancing the websites, applications, and mobile devices people use every day with contextual intelligence, next-action suggestions, and workflows.
 - o *Custom Applications* – Our platform enables users to create highly customized web and mobile applications that leverage the full breadth of the MicroStrategy platform to deliver intuitive BI apps for teams, departments, and organizations.
- **Open, Federated Architecture:** MicroStrategy embraces an agile approach to development and innovation, addressing our strategy of seeking to offer the most open analytics platform on the market.
 - o *Federated Analytics* – Our platform provides analysts and data scientists with seamless access to trusted, governed data directly within their favorite tools. The MicroStrategy platform integrates with popular business apps, including Microsoft Excel, Power BI, and Tableau to provide users with the flexibility to leverage trusted data from MicroStrategy directly within the client applications to which they are accustomed. The MicroStrategy platform also provides out-of-the-box integrations to popular data-science tools like Jupyter and RStudio, allowing users to develop predictive, machine learning-enhanced data models on top of the secure and trusted foundation offered by the MicroStrategy platform.
 - o *APIs and Gateways* – Our gateways, application programming interfaces (“APIs”), and connectors enable the MicroStrategy platform to integrate with the most popular enterprise platforms and tools. We certify more than 200 connectors to popular data sources both locally stored and in the cloud, and we offer a comprehensive set of Representational State Transfer (“REST”) APIs that makes it easy to embed the platform in packaged and custom applications, workflows, and devices.
 - o *Multiple Deployment Options* – We also believe that customers should have the choice of where to deploy their analytics platform without compromising functionality. Our fully featured platform can be deployed in three ways: on premises, the customer’s cloud environment, or the MicroStrategy Cloud™ Environment (“MCE”). MCE is a cloud subscription service that allows customers to deploy the platform on Amazon Web Services (“AWS”) or Microsoft Azure environments, fully managed and hosted by us.
- **Enterprise Platform:** Our platform is designed to securely scale analytics at high data volumes. The MicroStrategy platform has the tools and functionality that enable organizations to deliver secure, high-performance applications at scale.

- o *Enterprise Semantic Graph™* – The engine of our platform is our proprietary Enterprise Semantic Graph, which provides a structured view of a company’s data assets by organizing them into understandable business terms. Our Enterprise Semantic Graph also enriches metadata content with real-time location intelligence and content and system usage telemetry. This feature allows users to have a consistent and secure view of data across the enterprise—effectively delivering what we refer to as a *single version of truth*.
- o *Scalability* – Our platform powers some of the largest business intelligence deployments in the world. The platform is designed to scale efficiently to hundreds of thousands of users, with millions of personalized queries, across hundreds of applications, built on top of the largest datasets.
- o *Security* – Our platform includes a comprehensive set of features that provides superior administration, security, and architecture, including role-based access to both row and column data. This level of data security gives our customers that are subject to the most stringent data security requirements, including financial institutions, healthcare providers, and government agencies, the confidence they need to deploy our platform across their enterprise.

Our customers include leading global organizations from a wide range of industries, including retail, consulting, technology, manufacturing, banking, insurance, finance, healthcare, telecommunications, as well as the public sector.

To stand apart in a highly competitive market, we depend on the effectiveness with which we can differentiate our offerings from those of large software vendors that provide products across multiple lines of business, including one or more products that directly compete with our offerings, and other potential competitors across analytics implementation projects of varying sizes.

Impact of COVID-19 on Our Software Strategy

The COVID-19 pandemic has resulted, and may continue to result, in significant economic disruption despite progress made in the development and distribution of vaccines and therapeutic treatments. It has continued to disrupt supply chains and has adversely impacted global commercial activity. Although many jurisdictions, including the United States, have substantially lifted COVID-19 travel restrictions, some restrictions do remain. Considerable uncertainty continues to surround COVID-19, the evolution of its variants, its potential long-term economic effects, as well as the effectiveness of any responses taken by government authorities and businesses and of various efforts to inoculate the global population and develop effective treatments.

Significant uncertainty continues to exist concerning the impact of the COVID-19 pandemic on our customers’ and prospects’ business and operations in future periods. Although our total revenues for the three and nine months ended September 30, 2022 and 2021 were not materially impacted by COVID-19, our revenues may be negatively impacted in future periods until the effects of the pandemic and the efforts to address it have fully subsided and the current macroeconomic environment has substantially recovered. The uncertainty related to COVID-19 may also result in increased volatility in the financial projections we use as the basis for estimates and assumptions used in our financial statements.

We adapted our operations to meet the challenges of the pandemic, including establishing flexible working arrangements for our employees, reducing business travel, and shifting certain of our customer, employee, and industry events to virtual formats.

Effects of the COVID-19 pandemic that may negatively impact our business in future periods include, but are not limited to: limitations on the ability of our customers to conduct their business, purchase our products and services, and make timely payments; curtailed consumer spending; deferred purchasing decisions; delayed consulting services implementations; decreases in product licenses revenues driven by channel partners, and compliance costs and business disruptions associated with certain government requirements and recommendations adopted in response to the pandemic. We will continue to actively monitor the nature and extent of the impact to our business, operating results, and financial condition.

Operating Highlights

The following table sets forth certain operating highlights (in thousands) for the three and nine months ended September 30, 2022 and 2021:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Revenues				
Product licenses	\$ 22,286	\$ 25,830	\$ 58,928	\$ 69,261
Subscription services	16,414	10,853	43,276	31,221
Total product licenses and subscription services	38,700	36,683	102,204	100,482
Product support	66,010	70,387	199,682	212,063
Other services	20,650	20,924	64,824	63,702
Total revenues	125,360	127,994	366,710	376,247
Cost of revenues				
Product licenses	406	383	1,314	1,290
Subscription services	6,395	4,282	17,303	11,720
Total product licenses and subscription services	6,801	4,665	18,617	13,010
Product support	5,224	4,679	15,542	14,353
Other services	13,360	12,975	42,107	40,543
Total cost of revenues	25,385	22,319	76,266	67,906
Gross profit	99,975	105,675	290,444	308,341
Operating expenses				
Sales and marketing	35,409	38,209	105,511	116,728
Research and development	30,498	28,211	95,811	86,242
General and administrative	27,283	23,751	82,491	68,397
Digital asset impairment losses	727	65,165	1,088,656	684,034
Total operating expenses	93,917	155,336	1,372,469	955,401
Income (loss) from operations	\$ 6,058	\$ (49,661)	\$ (1,082,025)	\$ (647,060)

We have incurred and may continue to incur significant impairment losses on our digital assets and we may recognize gains upon sale of our digital assets in the future, which would be presented net of any impairment losses within operating expenses. In addition, we base our internal operating expense forecasts on expected revenue trends and strategic objectives in our enterprise analytics software business. Many of our expenses, such as office leases and certain personnel costs, are relatively fixed. Accordingly, any decrease in the price of bitcoin during any quarter, any sales by us of our bitcoin at prices above their then current carrying costs or any shortfall in revenue in our software business may cause significant variation in our operating results. We therefore believe that quarter-to-quarter comparisons of our operating results may not be a good indication of our future performance.

Employees

As of September 30, 2022, we had a total of 2,172 employees, of whom 765 were based in the United States and 1,407 were based internationally. The following table summarizes employee headcount as of the dates indicated:

	September 30, 2022	December 31, 2021	September 30, 2021
Subscription services	95	72	71
Product support	171	174	165
Consulting	453	413	393
Education	22	36	36
Sales and marketing	452	470	473
Research and development	712	699	661
General and administrative	267	257	258
Total headcount	2,172	2,121	2,057

Share-based Compensation Expense

As discussed in Note 8, Share-based Compensation, to the Consolidated Financial Statements, we have outstanding stock options to purchase shares of our class A common stock, restricted stock units, each of which represents a right to receive a share of our class A common stock upon the satisfaction of applicable vesting requirements, and certain other stock-based awards under our 2013 Equity Plan, as well as opportunities for eligible employees to purchase shares of our class A common stock under our 2021 ESPP. Share-based compensation expense (in thousands) from these awards was recognized in the following cost of revenues and operating expense line items in our Consolidated Statements of Operations for the periods indicated:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Cost of subscription services revenues	\$ 80	\$ 83	\$ 221	\$ 172
Cost of product support revenues	541	345	1,513	787
Cost of consulting revenues	463	240	1,278	424
Cost of education revenues	37	34	143	66
Sales and marketing	4,935	3,600	13,662	9,239
Research and development	3,795	2,956	10,235	7,546
General and administrative	7,048	4,908	19,535	12,739
Total share-based compensation expense	<u>\$ 16,899</u>	<u>\$ 12,166</u>	<u>\$ 46,587</u>	<u>\$ 30,973</u>

The \$4.7 million and \$15.6 million increases in share-based compensation expense during the three and nine months ended September 30, 2022, respectively, as compared to the same periods in the prior year, are primarily due to the continued expansion of our equity award programs worldwide. As of September 30, 2022, we estimated that an aggregate of approximately \$184.9 million of additional share-based compensation expense associated with the 2013 Equity Plan and the 2021 ESPP will be recognized over a remaining weighted average period of 2.9 years.

Non-GAAP Financial Measures

We are providing supplemental financial measures for (i) non-GAAP income (loss) from operations that excludes the impact of our share-based compensation expense, (ii) non-GAAP net loss and non-GAAP diluted loss per share that exclude the impacts of our share-based compensation expense, interest expense arising from the amortization of debt issuance costs on our long-term debt, and related income tax effects, and (iii) certain non-GAAP constant currency revenues, cost of revenues, and operating expenses that exclude foreign currency exchange rate fluctuations. These supplemental financial measures are not measurements of financial performance under generally accepted accounting principles in the United States ("GAAP") and, as a result, these supplemental financial measures may not be comparable to similarly titled measures of other companies. Management uses these non-GAAP financial measures internally to help understand, manage, and evaluate our business performance and to help make operating decisions.

We believe that these non-GAAP financial measures are also useful to investors and analysts in comparing our performance across reporting periods on a consistent basis. The first supplemental financial measure excludes a significant non-cash expense that we believe is not reflective of our general business performance, and for which the accounting requires management judgment and the resulting share-based compensation expense could vary significantly in comparison to other companies. The second set of supplemental financial measures excludes the impacts of (i) share-based compensation expense, (ii) non-cash interest expense arising from the amortization of debt issuance costs related to our long-term debt, and (iii) related income tax effects. The third set of supplemental financial measures excludes changes resulting from fluctuations in foreign currency exchange rates so that results may be compared to the same period in the prior year on a non-GAAP constant currency basis. We believe the use of these non-GAAP financial measures can also facilitate comparison of our operating results to those of our competitors.

Non-GAAP financial measures are subject to material limitations as they are not measurements prepared in accordance with GAAP, and are not a substitute for such measurements. For example, we expect that share-based compensation expense, which is excluded from the first two non-GAAP financial measures, will continue to be a significant recurring expense over the coming years and is an important part of the compensation provided to certain employees, officers, and directors. Similarly, we expect that interest expense arising from the amortization of debt issuance costs will continue to be a recurring expense over the term of the long-term debt. Our non-GAAP financial measures are not meant to be considered in isolation and should be read only in conjunction with our Consolidated Financial Statements, which have been prepared in accordance with GAAP. We rely primarily on such Consolidated Financial Statements to understand, manage, and evaluate our business performance and use the non-GAAP financial measures only supplementally.

The following is a reconciliation of our non-GAAP income (loss) from operations, which excludes the impact of share-based compensation expense, to its most directly comparable GAAP measures (in thousands) for the periods indicated:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Reconciliation of non-GAAP income (loss) from operations:				
Income (loss) from operations	\$ 6,058	\$ (49,661)	\$ (1,082,025)	\$ (647,060)
Share-based compensation expense	16,899	12,166	46,587	30,973
Non-GAAP income (loss) from operations	<u>\$ 22,957</u>	<u>\$ (37,495)</u>	<u>\$ (1,035,438)</u>	<u>\$ (616,087)</u>

The following are reconciliations of our non-GAAP net loss and non-GAAP diluted loss per share, in each case excluding the impacts of (i) share-based compensation expense, (ii) interest expense arising from the amortization of debt issuance costs on our long-term debt, and (iii) related income tax effects to their most directly comparable GAAP measures (in thousands, except per share data) for the periods indicated:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Reconciliation of non-GAAP net loss:				
Net loss	\$ (27,079)	\$ (36,136)	\$ (1,220,128)	\$ (445,503)
Share-based compensation expense	16,899	12,166	46,587	30,973
Interest expense arising from amortization of debt issuance costs	2,193	2,107	6,490	5,084
Income tax effects (1)	(2,844)	(6,489)	(10,186)	(32,877)
Non-GAAP net loss	<u>\$ (10,831)</u>	<u>\$ (28,352)</u>	<u>\$ (1,177,237)</u>	<u>\$ (442,323)</u>
Reconciliation of non-GAAP diluted loss per share (2):				
Diluted loss per share	\$ (2.39)	\$ (3.61)	\$ (107.99)	\$ (45.47)
Share-based compensation expense (per diluted share)	1.49	1.21	4.12	3.16
Interest expense arising from amortization of debt issuance costs (per diluted share)	0.19	0.21	0.57	0.52
Income tax effects (per diluted share)	(0.25)	(0.65)	(0.89)	(3.35)
Non-GAAP diluted loss per share	<u>\$ (0.96)</u>	<u>\$ (2.84)</u>	<u>\$ (104.19)</u>	<u>\$ (45.14)</u>

- (1) Income tax effects reflect the net tax effects of share-based compensation expense, which includes tax benefits and expenses on exercises of stock options and vesting of share-settled restricted stock units, and interest expense for amortization of debt issuance costs.
- (2) For reconciliation purposes, the non-GAAP diluted earnings (loss) per share calculations use the same weighted average shares outstanding as that used in the GAAP diluted earnings (loss) per share calculations for the same period. For example, in periods of GAAP net loss, otherwise dilutive potential shares of common stock from our share-based compensation arrangements and Convertible Notes are excluded from the GAAP diluted loss per share calculation as they would be antidilutive, and therefore are also excluded from the non-GAAP diluted earnings or loss per share calculation.

The following are reconciliations of certain non-GAAP constant currency revenues, cost of revenues, and operating expenses to their most directly comparable GAAP measures (in thousands) for the periods indicated:

Three Months Ended September 30,						
	GAAP	Foreign Currency Exchange Rate Impact (1)	Non-GAAP Constant Currency (2)	GAAP	GAAP % Change	Non-GAAP Constant Currency % Change (3)
	2022	2022	2022	2021	2022	2022
Product licenses revenues	\$ 22,286	\$ (1,219)	\$ 23,505	\$ 25,830	-13.7%	-9.0%
Subscription services revenues	16,414	(828)	17,242	10,853	51.2%	58.9%
Product support revenues	66,010	(3,848)	69,858	70,387	-6.2%	-0.8%
Other services revenues	20,650	(1,747)	22,397	20,924	-1.3%	7.0%
Cost of product support revenues	5,224	(329)	5,553	4,679	11.6%	18.7%
Cost of other services revenues	13,360	(1,444)	14,804	12,975	3.0%	14.1%
Sales and marketing expenses	35,409	(1,833)	37,242	38,209	-7.3%	-2.5%
Research and development expenses	30,498	(755)	31,253	28,211	8.1%	10.8%
General and administrative expenses	27,283	(545)	27,828	23,751	14.9%	17.2%

	GAAP	Foreign Currency Exchange Rate Impact (1)	Non-GAAP Constant Currency (2)	GAAP	GAAP % Change	Non-GAAP Constant Currency % Change (3)
	2021	2021	2021	2020	2021	2021
Product licenses revenues	\$ 25,830	\$ (146)	\$ 25,976	\$ 29,573	-12.7%	-12.2%
Subscription services revenues	10,853	110	10,743	8,305	30.7%	29.4%
Product support revenues	70,387	450	69,937	71,352	-1.4%	-2.0%
Other services revenues	20,924	143	20,781	18,178	15.1%	14.3%
Cost of product support revenues	4,679	(18)	4,697	5,679	-17.6%	-17.3%
Cost of other services revenues	12,975	(53)	13,028	11,856	9.4%	9.9%
Sales and marketing expenses	38,209	(64)	38,273	35,330	8.1%	8.3%
Research and development expenses	28,211	399	27,812	26,638	5.9%	4.4%
General and administrative expenses	23,751	60	23,691	19,733	20.4%	20.1%

**Nine Months Ended
September 30,**

	GAAP	Foreign Currency Exchange Rate Impact (1)	Non-GAAP Constant Currency (2)	GAAP	GAAP % Change	Non-GAAP Constant Currency % Change (3)
	2022	2022	2022	2021	2022	2022
Product licenses revenues	\$ 58,928	\$ (2,315)	\$ 61,243	\$ 69,261	-14.9%	-11.6%
Subscription services revenues	43,276	(1,516)	44,792	31,221	38.6%	43.5%
Product support revenues	199,682	(8,547)	208,229	212,063	-5.8%	-1.8%
Other services revenues	64,824	(3,914)	68,738	63,702	1.8%	7.9%
Cost of product support revenues	15,542	(696)	16,238	14,353	8.3%	13.1%
Cost of other services revenues	42,107	(3,260)	45,367	40,543	3.9%	11.9%
Sales and marketing expenses	105,511	(4,150)	109,661	116,728	-9.6%	-6.1%
Research and development expenses	95,811	(1,185)	96,996	86,242	11.1%	12.5%
General and administrative expenses	82,491	(1,200)	83,691	68,397	20.6%	22.4%

	GAAP	Foreign Currency Exchange Rate Impact (1)	Non-GAAP Constant Currency (2)	GAAP	GAAP % Change	Non-GAAP Constant Currency % Change (3)
	2021	2021	2021	2020	2021	2021
Product licenses revenues	\$ 69,261	\$ 311	\$ 68,950	\$ 56,973	21.6%	21.0%
Subscription services revenues	31,221	564	30,657	24,294	28.5%	26.2%
Product support revenues	212,063	4,792	207,271	212,548	-0.2%	-2.5%
Other services revenues	63,702	1,524	62,178	55,601	14.6%	11.8%
Cost of product support revenues	14,353	123	14,230	19,234	-25.4%	-26.0%
Cost of other services revenues	40,543	819	39,724	37,795	7.3%	5.1%
Sales and marketing expenses	116,728	1,348	115,380	109,799	6.3%	5.1%
Research and development expenses	86,242	1,502	84,740	78,606	9.7%	7.8%
General and administrative expenses	68,397	406	67,991	60,514	13.0%	12.4%

- (1) The “Foreign Currency Exchange Rate Impact” reflects the estimated impact of fluctuations in foreign currency exchange rates on international components of our Consolidated Statements of Operations. It shows the increase (decrease) in material international revenues or expenses, as applicable, from the same period in the prior year, based on comparisons to the prior year quarterly average foreign currency exchange rates. The term “international” refers to operations outside of the United States and Canada.
- (2) The “Non-GAAP Constant Currency” reflects the current period GAAP amount, less the Foreign Currency Exchange Rate Impact.
- (3) The “Non-GAAP Constant Currency % Change” reflects the percentage change between the current period Non-GAAP Constant Currency amount and the GAAP amount for the same period in the prior year.

Critical Accounting Estimates

Our discussion and analysis of our financial condition and results of operations are based on our Consolidated Financial Statements, which have been prepared in accordance with GAAP. The preparation of our Consolidated Financial Statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, and equity, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results and outcomes could differ from these estimates and assumptions.

Critical accounting estimates involve a significant level of estimation uncertainty and are estimates that have had or are reasonably likely to have a material impact on our financial condition or results of operations. We consider certain estimates and judgments related to revenue recognition to be critical accounting estimates for us, as discussed under “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Estimates” included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021. There have been no significant changes in such estimates and judgments since December 31, 2021.

Results of Operations

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

Revenues

Except as otherwise indicated herein, the term “domestic” refers to operations in the United States and Canada and the term “international” refers to operations outside of the United States and Canada.

Product licenses and subscription services revenues. The following table sets forth product licenses and subscription services revenues (in thousands) and related percentage changes for the periods indicated:

	Three Months Ended September 30,		%	Nine Months Ended September 30,		%
	2022	2021	Change	2022	2021	Change
Product Licenses and Subscription Services Revenues:						
Product Licenses						
Domestic	\$ 15,526	\$ 16,662	-6.8%	\$ 40,535	\$ 39,927	1.5%
International	6,760	9,168	-26.3%	18,393	29,334	-37.3%
Total product licenses revenues	22,286	25,830	-13.7%	58,928	69,261	-14.9%
Subscription Services						
Domestic	11,381	7,717	47.5%	30,540	22,782	34.1%
International	5,033	3,136	60.5%	12,736	8,439	50.9%
Total subscription services revenues	16,414	10,853	51.2%	43,276	31,221	38.6%
Total product licenses and subscription services revenues	\$ 38,700	\$ 36,683	5.5%	\$ 102,204	\$ 100,482	1.7%

The following table sets forth a summary, grouped by size, of the number of recognized product licenses transactions for the periods indicated:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Product Licenses Transactions with Recognized Licenses Revenue in the Applicable Period:				
More than \$1.0 million in licenses revenue recognized	3	5	6	9
Between \$0.5 million and \$1.0 million in licenses revenue recognized	3	4	10	16
Total	6	9	16	25
<i>Domestic:</i>				
More than \$1.0 million in licenses revenue recognized	3	4	6	7
Between \$0.5 million and \$1.0 million in licenses revenue recognized	1	3	7	9
Total	4	7	13	16
<i>International:</i>				
More than \$1.0 million in licenses revenue recognized	0	1	0	2
Between \$0.5 million and \$1.0 million in licenses revenue recognized	2	1	3	7
Total	2	2	3	9

The following table sets forth the recognized revenue (in thousands) attributable to product licenses transactions, grouped by size, and related percentage changes for the periods indicated:

	Three Months Ended September 30,			%	Nine Months Ended September 30,		%
	2022	2021	Change		2022	2021	Change
Product Licenses Revenue Recognized in the Applicable Period:							
More than \$1.0 million in licenses revenue recognized	\$ 7,291	\$ 7,283	0.1%	\$	15,848	\$ 17,422	-9.0%
Between \$0.5 million and \$1.0 million in licenses revenue recognized	2,039	2,594	-21.4%		7,177	10,485	-31.5%
Less than \$0.5 million in licenses revenue recognized	12,956	15,953	-18.8%		35,903	41,354	-13.2%
Total	22,286	25,830	-13.7%		58,928	69,261	-14.9%
<i>Domestic:</i>							
More than \$1.0 million in licenses revenue recognized	7,291	6,236	16.9%		15,848	13,942	13.7%
Between \$0.5 million and \$1.0 million in licenses revenue recognized	791	1,900	-58.4%		5,419	5,977	-9.3%
Less than \$0.5 million in licenses revenue recognized	7,444	8,526	-12.7%		19,268	20,008	-3.7%
Total	15,526	16,662	-6.8%		40,535	39,927	1.5%
<i>International:</i>							
More than \$1.0 million in licenses revenue recognized	0	1,047	-100.0%		0	3,480	-100.0%
Between \$0.5 million and \$1.0 million in licenses revenue recognized	1,248	694	79.8%		1,758	4,508	-61.0%
Less than \$0.5 million in licenses revenue recognized	5,512	7,427	-25.8%		16,635	21,346	-22.1%
Total	\$ 6,760	\$ 9,168	-26.3%	\$	18,393	\$ 29,334	-37.3%

Product licenses revenues decreased \$3.5 million and \$10.3 million for the three and nine months ended September 30, 2022, respectively, as compared to the same periods in the prior year. For the three months ended September 30, 2022 and 2021, product licenses transactions with more than \$0.5 million in recognized revenue represented 41.9% and 38.2%, respectively, of our product licenses revenues. For the nine months ended September 30, 2022, our top three product licenses transactions totaled \$12.1 million in recognized revenue, or 20.5% of total product licenses revenues, compared to \$10.1 million, or 14.6% of total product licenses revenues, for the nine months ended September 30, 2021.

Domestic product licenses revenues. Domestic product licenses revenues decreased \$1.1 million for the three months ended September 30, 2022, as compared to the same period in the prior year, primarily due to a decrease in the number of transactions, partially offset by an increase in the average deal size of transactions with more than \$1.0 million in recognized revenue. Domestic product licenses revenues increased \$0.6 million for the nine months ended September 30, 2022, as compared to the same period in the prior year, primarily due to an increase in the average deal size of transactions, partially offset by a decrease in the number of transactions.

International product licenses revenues. International product licenses revenues decreased \$2.4 million for the three months ended September 30, 2022, as compared to the same period in the prior year, primarily due to a decrease in the number of transactions with less than \$0.5 million in recognized revenue and more than \$1.0 million in recognized revenue, and a \$1.2 million unfavorable foreign currency exchange impact, partially offset by an increase in the number of transactions with more than \$0.5 million in recognized revenue and less than \$1.0 million in recognized revenue. International product licenses revenues decreased \$10.9 million for the nine months ended September 30, 2022, as compared to the same period in the prior year, primarily due to a decrease in the number of transactions and a \$2.3 million unfavorable foreign currency exchange impact.

Subscription services revenues. Subscription services revenues are derived from our MCE cloud subscription service and are recognized ratably over the service period in the contract. Subscription services revenues increased \$5.6 million for the three months ended September 30, 2022, as compared to the same period in the prior year, primarily due to conversions to cloud-based subscriptions from existing on-premises customers, an increase in the use of subscription services by existing customers, and sales contracts with new customers, partially offset by a \$0.8 million unfavorable foreign currency exchange impact. Subscription services revenues increased \$12.1 million for the nine months ended September 30, 2022, as compared to the same period in the prior year, primarily due to conversions to cloud-based subscriptions from existing on-premises customers, an increase in the use of subscription services by existing customers, and sales contracts with new customers, partially offset by a \$1.5 million unfavorable foreign currency exchange impact. We expect our subscription services revenues to continue to grow in future periods as we continue to promote our cloud offering to new and existing customers.

Product support revenues. The following table sets forth product support revenues (in thousands) and related percentage changes for the periods indicated:

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2022	2021	% Change	2022	2021	% Change
Product Support Revenues:						
Domestic	\$ 40,375	\$ 40,350	0.1%	\$ 118,861	\$ 121,179	-1.9%
International	25,635	30,037	-14.7%	80,821	90,884	-11.1%
Total product support revenues	<u>\$ 66,010</u>	<u>\$ 70,387</u>	-6.2%	<u>\$ 199,682</u>	<u>\$ 212,063</u>	-5.8%

Product support revenues are derived from providing technical software support and software updates and upgrades to customers. Product support revenues are recognized ratably over the term of the contract, which is generally one year. Product support revenues decreased \$4.4 million for the three months ended September 30, 2022, as compared to the same period in the prior year, primarily due to a \$3.8 million unfavorable foreign currency exchange impact and certain existing customers converting from perpetual product licenses with separate support contracts to our subscription services or term product licenses offerings. Product support revenues decreased \$12.4 million for the nine months ended September 30, 2022, as compared to the same period in the prior year, primarily due to an \$8.5 million unfavorable foreign currency exchange impact and certain existing customers converting from perpetual product licenses with separate support contracts to our subscription services or term product licenses offerings.

Other services revenues. The following table sets forth other services revenues (in thousands) and related percentage changes for the periods indicated:

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2022	2021	% Change	2022	2021	% Change
Other Services Revenues:						
Consulting						
Domestic	\$ 9,658	\$ 9,202	5.0%	\$ 28,982	\$ 27,728	4.5%
International	9,887	10,536	-6.2%	32,271	32,343	-0.2%
Total consulting revenues	<u>19,545</u>	<u>19,738</u>	-1.0%	<u>61,253</u>	<u>60,071</u>	2.0%
Education	1,105	1,186	-6.8%	3,571	3,631	-1.7%
Total other services revenues	<u>\$ 20,650</u>	<u>\$ 20,924</u>	-1.3%	<u>\$ 64,824</u>	<u>\$ 63,702</u>	1.8%

Consulting revenues. Consulting revenues are derived from helping customers plan and execute the deployment of our software. Consulting revenues did not materially change for the three months ended September 30, 2022, as compared to the same period in the prior year, primarily due to a \$1.7 million unfavorable foreign currency exchange impact having been substantially offset by an increase in average bill rates and an increase in billable hours worldwide. Consulting revenues increased \$1.2 million for the nine months ended September 30, 2022, as compared to the same period in the prior year, primarily due to an increase in billable hours worldwide and an increase in average bill rates, partially offset by a \$3.8 million unfavorable foreign currency exchange impact.

Education revenues. Education revenues are derived from the education and training that we provide to our customers to enhance their ability to fully utilize the features and functionality of our software. These offerings include self-tutorials, custom course development, joint training with customers' internal staff, and standard course offerings, with pricing dependent on the specific offering delivered. Education revenues did not materially change for the three and nine months ended September 30, 2022, as compared to the same periods in the prior year.

Costs and Expenses

Cost of revenues. The following table sets forth cost of revenues (in thousands) and related percentage changes for the periods indicated:

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2022	2021	% Change	2022	2021	% Change
Cost of Revenues:						
Product licenses and subscription services:						
Product licenses	\$ 406	\$ 383	6.0%	\$ 1,314	\$ 1,290	1.9%
Subscription services	6,395	4,282	49.3%	17,303	11,720	47.6%
Total product licenses and subscription services	6,801	4,665	45.8%	18,617	13,010	43.1%
Product support	5,224	4,679	11.6%	15,542	14,353	8.3%
Other services:						
Consulting	12,267	11,745	4.4%	38,404	36,515	5.2%
Education	1,093	1,230	-11.1%	3,703	4,028	-8.1%
Total other services	13,360	12,975	3.0%	42,107	40,543	3.9%
Total cost of revenues	\$ 25,385	\$ 22,319	13.7%	\$ 76,266	\$ 67,906	12.3%

Cost of product licenses revenues. Cost of product licenses revenues consists of referral fees paid to channel partners, the costs of product manuals and media, and royalties paid to third-party software vendors. Cost of product licenses revenues did not materially change for the three and nine months ended September 30, 2022, as compared to the same periods in the prior year.

Cost of subscription services revenues. Cost of subscription services revenues consists of equipment, facility and other related support costs, and personnel and related overhead costs. Subscription services headcount increased 33.8% to 95 at September 30, 2022 from 71 at September 30, 2021. Cost of subscription services revenues increased \$2.1 million for the three months ended September 30, 2022, as compared to the same period in the prior year, primarily due to a \$1.4 million increase in cloud hosting infrastructure costs, which is a result of the increased usage by new and existing cloud subscription services customers, and a \$0.5 million increase in employee salaries primarily attributable to an increase in average staffing levels and wage increases. Cost of subscription services revenues increased \$5.6 million for the nine months ended September 30, 2022, as compared to the same period in the prior year, primarily due to a \$3.6 million increase in cloud hosting infrastructure costs, which is a result of the increased usage by new and existing cloud subscription services customers, a \$1.4 million increase in employee salaries primarily attributable to an increase in average staffing levels and wage increases, and a \$0.5 million increase in variable compensation.

Cost of product support revenues. Cost of product support revenues consists of personnel and related overhead costs, including those under our Enterprise Support program. Our Enterprise Support program utilizes primarily consulting personnel to provide product support to our customers at our discretion. Compensation related to personnel providing Enterprise Support services is reported as cost of product support revenues. Product support headcount increased 3.6% to 171 at September 30, 2022 from 165 at September 30, 2021. Cost of product support revenues increased \$0.5 million for the three months ended September 30, 2022, as compared to the same period in the prior year. Cost of product support revenues increased \$1.2 million for the nine months ended September 30, 2022, as compared to the same period in the prior year, primarily due to a \$0.8 million increase in employee salaries primarily attributable to wage increases, and a \$0.7 million net increase in share-based compensation expense, partially offset by a \$0.5 million decrease in compensation and related costs attributable to non-product support personnel providing a decreased level of Enterprise Support services. The \$0.7 million net increase in share-based compensation expense is primarily due to the grant of additional awards under the 2013 Equity Plan. Included cost of product support revenues for the nine months ended September 30, 2022 is an aggregate \$0.7 million favorable foreign currency exchange impact.

Cost of consulting revenues. Cost of consulting revenues consists of personnel and related overhead costs, excluding those under our Enterprise Support program which are allocated to cost of product support revenues. Consulting headcount increased 15.3% to 453 at September 30, 2022 from 393 at September 30, 2021. Cost of consulting revenues increased \$0.5 million for the three months ended September 30, 2022, as compared to the same period in the prior year. Included in cost of consulting revenues for the three months ended September 30, 2022 is an aggregate \$1.4 million favorable foreign currency exchange impact. Cost of consulting revenues increased \$1.9 million for the nine months ended September 30, 2022, as compared to the same period in the prior year, primarily due to a \$0.9 million increase in employee salaries primarily attributable to an increase in average staffing levels and consulting personnel providing a decreased level of Enterprise Support services, and a \$0.9 million net increase in share-based compensation expense. The \$0.9 million net increase in share-based compensation expense is primarily due to the grant of additional awards under the 2013 Equity Plan. Included in cost of consulting revenues for the nine months ended September 30, 2022 is an aggregate \$3.1 million favorable foreign currency exchange impact.

Cost of education revenues. Cost of education revenues consists of personnel and related overhead costs. Education headcount decreased 38.9% to 22 at September 30, 2022 from 36 at September 30, 2021. Cost of education revenues did not materially change for the three and nine months ended September 30, 2022, as compared to the same periods in the prior year.

Sales and marketing expenses. Sales and marketing expenses consist of personnel costs, commissions, office facilities, travel, advertising, public relations programs, and promotional events, such as trade shows, seminars, and technical conferences. Sales and marketing headcount decreased 4.4% to 452 at September 30, 2022 from 473 at September 30, 2021. The following table sets forth sales and marketing expenses (in thousands) and related percentage changes for the periods indicated:

	Three Months Ended September 30,			%	Nine Months Ended September 30,			%
	2022	2021	Change		2022	2021	Change	
Sales and marketing expenses	\$ 35,409	\$ 38,209	-7.3%		\$ 105,511	\$ 116,728	-9.6%	

Sales and marketing expenses decreased \$2.8 million for the three months ended September 30, 2022, as compared to the same period in the prior year, primarily due to a \$3.6 million decrease in variable compensation, which decrease was primarily attributable to a net increase in capitalized commissions and a decrease in other personnel costs, and a \$0.5 million decrease in employee salaries, which decrease was primarily attributable to a decrease in average staffing levels, partially offset by wage increases. These decreases were partially offset by a \$1.3 million net increase in share-based compensation expense and a \$0.5 million increase in travel and entertainment expenditures that were undertaken as various COVID-19-related restrictions were lifted. The \$1.3 million net increase in share-based compensation expense is primarily due to the grant of additional awards under the 2013 Equity Plan. Included in sales and marketing expenses for the three months ended September 30, 2022 is an aggregate \$1.8 million favorable foreign currency exchange impact.

Sales and marketing expenses decreased \$11.2 million for the nine months ended September 30, 2022, as compared to the same period in the prior year, primarily due to a \$14.8 million decrease in variable compensation, which decrease was primarily attributable to a net increase in capitalized commissions and decreases in other personnel costs and employee relations expenses, a \$0.9 million decrease in employee salaries, which decrease was primarily attributable to a decrease in average staffing levels, partially offset by wage increases, and a \$0.7 million decrease in facility and other related support costs, partially offset by a \$4.4 million net increase in share-based compensation expense and a \$1.3 million increase in travel and entertainment expenditures that were undertaken as various COVID-19-related restrictions were lifted. The \$4.4 million net increase in share-based compensation expense is primarily due to the grant of additional awards under the 2013 Equity Plan, partially offset by the forfeiture of certain awards and the fair value remeasurement of certain liability-classified awards at the end of the reporting period. Included in sales and marketing expenses for the nine months ended September 30, 2022 is an aggregate \$4.2 million favorable foreign currency exchange impact.

Research and development expenses. Research and development expenses consist of the personnel costs for our software engineering personnel, depreciation of equipment, and other related costs. Research and development headcount increased 7.7% to 712 at September 30, 2022 from 661 at September 30, 2021. The following table summarizes research and development expenses (in thousands) and related percentage changes for the periods indicated:

	Three Months Ended September 30,			%	Nine Months Ended September 30,			%
	2022	2021	Change		2022	2021	Change	
Research and development expenses	\$ 30,498	\$ 28,211	8.1%		\$ 95,811	\$ 86,242	11.1%	

Research and development expenses increased \$2.3 million for the three months ended September 30, 2022, as compared to the same period in the prior year, primarily due to a \$1.7 million increase in employee salaries primarily attributable to wage increases and an increase in average staffing levels, partially offset by a shift in staffing levels to lower cost regions, and a \$0.8 million net increase in share-based compensation expense. The \$0.8 million net increase in share-based compensation expense is primarily due to the grant of additional awards under the 2013 Equity Plan. Included in research and development expenses for the three months ended September 30, 2022 is an aggregate \$0.8 million favorable foreign currency exchange impact.

Research and development expenses increased \$9.6 million for the nine months ended September 30, 2022, as compared to the same period in the prior year, primarily due to a \$6.7 million increase in employee salaries primarily attributable to wage increases and an increase in average staffing levels, partially offset by a shift in staffing levels to lower cost regions, and a \$2.7 million net increase in share-based compensation expense, partially offset by a \$0.9 million decrease in facility and other related support costs. The \$2.7 million net increase in share-based compensation expense is primarily due to the grant of additional awards under the 2013 Equity Plan, partially offset by certain awards that became fully vested and the fair value remeasurement of certain liability-classified awards at the end of the

reporting period. Included in research and development expenses for the nine months ended September 30, 2022 is an aggregate \$1.2 million favorable foreign currency exchange impact.

General and administrative expenses. General and administrative expenses consist of personnel and related overhead costs, and other costs of our executive, finance, human resources, information systems, and administrative departments, as well as third-party consulting, legal, and other professional fees. General and administrative headcount increased 3.5% to 267 at September 30, 2022 from 258 at September 30, 2021. The following table sets forth general and administrative expenses (in thousands) and related percentage changes for the periods indicated:

	Three Months Ended September 30,		%	Nine Months Ended September 30,		%
	2022	2021		2022	2021	
General and administrative expenses	\$ 27,283	\$ 23,751	14.9%	\$ 82,491	\$ 68,397	20.6%

General and administrative expenses increased \$3.5 million for the three months ended September 30, 2022, as compared to the same period in the prior year, primarily due to a \$2.1 million net increase in share-based compensation expense, a \$0.6 million increase in facility and other related support costs, and a \$0.5 million increase in compensation and related costs, partially offset by a \$0.6 million decrease in custodial fees incurred on our bitcoin holdings. The \$2.1 million net increase in share-based compensation expense is primarily due to the grant of additional awards under the 2013 Equity Plan, partially offset by certain awards that became fully vested. Included in general and administrative expenses for the three months ended September 30, 2022 is an aggregate \$0.5 million favorable foreign currency exchange impact.

General and administrative expenses increased \$14.1 million for the nine months ended September 30, 2022, as compared to the same period in the prior year, primarily due to a \$6.8 million net increase in share-based compensation expense, a \$2.8 million increase in costs related to the maintenance and operations of our corporate aircraft, a \$1.7 million increase in facility and other related support costs, a \$1.4 million increase in legal, consulting, and other advisory costs which includes costs from executing our bitcoin acquisition strategy, a \$1.0 million increase in employee salaries primarily attributable to wage increases and an increase in average staffing levels, partially offset by a shift in staffing levels to lower cost regions, a \$0.8 million increase in travel and entertainment expenditures that were undertaken as various COVID-19-related restrictions were lifted, and a \$0.6 million increase in bad debt expense, partially offset by a \$1.7 million decrease in custodial fees incurred on our bitcoin holdings. The \$6.8 million net increase in share-based compensation expense is primarily due to the grant of additional awards under the 2013 Equity Plan, partially offset by certain awards that became fully vested. Included in general and administrative expenses for the nine months ended September 30, 2022 is an aggregate \$1.2 million favorable foreign currency exchange impact.

Digital asset impairment losses. Digital asset impairment losses are recognized when the carrying value of our digital assets exceeds their lowest fair value at any time since their acquisition. Impaired digital assets are written down to fair value at the time of impairment, and such impairment loss cannot be recovered for any subsequent increases in fair value. The following table sets forth digital asset impairment losses (in thousands) and related percentage changes for the periods indicated:

	Three Months Ended September 30,		%	Nine Months Ended September 30,		%
	2022	2021		2022	2021	
Digital asset impairment losses	\$ 727	\$ 65,165	-98.9%	\$ 1,088,656	\$ 684,034	59.2%

We did not sell any of our digital assets during the three and nine months ended September 30, 2022 and 2021. We may continue to incur significant digital asset impairment losses in the future.

Interest Expense, Net

For the three and nine months ended September 30, 2022, interest expense, net, of \$14.1 million and \$38.3 million, respectively, was primarily related to the contractual interest expense and amortization of issuance costs related to our long-term debt arrangements. For the three and nine months ended September 30, 2021, interest expense, net, of \$10.7 million and \$17.5 million, respectively, was primarily related to the contractual interest expense and the amortization of issuance costs related to our long-term debt arrangements. Refer to Note 4, Long-term Debt, to the Consolidated Financial Statements for further information.

Other Income, Net

For the three and nine months ended September 30, 2022, other income, net, of \$4.9 million and \$12.2 million, respectively, were comprised primarily of foreign currency transaction net gains. For the three and nine months ended September 30, 2021, other income, net, of \$1.3 million and \$1.6 million, respectively, were comprised primarily of foreign currency transaction net gains.

Provision for (Benefit from) Income Taxes

We recorded a provision for income taxes of \$112.0 million on a pretax loss of \$1.108 billion for the nine months ended September 30, 2022 and a benefit from income taxes of \$217.4 million on a pretax loss of \$662.9 million for the nine months ended September 30, 2021. Our provision for income taxes increased from the same period in the prior year primarily due to the establishment of a valuation allowance on our deferred tax asset related to the impairment on our bitcoin holdings, attributable to the decrease in the market value of bitcoin as of September 30, 2022.

As of September 30, 2022, we had a valuation allowance of \$411.8 million primarily related to our deferred tax asset related to the impairment on our bitcoin holdings that, in our present estimation, more likely than not will not be realized. If the market value of bitcoin continues to decline or we are unable to regain profitability in future periods, we may be required to increase further the valuation allowance against our deferred tax assets, which could result in a charge that would materially adversely affect net income (loss) in the period in which the charge is incurred. To the extent the market value of bitcoin rises we may decrease the valuation allowance against our deferred tax asset. We will continue to regularly assess the realizability of deferred tax assets.

Our effective tax rate may fluctuate due to changes in our domestic and foreign earnings and losses, material discrete tax items, or a combination of these factors resulting from transactions or events.

Deferred Revenue and Advance Payments

Deferred revenue and advance payments represent amounts received or due from our customers in advance of our transferring our software or services to the customer. In the case of multi-year service contract arrangements, we generally do not invoice more than one year in advance of services and do not record deferred revenue for amounts that have not been invoiced. Revenue is subsequently recognized in the period(s) in which control of the software or services is transferred to the customer.

The following table summarizes deferred revenue and advance payments (in thousands), as of:

	September 30, 2022	December 31, 2021	September 30, 2021
Current:			
Deferred product licenses revenue	\$ 442	\$ 993	\$ 2,315
Deferred subscription services revenue	38,272	35,589	23,089
Deferred product support revenue	123,203	166,477	130,339
Deferred other services revenue	4,017	6,801	4,954
Total current deferred revenue and advance payments	<u>\$ 165,934</u>	<u>\$ 209,860</u>	<u>\$ 160,697</u>
Non-current:			
Deferred product licenses revenue	\$ 70	\$ 68	\$ 74
Deferred subscription services revenue	2,943	1,064	590
Deferred product support revenue	5,172	6,203	6,973
Deferred other services revenue	569	754	665
Total non-current deferred revenue and advance payments	<u>\$ 8,754</u>	<u>\$ 8,089</u>	<u>\$ 8,302</u>
Total current and non-current:			
Deferred product licenses revenue	\$ 512	\$ 1,061	\$ 2,389
Deferred subscription services revenue	41,215	36,653	23,679
Deferred product support revenue	128,375	172,680	137,312
Deferred other services revenue	4,586	7,555	5,619
Total current and non-current deferred revenue and advance payments	<u>\$ 174,688</u>	<u>\$ 217,949</u>	<u>\$ 168,999</u>

The portions of multi-year contracts that will be invoiced in the future are not presented on the balance sheet in “Accounts receivable, net” and “Deferred revenue and advance payments” and instead are included in the remaining performance obligation disclosure below. Total deferred revenue and advance payments decreased \$43.3 million as of September 30, 2022, as compared to December 31, 2021, primarily due to a decrease in deferred product support revenue from the timing of product support renewals and an increase in conversions from on-premises to subscription services contracts and revenue recognized on previously deferred other services revenue, partially offset by an increase in deferred revenue from new subscription services contracts. Total deferred revenue and advance payments increased \$5.7 million as of September 30, 2022, as compared to September 30, 2021, primarily due to an increase in deferred revenue from new subscription services contracts, partially offset by a decrease in deferred product support revenue from an increase in conversions from on-premises to subscription services contracts and revenue recognized on previously deferred product licenses and other services revenues. Included in our international deferred revenue balances at September 30, 2022 are \$9.9 million and \$11.0 million unfavorable foreign currency impacts from the general strengthening of the U.S. dollar compared to December 31, 2021 and September 30, 2021, respectively.

Our remaining performance obligation represents all future revenue under contract and includes deferred revenue and advance payments and billable non-cancelable amounts that will be invoiced and recognized as revenue in future periods. The remaining performance obligation excludes contracts that are billed in arrears, such as certain time and materials contracts. As of September 30, 2022, we had an aggregate transaction price of \$255.9 million allocated to the remaining performance obligation related to product support, subscription services, product licenses, and other services contracts. We expect to recognize approximately \$190.6 million of the remaining performance obligation over the next 12 months and the remainder thereafter. However, the timing and ultimate recognition of our deferred revenue and advance payments and other remaining performance obligations depend on our satisfaction of various performance obligations, and the amount of deferred revenue and advance payments and remaining performance obligations at any date should not be considered indicative of revenues for any succeeding period.

Liquidity and Capital Resources

Liquidity. Our principal sources of liquidity are cash and cash equivalents and on-going collection of our accounts receivable. Cash and cash equivalents may include holdings in bank demand deposits, money market instruments, certificates of deposit, and U.S. Treasury securities. Under our Treasury Reserve Policy and bitcoin acquisition strategy, we use a significant portion of our cash, including cash generated from capital raising transactions, to acquire bitcoins, which are classified as indefinite-lived intangible assets. In September 2022, we entered into a new at-the-market equity offering program, pursuant to which we may from time-to-time issue and sell shares of our class A common stock having an aggregate offering price of up to \$500.0 million. For additional information, see “At-the-Market Equity Offerings” below.

As of September 30, 2022 and December 31, 2021, the amount of cash and cash equivalents held by our U.S. entities was \$27.3 million and \$13.1 million, respectively, and by our non-U.S. entities was \$33.1 million and \$50.3 million, respectively. We earn a significant amount of our revenues outside the United States. We repatriated foreign earnings and profits of \$57.5 million during 2021 and \$34.7 million during the nine months ended September 30, 2022.

Our material contractual obligations and cash requirements consist of:

- principal and interest payments related to our long-term debt;
- rent payments under noncancellable operating leases;
- payments related to the mandatory deemed repatriation transition tax (the “Transition Tax”) under the U.S. Tax Cuts and Jobs Act (the “Tax Act”);
- payments under various purchase agreements, primarily related to third-party software supporting our products, marketing, and operations; and
- ongoing personnel-related expenditures and vendor payments.

The above items are explained in further detail in Note 4, Long-term Debt, to the Consolidated Financial Statements included in this Quarterly Report as well as under “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources” included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 and in the Notes to the Consolidated Financial Statements included therein. There have been no changes to our material contractual obligations and cash requirements since December 31, 2021, except for the issuance of the 2025 Secured Term Loan and other long-term secured debt, as described in Note 4, Long-term Debt, to the Consolidated Financial Statements.

We believe that existing cash and cash equivalents held by us and cash and cash equivalents anticipated to be generated by us are sufficient to meet working capital requirements, anticipated capital expenditures, and contractual obligations for at least the next 12 months. Beyond the next 12 months, our long-term cash requirements are primarily for obligations related to our long-term debt. We have principal due upon maturity of our long-term debt instruments in the aggregate of \$2.413 billion in addition to \$2.4 million in coupon interest due each semi-annual period for the 2025 Convertible Notes, \$15.3 million in coupon interest due each semi-annual period for the 2028 Secured Notes, an estimated \$1.1 million due monthly in variable coupon interest for the 2025 Secured Term Loan (based on the interest rate in effect at September 30, 2022), and \$0.1 million due monthly in principal and interest related to our other long-term secured debt. We also have long-term cash requirements for obligations related to our operating leases, the Transition Tax, and our various purchase agreements. If cash and cash equivalents generated by future operating activities are not sufficient to enable us to satisfy these obligations, we may seek to generate cash and cash equivalents from other sources. The sources could include the

sale of bitcoins, additional borrowings collateralized by our bitcoins, as well as the issuance and sale of shares of our class A common stock. Furthermore, if certain conditions are met, we may have the right to elect to settle the Convertible Notes upon a conversion of such Convertible Notes in shares of our class A common stock, or a combination of cash and shares of class A common stock, which may enable us to reduce the amount of our cash obligations under the Convertible Notes.

As of September 30, 2022, we held approximately 130,000 bitcoins, of which approximately 85,059 are unencumbered. We do not believe we will need to sell or engage in other transactions with respect to any of our bitcoins within the next twelve months to meet our working capital requirements, although we may from time to time sell or engage in other transactions with respect to our bitcoins as part of treasury management operations, as noted above. The bitcoin market historically has been characterized by significant volatility in its price, limited liquidity and trading volumes compared to sovereign currencies markets, relative anonymity, a developing regulatory landscape, susceptibility to market abuse and manipulation, and various other risks inherent in its entirely electronic, virtual form and decentralized network. During times of instability in the bitcoin market, we may not be able to sell our bitcoins at reasonable prices or at all. As a result, our bitcoins are less liquid than our existing cash and cash equivalents and may not be able to serve as a source of liquidity for us to the same extent as cash and cash equivalents. In addition, upon sale of our bitcoin, we may incur additional taxes related to any realized gains or we may incur capital losses as to which the tax deduction may be limited.

The following table sets forth a summary of our cash flows (in thousands) and related percentage changes for the periods indicated:

	Nine Months Ended September 30,		% Change
	2022	2021	
Net cash provided by operating activities	\$ 21,409	\$ 90,586	-76.4%
Net cash used in investing activities	\$ (233,329)	\$ (2,037,353)	-88.5%
Net cash provided by financing activities	\$ 220,051	\$ 1,946,169	-88.7%

Net cash provided by operating activities. The primary source of our cash provided by operating activities is cash collections of our accounts receivable from customers following the sales and renewals of our product licenses and product support, as well as consulting, education, and subscription services. Our primary uses of cash in operating activities are for personnel-related expenditures for software development, personnel-related expenditures for providing consulting, education, and subscription services, and for sales and marketing costs, general and administrative costs, income taxes, and interest expense related to our long-term debt arrangements. Non-cash items to further reconcile net loss to net cash provided by operating activities consist primarily of depreciation and amortization, reduction in the carrying amount of operating lease right-of-use assets, credit losses and sales allowances, deferred taxes, release of liabilities for unrecognized tax benefits, share-based compensation expense, digital asset impairment losses, and amortization of debt issuance costs on our long-term debt.

Net cash provided by operating activities decreased \$69.2 million for the nine months ended September 30, 2022, as compared to the same period in the prior year, due to a \$774.6 million increase in net loss and a \$26.4 million decrease from changes in operating assets and liabilities, partially offset by a \$731.8 million increase from changes in non-cash items.

Net cash used in investing activities. The changes in net cash used in investing activities primarily relate to purchases of digital assets and expenditures on property and equipment. Net cash used in investing activities decreased \$1.804 billion for the nine months ended September 30, 2022, as compared to the same period in the prior year, primarily due to a \$1.804 billion decrease in purchases of bitcoins. During the nine months ended September 30, 2022, we purchased bitcoin using \$190.5 million of the net proceeds from the issuance of the 2025 Secured Term Loan and Excess Cash. During the nine months ended September 30, 2021, we purchased bitcoin using the net proceeds from the issuance of our 2027 Convertible Notes and 2028 Secured Notes, the sale of class A common stock under the 2021 Open Market Sale Agreement, and Excess Cash.

Net cash provided by financing activities. The changes in net cash provided by (used in) financing activities primarily relate to the issuance of our long-term debt, the sale of class A common stock under the 2021 Open Market Sale Agreement, the exercise of stock options under the 2013 Equity Plan, the sales of class A common stock under the 2021 ESPP, the payment of withholding tax on vesting of restricted stock units, and the repayments of other long-term secured debt. Net cash provided by financing activities decreased \$1.726 billion for the nine months ended September 30, 2022, as compared to the same period in the prior year, primarily due to \$1.050 billion in gross proceeds from our 2027 Convertible Notes during the nine months ended September 30, 2021, \$500.0 million in gross proceeds from our 2028 Secured Notes during the nine months ended September 30, 2021, \$404.0 million in gross proceeds from the sale of class A common stock offered under the 2021 Open Market Sale Agreement during the nine months ended September 30, 2021, a \$30.0 million decrease in proceeds from the exercise of stock options under the 2013 Equity Plan in the nine months ended September 30, 2022 compared to the same period in the prior year, and \$1.1 million of withholding tax paid on vesting of restricted stock units during the nine months ended September 30, 2022, partially offset by \$204.7 million in gross proceeds, net of lender fees, from our 2025 Secured Term Loan during the nine months ended September 30, 2022, \$24.7 million in issuance costs paid for our Convertible Notes during the nine months ended September 30, 2021, \$12.8 million in issuance costs paid for our 2028 Secured Notes during the nine months ended September 30, 2021, \$11.1 million in gross proceeds from the issuance of other long-term secured debt during the nine months ended September 30, 2022, \$4.5 million of issuance costs paid related to the 2021 Open Market Sale Agreement during the nine months ended September 30, 2021, and a \$1.6 million increase in proceeds from the sales of class A common stock under the 2021 ESPP during the nine months ended September 30, 2022 compared to the same period in the prior year.

Long-term Debt

In December 2020, we issued \$650.0 million aggregate principal amount of the 2025 Convertible Notes and in February 2021, we issued \$1.050 billion aggregate principal amount of the 2027 Convertible Notes. We used the net proceeds from the issuance of the Convertible Notes to acquire bitcoin. The terms of the Convertible Notes are discussed more fully in Note 4, Long-term Debt, to the Consolidated Financial Statements included in this Quarterly Report as well as Note 8, Long-term Debt, to the Consolidated Financial Statements of our Annual Report on Form 10-K for the fiscal year ended December 31, 2021. For the three months ended September 30, 2022 and 2021, we did not pay any interest to holders of the 2025 Convertible Notes. For the nine months ended September 30, 2022 and 2021, we paid \$2.4 million and \$2.5 million, respectively, in interest to holders of the 2025 Convertible Notes. The 2027 Convertible Notes do not bear regular interest and we have not paid any special interest to holders of the 2027 Convertible Notes to date.

In June 2021, we issued \$500.0 million aggregate principal amount of the 2028 Secured Notes. We used the net proceeds from the issuance of the 2028 Secured Notes to acquire bitcoin. As of September 30, 2022, approximately 14,890 of the bitcoins held by the Company serve as part of the collateral for the 2028 Secured Notes. The terms of the 2028 Secured Notes are discussed more fully in Note 4, Long-term Debt to the Consolidated Financial Statements included in this Quarterly Report as well as Note 8, Long-term Debt, to the Consolidated Financial Statements of our Annual Report on Form 10-K for the fiscal year ended December 31, 2021. For the three months ended September 30, 2022 and 2021, we did not pay any interest to holders of the 2028 Secured Notes. For the nine months ended September 30, 2022, we paid \$15.3 million in interest to holders of the 2028 Secured Notes. We did not pay any interest to holders of the 2028 Secured Notes for the nine months ended September 30, 2021.

In March 2022, MacroStrategy, our wholly-owned subsidiary, entered into a Credit and Security Agreement with Silvergate Bank, pursuant to which Silvergate Bank issued the \$205.0 million 2025 Secured Term Loan to MacroStrategy. We used \$190.5 million of the net proceeds from the issuance of the 2025 Secured Term Loan to acquire bitcoin, used \$5.0 million of the net proceeds to establish the Reserve Account which serves as collateral for the 2025 Secured Term Loan, and expect to use the remaining net proceeds to pay fees, interest, and expenses related to the 2025 Secured Term Loan or for general corporate purposes. As of September 30, 2022, approximately 30,051 of the bitcoins held by MacroStrategy serve as part of the collateral for the 2025 Secured Term Loan. Subject to certain conditions described in Note 4, Long-term Debt, to the Consolidated Financial Statements included in this Quarterly Report, MacroStrategy can withdraw excess collateral held in the Bitcoin Collateral Account. The terms of the 2025 Secured Term Loan are discussed more fully in Note 4, Long-term Debt, to the Consolidated Financial Statements. For the three and nine months ended September 30, 2022, we paid \$2.7 million and \$4.3 million, respectively, in interest to Silvergate.

In June 2022, we, through one of our wholly-owned subsidiaries, entered into a secured term loan agreement in the amount of \$11.1 million, bearing interest at an annual rate of 5.2%, and maturing in June 2027. For the three and nine months ended September 30, 2022, we paid \$0.3 million in principal and interest to the lender.

At-the-Market Equity Offerings

On June 14, 2021, we entered into the 2021 Open Market Sale Agreement with Jefferies, pursuant to which we issued and sold shares of our class A common stock having an aggregate offering price of approximately \$1.0 billion from time to time through Jefferies. The terms of the 2021 Open Market Sale Agreement are discussed more fully in Note 10, Open Market Offerings, to the Consolidated Financial Statements. During the three and nine months ended September 30, 2021, we issued and sold 555,179 shares of our class A common stock under the 2021 Open Market Sale Agreement, at an average gross price per share of approximately \$727.64, for aggregate net proceeds (less \$4.5 million in sales commissions and expenses) of approximately \$399.5 million. As of December 31, 2021, the cumulative aggregate offering price of the shares of class A common stock sold under the 2021 Open Market Sale Agreement was approximately \$1.0 billion, inclusive of sales commissions, constituting the maximum program amount under the 2021 Open Market Sale Agreement.

On September 9, 2022, we entered into a Sales Agreement (the "2022 Sales Agreement") with Cowen and Company LLC and BTIG, LLC, as agents (collectively, the "2022 Sales Agents"), pursuant to which we may issue and sell shares of our class A common stock having an aggregate offering price of up to \$500.0 million from time to time through the 2022 Sales Agents. The terms of the 2022 Sales Agreement are discussed more fully in Note 10, At-the-Market Equity Offerings, to the Consolidated Financial Statements. As of September 30, 2022, we had not issued and sold any shares of class A common stock under the 2022 Sales Agreement.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The following discussion about our market risk exposures involves forward-looking statements. Actual results could differ materially from those projected in the forward-looking statements.

We are exposed to the impact of both market price changes in bitcoin and foreign currency fluctuations.

Market Price Risk of Bitcoin. We have used a significant portion of our cash, including cash generated from capital raising transactions, to acquire bitcoin and, as of September 30, 2022, we held approximately 130,000 bitcoins. The carrying value of our bitcoins as of September 30, 2022 was \$1.993 billion, which reflects cumulative impairments of \$1.990 billion, on our Consolidated Balance Sheet. We account for our bitcoin as indefinite-lived intangible assets, which are subject to impairment losses if the fair value of our bitcoin decreases below their carrying value at any time since their acquisition. Impairment losses cannot be recovered for any subsequent increase in fair value. For example, the market price of one bitcoin on the Coinbase exchange (our principal market for bitcoin) ranged from \$17,567.45 to \$48,240.00 during the nine months ended September 30, 2022, but the carrying value of each bitcoin we held at the end of the reporting period reflects the lowest price of one bitcoin quoted on the active exchange at any time since its acquisition. Therefore, negative swings in the market price of bitcoin could have a material impact on our earnings and on the carrying value of our digital assets. Positive swings in the market price of bitcoin are not reflected in the carrying value of our digital assets and impact earnings only when the bitcoin is sold at a gain. For the nine months ended September 30, 2022, we incurred an impairment loss of \$1.089 billion on our bitcoin.

Foreign Currency Risk. We conduct a significant portion of our business in currencies other than the U.S. dollar, the currency in which we report our Consolidated Financial Statements. International revenues accounted for 38.1% and 41.8% of our total revenues for the three months ended September 30, 2022 and 2021, respectively, and 39.7% and 43.3% of our total revenues for the nine months ended September 30, 2022 and 2021, respectively. We anticipate that international revenues will continue to account for a significant portion of our total revenues. The functional currency of each of our foreign subsidiaries is generally the local currency.

Assets and liabilities of our foreign subsidiaries are translated into U.S. dollars at exchange rates in effect as of the applicable Balance Sheet date and any resulting translation adjustments are included as an adjustment to stockholders' equity. Revenues and expenses generated from these subsidiaries are translated at average monthly exchange rates during the quarter in which the transactions occur. Gains and losses from transactions in local currencies are included in net income (loss).

As a result of transacting in multiple currencies and reporting our Consolidated Financial Statements in U.S. dollars, our operating results may be adversely impacted by currency exchange rate fluctuations in the future. The impact of foreign currency exchange rate fluctuations on current and comparable periods is described in the "Non-GAAP Financial Measures" section under "Part I. Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations."

We cannot predict the effect of exchange rate fluctuations upon our future results. We attempt to minimize our foreign currency risk by converting our excess foreign currency held in foreign jurisdictions to U.S. dollar-denominated cash and investment accounts.

As of September 30, 2022 and December 31, 2021, a 10% adverse change in foreign currency exchange rates versus the U.S. dollar would have decreased our aggregate reported cash and cash equivalents by 3.3% and 4.0%, respectively. If average exchange rates during the nine months ended September 30, 2022 had changed unfavorably by 10%, our revenues for the nine months ended September 30, 2022 would have decreased by 3.6%. During the nine months ended September 30, 2022, our revenues were lower by 4.3% as a result of a 9.7% unfavorable change in weighted average exchange rates, as compared to the same period in the prior year.

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, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Quarterly Report. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their control objectives. Based on the evaluation of our disclosure controls and procedures as of the end of the period covered by this Quarterly Report, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Controls. No change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the three months ended September 30, 2022 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. We are continually monitoring and assessing the effect of the COVID-19 pandemic on our internal control over financial reporting to minimize the impact on the design and operating effectiveness of such internal control. We have not experienced any material impact on our internal control over financial reporting despite the fact that many of our employees continue to work remotely.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

We are involved in various legal proceedings arising in the normal course of business, including the matter described below. Although the outcomes of these legal proceedings are inherently difficult to predict, we do not expect the resolution of these legal proceedings to have a material adverse effect on our financial position, results of operations, or cash flows.

On August 31, 2022, the District of Columbia (the “District”), through its Office of the Attorney General, filed a civil complaint in the Superior Court of the District of Columbia naming as defendants (i) Michael J. Saylor, the Chairman of our Board of Directors and our Executive Chairman, in his personal capacity, and (ii) the Company. The District is seeking, among other relief, monetary damages under the District’s False Claims Act for the alleged failure of Mr. Saylor to pay personal income taxes to the District over a number of years together with penalties, interest, and treble damages. The complaint alleges that the amount of personal income taxes purportedly involved is more than \$25 million. The complaint also alleges that we violated the District’s False Claims Act by conspiring to assist Mr. Saylor’s alleged failure to pay personal income taxes. We believe that the District’s claims against us have no merit and we are defending aggressively against these allegations. On October 26, 2022, we filed a motion to dismiss the District’s complaint. We filed a motion to stay discovery on September 28, 2022, and the court granted this motion on October 28, 2022. The outcome of this matter is not presently determinable.

Item 1A. Risk Factors

You should carefully consider the risks described below before making an investment decision. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations.

If any of the following risks occur, our business, financial condition, or results of operations could be materially adversely affected. In such case, the market price of our class A common stock could decline, and you may lose all or part of your investment.

Risks Related to Our Business in General

Our quarterly operating results, revenues, and expenses may fluctuate significantly, which could have an adverse effect on the market price of our stock

For many reasons, including those described below, our operating results, revenues, and expenses have varied in the past and may vary significantly in the future from quarter to quarter. These fluctuations could have an adverse effect on the market price of our class A common stock.

Fluctuations in Quarterly Operating Results. Our quarterly operating results may fluctuate, in part, as a result of:

- fluctuations in the price of bitcoin, of which we have significant holdings and with respect to which we expect to continue to make significant future purchases, and potential material impairment charges that may be associated therewith;
- any sales by us of our bitcoin at prices above their then current carrying costs, which would result in our recording gains upon sale of our digital assets;
- regulatory, commercial, and technical developments related to bitcoin or the bitcoin blockchain;
- the size, timing, volume, and execution of significant orders and deliveries;
- the mix of our offerings ordered by customers, including product licenses and cloud subscriptions, which can affect the extent to which revenue is recognized immediately or over future quarterly periods;
- the timing of the release or delivery of new or enhanced offerings and market acceptance of new and enhanced offerings;
- the timing of announcements of new offerings by us or our competitors;
- changes in our pricing policies or those of our competitors;
- the length of our sales cycles;
- seasonal or other buying patterns of our customers;
- changes in our operating expenses;
- the impact of the COVID-19 pandemic, or other future infectious disease pandemics, on the global economy and on our customers, suppliers, employees, and business;
- the timing of research and development projects;
- utilization of our consulting and education services, which can be affected by delays or deferrals of customer implementation of our software;
- fluctuations in foreign currency exchange rates;
- bilateral or multilateral trade tensions, which could affect our offerings in particular foreign markets;

- our profitability and expectations for future profitability and their effect on our deferred tax assets and net income for the period in which any adjustment to our net deferred tax asset valuation allowance may be made;
- increases or decreases in our liability for unrecognized tax benefits; and
- changes in customer decision-making processes or customer budgets.

Limited Ability to Adjust Expenses. We base our operating expense budgets on expected revenue trends and strategic objectives. Many of our expenses, such as interest expense on our long-term debt, office leases and certain personnel costs, are relatively fixed. We may be unable to adjust spending quickly enough to offset any unexpected revenue shortfall or impairment losses related to our digital assets. Accordingly, any shortfall in revenue from our enterprise analytics software business or impairment losses related to our digital assets may cause significant variation in operating results in any quarter.

Based on the above factors, we believe quarter-to-quarter comparisons of our operating results are not a good indication of our future performance. It is possible that in one or more future quarters, our operating results may be below the expectations of public market analysts and investors. In that event, the market price of our class A common stock may fall.

We may not be able to regain or increase profitability in the future

We generated a net loss for the nine months ended September 30, 2022, primarily due to digital asset impairment losses, and we may not be able to regain or increase profitability on a quarterly or annual basis in the future. If our revenues are not sufficient to offset our operating expenses, we are unable to adjust our operating expenses in a timely manner in response to any shortfall in anticipated revenue, or we incur significant impairment losses related to our digital assets, we may incur operating losses in future periods, our profitability may decrease, or we may cease to be profitable. As a result, our business, results of operations, and financial condition may be materially adversely affected.

As of September 30, 2022, we had \$233.0 million of deferred tax assets, which reflects a \$411.8 million valuation allowance. The largest deferred tax asset relates to the impairment on our bitcoin holdings. If the market value of bitcoin continues to decline, we may be required to increase further the valuation allowance against the deferred tax asset. Additionally, if we are unable to regain or increase profitability in the future, we may also be required to increase the valuation allowance against the remaining deferred tax assets. A significant increase in the valuation allowance could result in a charge that would materially adversely affect net income in the period in which the charge is incurred.

We may have exposure to greater than anticipated tax liabilities

We are subject to income taxes and non-income taxes in a variety of domestic and foreign jurisdictions. Our future income tax liability could be materially adversely affected by earnings that are lower than anticipated in jurisdictions where we have lower statutory rates, earnings that are higher than anticipated in jurisdictions where we have higher statutory rates, changes in the valuation of our deferred tax assets and liabilities, changes in the amount of our unrecognized tax benefits, or changes in tax laws, regulations, accounting principles, or interpretations thereof. In addition, if we sold any of our bitcoin at prices greater than the cost basis of the bitcoin sold, we would incur a tax liability with respect to any gain recognized, and such tax liability could be material.

Changes in the tax laws of foreign jurisdictions could arise, including as a result of the project undertaken by the Organisation for Economic Co-operation and Development (“OECD”) to combat base erosion and profit shifting (“BEPS”). The OECD, which represents a coalition of member countries, has issued recommendations that, in some cases, make substantial changes to numerous long-standing tax positions and principles. These changes, many of which have been adopted or are under active consideration by OECD members and/or other countries, could increase tax uncertainty and may adversely affect our provision for income taxes.

In addition, in response to significant market volatility and disruptions to business operations resulting from the COVID-19 pandemic, legislatures and taxing authorities in many jurisdictions in which we operate have implemented, and in the future may implement additional changes to their tax rules. As part of the U.S. Congress’s response to the COVID-19 pandemic, the Families First Coronavirus Response Act (“FFCRA”) and the Coronavirus Aid, Relief, and Economic Security Act (the “CARES Act”) were enacted in March 2020. Both contain numerous tax provisions. Regulatory guidance under the Tax Act, FFCRA, and CARES Act is and continues to be forthcoming, and such guidance could ultimately increase or lessen the impact of these laws on our business and financial condition. Additional legislation may be enacted in connection with the COVID-19 pandemic, some of which could have tax provisions that impact us. In addition, it is uncertain if and to what extent various states will conform to the Tax Act, FFCRA, or CARES Act. These changes in law could include modifications that have temporary effect or more permanent changes. The impact of these changes on us, our long-term tax planning, and our effective tax rate could be material.

Our determination of our tax liability is subject to review by applicable domestic and foreign tax authorities. Any adverse outcome of such reviews could have an adverse effect on our operating results and financial condition. The determination of our worldwide

provision for income taxes and other tax liabilities requires significant judgment and, in the ordinary course of business, there are many transactions and calculations where the ultimate tax determination is uncertain. Moreover, as a multinational business, we have subsidiaries that engage in many intercompany transactions in a variety of tax jurisdictions where the ultimate tax determination is uncertain.

We also have contingent tax liabilities that, in management's judgment, are not probable of assertion. If such unasserted contingent liabilities were to be asserted, or become probable of assertion, we may be required to record significant expenses and liabilities in the period in which these liabilities are asserted or become probable of assertion.

As a result of these and other factors, the ultimate amount of tax obligations owed may differ from the amounts recorded in our financial statements and any such difference may materially affect our financial results in future periods in which we change our estimates of our tax obligations or in which the ultimate tax outcome is determined.

Risks Related to Our Bitcoin Acquisition Strategy and Holdings

Our bitcoin acquisition strategy exposes us to various risks associated with bitcoin

Bitcoin is a highly volatile asset that has traded below \$20,000 per bitcoin and above \$65,000 per bitcoin on the Coinbase exchange (our principal market for bitcoin) in the 12 months preceding the date of this Quarterly Report. During the nine months ended September 30, 2022, the significant decrease in the trading price of bitcoin significantly reduced the value of the bitcoin we hold. Bitcoin does not pay interest or other returns and so our ability to generate cash from our bitcoin holdings depends on sales or implementing strategies that we may consider to create income streams or otherwise generate funds using our bitcoin holdings, including lending bitcoin to counterparties. As of the date of this Quarterly Report on Form 10-Q, we have not sold any bitcoin or implemented any such revenue generating strategies. If we continue to increase our overall holdings of bitcoin in the future, our bitcoin holdings will have a greater impact on our financial results and the market price of our class A common stock. See "Risks Related to Our Bitcoin Acquisition Strategy and Holdings – Our historical financial statements do not reflect the potential variability in earnings that we may experience in the future relating to our bitcoin holdings."

We are continually examining the risks and rewards of our bitcoin acquisition strategy. This strategy has not been tested over time or under various market conditions. For example, although we believe bitcoin can serve as a hedge against inflation in the long term, the short term price of bitcoin has been volatile in recent periods and has declined even as the inflation rate increased. Some investors and other market participants may disagree with our bitcoin acquisition strategy or actions we undertake to implement it. If bitcoin prices continue to fall or our bitcoin acquisition strategy otherwise proves unsuccessful, our financial condition, results of operations, and the market price of our class A common stock would be adversely impacted.

All of the bitcoin we own is held in custody accounts at institutional grade digital asset custodians. We believe that existing law and the terms and conditions of our contractual arrangements with our custodians would not result in the bitcoin held by our custodians being considered part of the custodian's bankruptcy estate were the custodian to file for bankruptcy. However, applicable insolvency law is not fully developed with respect to the holding of digital assets in custodial accounts and, if our custodially-held bitcoin were, in the event of a bankruptcy of any of our custodians, nevertheless considered to be the property of a bankruptcy estate, the bitcoin custodially-held on our behalf could be subject to bankruptcy proceedings and we could be treated as a general unsecured creditor of the custodian, inhibiting our ability to exercise ownership rights with respect to such bitcoin. Any such outcome could have a material adverse effect on our financial condition and the market price of our class A common stock.

While our bitcoin is currently owned directly by us or our wholly owned subsidiaries, we may investigate other potential approaches to owning bitcoin, including indirect ownership (for example, through ownership interests in a fund that owns bitcoin). If we were to own all or a portion of our bitcoin indirectly, the accounting treatment for our bitcoin, as well as our ability to use our bitcoin as collateral for additional borrowings, may correspondingly change. A change in the accounting treatment of our bitcoin holdings could have a material impact on our results of operations in future periods and could increase the volatility of our reported results of operations as well as affect the carrying value of our bitcoin on our balance sheet, which in turn could have a material adverse effect on our financial results and the market price of our class A common stock.

The price of bitcoin may be influenced by legal, commercial, and technical factors that are highly uncertain, and fluctuations in the price of bitcoin are likely to influence our financial results and the market price of our class A common stock

Fluctuations in the price of bitcoin have in the past and are likely to continue to influence our financial results and the market price of our class A common stock. Our financial results and the market price of our class A common stock would be adversely affected, and our business and financial condition would be negatively impacted, if the price of bitcoin decreased substantially, including as a result of:

- decreased user and investor confidence in bitcoin;
- investment and trading activities of highly active retail and institutional users, speculators, miners and investors;

- negative publicity or events relating to bitcoin, including potential public backlash against bitcoin to the extent the public views bitcoin as a vehicle that may be used to circumvent sanctions, including the recent sanctions imposed on Russia related to the ongoing conflict between Russia and Ukraine;
- negative or unpredictable media or social media coverage of bitcoin;
- negative public sentiment related to the actual or perceived environmental impact of bitcoin and related activities, including environmental concerns raised by private individuals, governmental, non-governmental organizations, and other actors related to the energy resources consumed in the bitcoin mining process;
- changes in consumer preferences and the perceived value or prospects of bitcoin;
- competition from other digital assets that exhibit better speed, security, scalability, or energy efficiency, that feature other more favored characteristics, that are backed by governments, including the U.S. government, or reserves of fiat currencies, or that represent ownership or security interests in physical assets;
- due to the correlation between the prices of bitcoin and other digital assets, a decrease in the price of other digital assets, including as a result of the crash in one or more digital assets or platforms, such as the May 2022 crash of the stablecoin Terra USD, or widespread defaults on digital asset exchanges, trading venues or lending platforms, such as the widespread default that affected and contributed to the crash and subsequent filing for bankruptcy protection of the digital asset lending platform Celsius Network;
- the identification of Satoshi Nakamoto, the pseudonymous person or persons who developed bitcoin, or the transfer of substantial amounts of bitcoin from bitcoin wallets attributed to Mr. Nakamoto;
- interruptions in service or failures of the principal markets for bitcoin, for example the announcement by the digital asset lending firm Celsius Network that it would freeze withdrawals and transfers from its accounts and subsequent filing for bankruptcy protection;
- the bankruptcy, liquidation, or market concerns about the financial viability, of one or more digital asset custodians, trading venues, lending platforms, or investment funds, such as the digital asset lending platforms Celsius Network and Voyager Digital Holdings filing for bankruptcy protection in 2022, and the ordered liquidation of the digital asset investment fund Three Arrows Capital in 2022;
- regulatory, legislative, enforcement and judicial actions that adversely affect the price, ownership, transferability, or public perception of bitcoin, or that adversely affect the operations of digital asset custodians or trading venues;
- further reductions in mining rewards of bitcoin, including block reward halving events, which are events that occur after a specific period of time that reduce the block reward earned by “miners” who validate bitcoin transactions;
- transaction congestion and fees associated with processing transactions on the bitcoin network;
- changes in the level of interest rates and inflation, monetary policies of governments, trade restrictions, and fiat currency devaluations;
- developments in mathematics or technology, including in digital computing, algebraic geometry and quantum computing, that could result in the cryptography being used by bitcoin becoming insecure or ineffective; and
- changes in national and international economic and political conditions, including, without limitation, the adverse impact attributable to the economic and political instability caused by the current conflict between Russia and Ukraine and the economic sanctions adopted in response to the conflict.

In addition, bitcoin and other digital assets are relatively novel and are subject to various risks and uncertainties that may adversely impact their price. The application of securities laws and other laws and regulations to such assets is unclear in certain respects, and it is possible that regulators in the United States or foreign countries may interpret or apply existing laws and regulations in a manner that adversely affects the price of bitcoin.

The U.S. federal government, states, regulatory agencies, and foreign countries may also enact new laws and regulations that could materially impact the price of bitcoin or the ability of individuals or institutions such as us to own or transfer bitcoin. For example:

- On March 9, 2022, President Biden signed an executive order relating to cryptocurrencies. While the executive order did not mandate the adoption of any specific regulations, it instructed various federal agencies to consider potential regulatory measures, including the evaluation of the creation of a U.S. Central Bank digital currency. On September 16, 2022, the White House released a framework for digital asset development, based on reports from various government agencies, including the U.S. Department of Treasury, the Department of Justice, and the Department of Commerce. Among other things, the framework encourages regulators to pursue enforcement actions, issue guidance and rules to address current and emergent risks, support the development and use of innovative technologies by payment providers to increase access to instant payments, consider creating a federal framework to regulate nonbank payment providers, and evaluate whether to call upon Congress to amend the Bank Secrecy Act and laws against unlicensed money transmission to apply explicitly to digital asset service providers.
- On September 8, 2022, the White House Office of Science and Technology Policy issued a report in coordination with other federal agencies relating to the climate and energy implications of digital assets, including Bitcoin, in the United States.

Among its findings are that digital assets are energy intensive and drive significant environmental impacts, and the report recommends further study of the environmental impact of digital assets and the development of environmental performance regulations for digital asset miners, which may include limiting or eliminating digital assets that use high energy intensity consensus mechanisms, including the proof-of-work consensus mechanisms on which the bitcoin blockchain is based.

- On April 4, 2022, SEC Chair Gary Gensler announced that he has asked SEC staff to work (i) to register and regulate digital asset platforms like securities exchanges; (ii) with the Commodities Futures Trading Commission on how to jointly address digital asset platforms that trade both securities and non-securities; (iii) on segregating out digital asset platforms' custody of customer assets, if appropriate; and (iv) on segregating out the market making functions of digital asset platforms, if appropriate. Similarly, foreign government authorities have recently expanded their efforts to restrict certain activities related to bitcoin and other digital assets.
- In the European Union, in October 2022, the Council of the EU agreed to the full legal text of legislation known as the Markets in Crypto Assets Regulation ("MiCA"), which contains provisions which will regulate the use of digital assets, like bitcoin. While MiCA still requires approval from the European Parliament, the legislation approved by the Council of the EU included provisions that will require the European Commission (i) to provide a report on the environmental impact of crypto-assets and (ii) based upon such report, introduce mandatory minimum sustainability standards for consensus mechanisms, including the proof-of-work consensus mechanisms on which the bitcoin blockchain is based.
- In China, the People's Bank of China and the National Development and Reform Commission have outlawed cryptocurrency mining and declared all cryptocurrency transactions illegal within the country.

Moreover, the risks of engaging in a bitcoin acquisition strategy are relatively novel and have created, and may create further, complications due to the lack of experience that third parties have with companies engaging in such a strategy, such as the unavailability on acceptable terms, or increased cost, of director and officer liability insurance.

The growth of the digital assets industry in general, and the use and acceptance of bitcoin in particular, may also impact the price of bitcoin and is subject to a high degree of uncertainty. The pace of worldwide growth in the adoption and use of bitcoin may depend, for instance, on public familiarity with digital assets, ease of buying and accessing bitcoin, institutional demand for bitcoin as an investment asset, consumer demand for bitcoin as a means of payment, and the availability and popularity of alternatives to bitcoin. Even if growth in bitcoin adoption occurs in the near or medium-term, there is no assurance that bitcoin usage will continue to grow over the long-term.

Because bitcoin has no physical existence beyond the record of transactions on the bitcoin blockchain, a variety of technical factors related to the bitcoin blockchain could also impact the price of bitcoin. For example, malicious attacks by miners, inadequate mining fees to incentivize validating of bitcoin transactions, hard "forks" of the bitcoin blockchain into multiple blockchains, and advances in digital computing, algebraic geometry, and quantum computing could undercut the integrity of the bitcoin blockchain and negatively affect the price of bitcoin. The liquidity of bitcoin may also be reduced and damage to the public perception of bitcoin may occur, if financial institutions were to deny banking services to businesses that hold bitcoin, provide bitcoin-related services or accept bitcoin as payment, which could also decrease the price of bitcoin.

Our historical financial statements do not reflect the potential variability in earnings that we may experience in the future relating to our bitcoin holdings

Our historical financial statements do not fully reflect the potential variability in earnings that we may experience in the future from holding or selling significant amounts of bitcoin.

The price of bitcoin has historically been subject to dramatic price fluctuations and is highly volatile. We determine the fair value of our bitcoin based on quoted (unadjusted) prices on the Coinbase exchange (our principal market for bitcoin). We perform an analysis each quarter to identify whether events or changes in circumstances, principally decreases in the quoted (unadjusted) prices on the active exchange, indicate that it is more likely than not that any of our bitcoin assets are impaired. In determining if an impairment has occurred, we consider the lowest price of one bitcoin quoted on the active exchange at any time since acquiring the specific bitcoin held. If the carrying value of a bitcoin exceeds that lowest price at any time during the quarter, an impairment loss is deemed to have occurred with respect to that bitcoin in the amount equal to the difference between its carrying value and such lowest price, and subsequent increases in the price of bitcoin will not affect the carrying value of our bitcoin. Gains (if any) are not recorded until realized upon sale, at which point they would be presented net of any impairment losses. In determining the gain to be recognized upon sale, we calculate the difference between the sale price and carrying value of the specific bitcoin sold immediately prior to sale.

As a result, any decrease in the fair value of bitcoin below our carrying value for such assets at any time since their acquisition requires us to incur an impairment charge, and such charge could be material to our financial results for the applicable reporting period, which may create significant volatility in our reported earnings and decrease the carrying value of our digital assets, which in turn could have a material adverse effect on the market price of our class A common stock.

At September 30, 2022, we carried \$1.993 billion of digital assets on our balance sheet, consisting of approximately 130,000 bitcoins and reflecting \$1.990 billion in cumulative impairment losses attributable to bitcoin trading price fluctuations, and held \$60.4 million in cash and cash equivalents, compared to a carrying value of \$2.406 billion of digital assets, consisting of approximately 114,042 bitcoins, and \$57.0 million in cash and cash equivalents at September 30, 2021. Digital asset impairment losses of \$1.089 billion incurred during the nine months ended September 30, 2022 represented 79.3% of our operating expenses, contributing to our net loss of \$1.220 billion for the nine months ended September 30, 2022, compared to \$684.0 million in digital asset impairment losses in the nine months ended September 30, 2021 representing 71.6% of our operating expenses and contributing to our net loss of \$445.5 million for the nine months ended September 30, 2021.

Because we intend to purchase additional bitcoin in future periods and increase our overall holdings of bitcoin, we expect that the proportion of our total assets represented by our bitcoin holdings will increase in the future. As a result, volatility in our earnings in future periods may be significantly more than what we experienced in prior periods.

Changes in securities regulation may adversely impact the market price of our class A common stock

Although bitcoin and other digital assets have experienced a surge of investor attention since bitcoin was invented in 2008, investors in the United States currently have limited means to gain exposure to bitcoin through traditional investment channels such as 401(k) retirement accounts, and instead generally must hold bitcoin through “hosted” wallets provided by digital asset service providers or through “unhosted” wallets that expose the investor to risks associated with loss or hacking of their private keys. Given the relative novelty of digital assets, general lack of familiarity with the processes needed to hold bitcoin directly, as well as the potential reluctance of financial planners and advisers to recommend direct bitcoin holdings to their retail customers because of the manner in which such holdings are custodied, some investors have sought exposure to bitcoin through investment vehicles that hold bitcoin and issue shares representing fractional undivided interests in their underlying bitcoin holdings. Although a number of investment vehicles currently offer this exposure to bitcoin, none of these investment vehicles currently offers its shares directly to the public in the United States, and such shares are offered only to “accredited investors” on a private placement basis. Investors who are not eligible to participate in these private placements may nevertheless purchase shares of these investment vehicles in the over-the-counter market, where such shares have historically traded at a premium to the net asset value (“NAV”) of the underlying bitcoin. These premiums have at times been substantial.

One reason for the substantial premium to NAV exhibited by the trading prices of shares of some bitcoin investment vehicles may be because of the relative scarcity of traditional investment vehicles providing investment exposure to bitcoin. To the extent investors view the value of our class A common stock as providing such exposure, it is possible that the value of our class A common stock also includes a premium over the value of our bitcoin.

Another reason for the substantial premium to NAV historically exhibited by the trading prices of shares of some bitcoin investment vehicles is that such vehicles operate in a manner similar to closed-end investment funds as opposed to exchange-traded funds (“ETFs”) and therefore do not continuously offer to create and redeem their shares at NAV in exchange for bitcoin. Although several bitcoin investment vehicles have attempted to list their shares on a U.S. national securities exchange to permit them to function in the manner of an ETF with continuous share creation and redemption at NAV, the SEC has generally declined to approve any such listing, citing concerns over the surveillance of trading in markets for the underlying bitcoin as well as concerns about fraud and manipulation in bitcoin trading markets. Most recently, in June 2022 the SEC denied proposals from NYSE Arca, Inc. to convert Grayscale Bitcoin Trust into a spot bitcoin ETF and to list and trade shares of the Bitwise Bitcoin ETF. However, in October 2021, the SEC permitted the listing of ETFs that invest primarily in bitcoin futures contracts. It is unclear as to whether or to what extent the existence of ETFs that invest in bitcoin futures contracts will have on any premium over the value of our bitcoin holdings that may be included in the value of our class A common stock.

If the SEC were to further resolve its concerns regarding surveillance of and the existence of fraud and manipulation in the bitcoin trading markets, it is possible that the SEC would permit the listing of ETFs specializing in the direct acquisition and holding of bitcoin, allowing these funds to offer their shares directly to the public. In addition to greatly simplifying the task of gaining investment exposure to bitcoin, the listing of a bitcoin ETF with continuous share creation and redemption at NAV would be expected to eliminate the NAV premiums currently exhibited by shares of investment vehicles that trade in the over-the-counter market. To the extent that our class A common stock is viewed as an alternative-to-bitcoin investment vehicle and trades at a premium to the value of our bitcoin holdings, that premium may also be eliminated, causing the price of our class A common stock to decline.

In addition, the introduction of the bitcoin futures focused ETFs and any future bitcoin focused ETFs on U.S. national securities exchanges may be viewed by investors as offering “pure play” exposure to bitcoin that would generally not be subject to federal income tax at the entity level as we are.

As a result of the foregoing factors, to the extent investors view our class A common stock as linked to the value of our bitcoin holdings, the introduction of bitcoin ETFs on U.S. national securities exchanges could have a material adverse effect on the market price of our class A common stock.

Our bitcoin acquisition strategy subjects us to enhanced regulatory oversight

As noted above, several bitcoin investment vehicles have attempted to list their shares on a U.S. national securities exchange to permit them to function in the manner of an ETF with continuous share creation and redemption at NAV. To date the SEC has declined to approve any such listing, citing concerns over the surveillance of trading in markets for the underlying bitcoin as well as concerns about fraud and manipulation in bitcoin trading markets. Even though we do not function in the manner of an ETF and do not offer continuous share creation and redemption at NAV, it is possible that we nevertheless could face regulatory scrutiny from the SEC due to our bitcoin holdings.

In addition, there has been increasing focus on the extent to which digital assets can be used to launder the proceeds of illegal activities, fund criminal or terrorist activities, or circumvent sanctions regimes, including those sanctions recently imposed in response to the ongoing conflict between Russia and Ukraine. While we have implemented and maintain policies and procedures reasonably designed to promote compliance with applicable anti-money laundering and sanctions laws and regulations and take care to only acquire our bitcoin through entities subject to anti-money laundering regulation and related compliance rules in the United States, if we are found to have purchased any of our bitcoin from bad actors that have used bitcoin to launder money or persons subject to sanctions, we may be subject to regulatory proceedings and any further transactions or dealings in bitcoin by us may be restricted or prohibited.

We have entered into a bitcoin-collateralized loan and may consider issuing additional debt or other financial instruments that may be collateralized by our bitcoin holdings. We may also consider strategies to create income streams or otherwise generate funds using our bitcoin holdings, including lending bitcoin to counterparties. These types of bitcoin-related transactions are the subject of enhanced regulatory oversight. These and any other bitcoin-related transactions we may enter into, beyond simply acquiring and holding bitcoin, may subject us to additional regulatory compliance requirements and scrutiny, including under federal and state money services regulations, money transmitter licensing requirements and various commodity and securities laws and regulations.

In addition, private actors that are wary of bitcoin or the regulatory concerns associated with bitcoin have in the past and may take further actions that may have an adverse effect on our business or the market price of our class A common stock. For example, an affiliate of HSBC Holdings has prohibited customers of its HSBC InvestDirect retail investment platform from buying shares of our class A common stock after determining that the value of our stock is related to the performance of bitcoin, indicating that it did not want to facilitate exposure to virtual currencies.

Due to the unregulated nature and lack of transparency surrounding the operations of many bitcoin trading venues, bitcoin trading venues may experience greater fraud, security failures or operational problems than trading venues for more established asset classes, which may result in a loss of confidence in bitcoin trading venues and adversely affect the value of our bitcoin

Bitcoin trading venues are relatively new and, in many cases, unregulated. Furthermore, there are many bitcoin trading venues which do not provide the public with significant information regarding their ownership structure, management teams, corporate practices and regulatory compliance. As a result, the marketplace may lose confidence in bitcoin trading venues, including prominent exchanges that handle a significant volume of bitcoin trading and/or are subject to regulatory oversight, in the event one or more bitcoin trading venues experience fraud, security failures or operational problems.

For example, in 2019 there were reports claiming that 80-95% of bitcoin trading volume on trading venues was false or non-economic in nature, with specific focus on unregulated exchanges located outside of the United States. Such reports may indicate that the bitcoin market is significantly smaller than expected and that the United States makes up a significantly larger percentage of the bitcoin market than is commonly understood. Any actual or perceived false trading in the bitcoin market, and any other fraudulent or manipulative acts and practices, could adversely affect the value of our bitcoin.

Negative perception, a lack of stability in the broader bitcoin markets and the closure, temporary shutdown or operational disruption of bitcoin trading venues due to fraud, business failure, hackers or malware, or government-mandated regulation may reduce confidence in bitcoin and result in greater volatility in the prices of bitcoin. To the extent investors view our class A common stock as linked to the value of our bitcoin holdings, these potential consequences of a bitcoin trading venue's failure could have a material adverse effect on the market price of our class A common stock.

The concentration of our bitcoin holdings enhances the risks inherent in our bitcoin acquisition strategy

As of October 31, 2022, we held approximately 130,000 bitcoins that were acquired at an aggregate purchase price of \$3.983 billion and we intend to purchase additional bitcoin and increase our overall holdings of bitcoin in the future. The concentration of our bitcoin holdings limits the risk mitigation that we could take advantage of by purchasing a more diversified portfolio of treasury assets, and the absence of diversification enhances the risks inherent in our bitcoin acquisition strategy. The price of bitcoin has recently experienced a significant decline, and this has had, and any further significant declines in the price of bitcoin would have, a more pronounced impact on our financial condition than if we used our cash to purchase a more diverse portfolio of assets.

The emergence or growth of other digital assets, including those with significant private or public sector backing, could have a negative impact on the price of Bitcoin and adversely affect our business

As a result of our bitcoin acquisition strategy, the majority of our assets are concentrated in our bitcoin holdings. Accordingly, a significant decrease in the market price of bitcoin may have a material adverse effect on our financial condition. As of the date of this Quarterly Report on Form 10-Q, bitcoin was the largest digital asset by market capitalization. However, there are numerous alternative digital assets and many entities, including consortiums and financial institutions, are researching and investing resources into private or permissioned blockchain platforms or digital assets that do not use proof-of-work mining like the bitcoin network. Additionally, central banks in some countries have started to introduce digital forms of legal tender. For example, China's cryptocurrencies backed by central banks ("CBDC") project was made available to consumers in January 2022, and governments including the United States and the European Union have been discussing the potential creation of new digital currencies. Whether or not they incorporate blockchain or similar technology, CBDCs, as legal tender in the issuing jurisdiction, could have an advantage in competing with, or replacing, bitcoin and other digital assets as a medium of exchange or store of value. As a result, the value of bitcoin could decrease, which could have a material adverse effect on our business, prospects, financial condition, and operating results.

Our bitcoin holdings are less liquid than our existing cash and cash equivalents and may not be able to serve as a source of liquidity for us to the same extent as cash and cash equivalents

In September 2020, we adopted bitcoin as our primary treasury reserve asset. Historically, the bitcoin markets have been characterized by more price volatility, less liquidity, and lower trading volumes compared to sovereign currencies markets, as well as relative anonymity, a developing regulatory landscape, susceptibility to market abuse and manipulation, and various other risks inherent in its entirely electronic, virtual form and decentralized network. During times of market instability, we may not be able to sell our bitcoin at reasonable prices or at all. For example, although the Coinbase exchange (our principal market for bitcoin) has, to date, not been impacted, a number of bitcoin trading venues recently have temporarily halted deposits and withdrawals. As a result, our bitcoin holdings may not be able to serve as a source of liquidity for us to the same extent as cash and cash equivalents. Additionally, during times of market instability, including in particular at times when the price of bitcoin has materially declined, we may be unable to enter into term loans or other financings collateralized by our unencumbered bitcoin or otherwise generate funds using our bitcoin holdings. If we are unable to sell our bitcoin, enter into additional financings using bitcoin as collateral, or otherwise generate funds using our bitcoin holdings, or if we are forced to sell our bitcoin at a significant loss, in order to meet our working capital requirements, our business and financial condition could be negatively impacted.

If we or our third-party service providers experience a security breach or cyberattack and unauthorized parties obtain access to our bitcoin, we may lose some or all of our bitcoin and our financial condition and results of operations could be materially adversely affected

Security breaches and cyberattacks are of particular concern with respect to our bitcoin. Bitcoin and other blockchain-based cryptocurrencies have been, and may in the future be, subject to security breaches, cyberattacks, or other malicious activities. For example, in October 2021 it was reported that hackers exploited a flaw in the account recovery process and stole from the accounts of at least 6,000 customers of the Coinbase exchange (our principal market for bitcoin), although the flaw was subsequently fixed and Coinbase reimbursed affected customers. Similarly, in January 2022, hackers exploited weaknesses in the security architecture of the digital asset exchange Crypto.com and stole over \$30 million in digital assets, including bitcoin, from the accounts of 483 customers, although the flaw was subsequently fixed and Crypto.com reimbursed affected customers. Nonetheless, a successful security breach or cyberattack could result in:

- a partial or total loss of our bitcoin in a manner that may not be covered by insurance or indemnity provisions of the custody agreement with a custodian who holds our bitcoin;
- harm to our reputation and brand;
- improper disclosure of data and violations of applicable data privacy and other laws; or
- significant regulatory scrutiny, investigations, fines, penalties, and other legal, regulatory, contractual and financial exposure.

Further, any actual or perceived data security breach or cybersecurity attack directed at other companies with digital assets or companies that operate digital asset networks, whether or not we are directly impacted, could lead to a general loss of confidence in the broader bitcoin blockchain ecosystem or in the use of bitcoin networks to conduct financial transactions, which could negatively impact us.

Attacks upon systems across a variety of industries, including industries related to bitcoin, are increasing in frequency, persistence, and sophistication, and, in many cases, are being conducted by sophisticated, well-funded and organized groups and individuals, including state actors. The techniques used to obtain unauthorized, improper or illegal access to systems and information (including personal data and digital assets), disable or degrade services, or sabotage systems are constantly evolving, may be difficult to detect quickly, and often are not recognized or detected until after they have been launched against a target. These attacks may occur on our systems or those of our third-party service providers or partners. We may experience breaches of our security measures due to human error, malfeasance, insider threats, system errors or vulnerabilities or other irregularities. In particular, unauthorized parties have attempted, and we expect that they will continue to attempt, to gain access to our systems and facilities, as well as those of our partners and third-party service providers, through various means, such as hacking, social engineering, phishing and fraud. In the past, hackers have successfully employed a social engineering attack against one of our service providers and misappropriated our digital assets, although, to date, such events have not been material to our financial condition or operating results. Threats can come from a variety of sources, including criminal hackers, hacktivists, state-sponsored intrusions, industrial espionage, and insiders. In addition, certain types of attacks could harm us even if our systems are left undisturbed. For example, certain threats are designed to remain dormant or undetectable, sometimes for extended periods of time, or until launched against a target and we may not be able to implement adequate preventative measures. Further, there has been an increase in such activities as a result of the COVID-19 pandemic. The risk of cyberattacks could also be increased by cyberwarfare in connection with the ongoing conflict between Russia and Ukraine, including potential proliferation of malware from the conflict into systems unrelated to the conflict. Any future breach of our operations or those of others in the bitcoin industry, including third-party services on which we rely, could materially and adversely affect our business.

The loss or destruction of a private key required to access our bitcoin may be irreversible. If we are unable to access our private keys or if we experience a cyberattack or other data loss relating to our bitcoin, our financial condition and results of operations could be materially adversely affected

Bitcoin is controllable only by the possessor of both the unique public key and private key relating to the local or online digital wallet in which the bitcoin is held. While the bitcoin blockchain ledger requires a public key relating to a digital wallet to be published when used in a transaction, private keys must be safeguarded and kept private in order to prevent a third party from accessing the bitcoin held in such wallet. To the extent our private key is lost, destroyed, or otherwise compromised and no backup of the private key is accessible, we will be unable to access the bitcoin held in the related digital wallet. Furthermore, we cannot provide assurance that our digital wallets will not be compromised as a result of a cyberattack. The bitcoin and blockchain ledger, as well as other digital assets and blockchain technologies, have been, and may in the future be, subject to security breaches, cyberattacks, or other malicious activities.

We hold our bitcoin with regulated custodians that have duties to safeguard our private keys. In light of the significant amount of bitcoin we hold, we are continuing to seek a greater degree of diversification in the use of custodial services as the extent of potential risk of loss is dependent, in part, on the degree of diversification. As of September 30, 2022, the insurance that covers losses of our bitcoin holdings covers only a small fraction of the value of the entirety of our bitcoin holdings, and there can be no guarantee that such insurance will be maintained as part of the custodial services we have or that such coverage will cover losses with respect to our bitcoin. Moreover, as noted above, the use of custodians to hold our bitcoin exposes us to the risk that the bitcoin custodially-held on our behalf could be subject to bankruptcy proceedings and we could be treated as a general unsecured creditor of the custodian, inhibiting our ability to exercise ownership rights with respect to such bitcoin. Any loss associated with such insolvency proceedings is unlikely to be covered by any insurance coverage we maintain related to our bitcoin.

Regulatory change reclassifying bitcoin as a security could lead to our classification as an “investment company” under the Investment Company Act of 1940 and could adversely affect the market price of bitcoin and the market price of our class A common stock

While senior SEC officials have stated their view that bitcoin is not a “security” for purposes of the federal securities laws, the SEC has so far refused to permit the listing of any bitcoin-based ETFs, citing, among other things, concerns regarding bitcoin market integrity and custodial protections. It is possible that the SEC could take a contrary position to the one taken by its senior officials or a federal court could conclude that bitcoin is a security. Such a determination could lead to our classification as an “investment company” under the Investment Company Act of 1940, which would subject us to significant additional regulatory controls that could have a material adverse effect on our business and operations and also may require us to substantially change the manner in which we conduct our business.

In addition, if bitcoin is determined to constitute a security for purposes of the federal securities laws, the additional regulatory restrictions imposed by such a determination could adversely affect the market price of bitcoin and in turn adversely affect the market price of our class A common stock.

A significant decrease in the market value of our bitcoin holdings could adversely affect our ability to service our indebtedness

As a result of our bitcoin acquisition strategy and our Treasury Reserve Policy, the majority of our assets are concentrated in our bitcoin holdings. The concentration of our assets in bitcoin limits our ability to mitigate risk that could otherwise be achieved by purchasing a more diversified portfolio of treasury assets. Accordingly, the recent decline in the market price of bitcoin has significantly reduced the market value of our bitcoin holdings and any further decline in the market price of bitcoin will cause our bitcoin holdings to experience a decline, which, if significant, could have a material adverse effect on our financial condition. Any material adverse effect on our financial condition caused by a significant decline in the market value of our bitcoin holdings may create liquidity and credit risks for our business operations, as we would have limited means to obtain cash beyond the revenues generated by our enterprise analytics software business. To the extent that the cash generated by our enterprise analytics software business is insufficient to satisfy our debt service obligations, and to the extent that the liquidation of our bitcoin holdings would be insufficient to satisfy our debt service obligations, we may be unable to make scheduled payments on our current or future indebtedness, which could cause us to default on our debt obligations. Any default on our current or future indebtedness may have a material adverse effect on our financial condition. See “Risks Related to Our Outstanding and Potential Future Indebtedness” for additional details about the risks which may impact us if we are unable to service our indebtedness.

Risks Related to Our Enterprise Analytics Software Business Strategy

We depend on revenue from a single software platform and related services as well as revenue from our installed customer base

Our revenue is derived from sales of our analytics software platform and related services. Although demand for analytics software has continued to grow, the market for analytics offerings continues to evolve. Resistance from consumer and privacy groups to commercial collection, use, and sharing of personal data has grown in recent years and our customers, potential customers, or the general public may perceive that use of our analytics software could violate individual privacy rights. In addition, increasing government restrictions on the collection, use, and transfer of personal data could impair the further growth of the market for analytics software, especially in foreign markets. Because we depend on revenue from a single software platform and related services, our business could be harmed by a decline in demand for, or in the adoption or prices of, our platform and related services as a result of, among other factors, any change in our pricing or packaging model, increased competition, maturation in the markets for our platform, or other risks described in this Quarterly Report. In addition, the adoption of our bitcoin acquisition strategy and the recent increase in our indebtedness has caused and may in the future cause certain of our existing or prospective customers to form negative perceptions regarding our corporate risk profile or our financial viability as a commercial counterparty, and such negative perceptions could negatively impact sales of our analytics software platform and related services to current or prospective customers. Such risks can also be exacerbated if the price of bitcoin declines. We also depend on our installed customer base for a substantial portion of our revenue. If our existing customers cancel or fail to renew their service contracts or fail to make additional purchases from us for any reason, including due to the risks inherent in our bitcoin acquisition strategy, our revenue could decrease and our operating results could be materially adversely affected.

A substantial customer shift in the deployment of the MicroStrategy platform from a product license model to a cloud subscription model could result in higher future rates of attrition of customers from the MicroStrategy platform and could affect the timing of revenue recognition, reduce product licenses and product support revenues, and materially adversely affect our operating results, and our ability to accelerate our cloud strategy could be negatively impacted by any inability to provide necessary sales and engineering support

We offer our analytics platform in the form of a product license or a cloud subscription. Given that it is relatively easy for customers to migrate on and off our cloud subscription platform, a substantial shift among our customers toward our cloud platform could result in higher future rates of attrition among our customers. In addition, the payment streams and revenue recognition timing for our product licenses are different from those for our cloud subscriptions. For product licenses, customers typically pay us a lump sum soon after entering into a license agreement, and we typically recognize product licenses revenue when control of the license is transferred to the customer. For cloud subscriptions, customers typically make periodic payments over the subscription period and we recognize subscription services revenues ratably over the subscription period. As a result, if a substantial number of current customers shift to, or new customers purchase, cloud subscriptions instead of product licenses, the resulting change in payment terms and revenue recognition may result in our recognizing less revenue in the reporting period in which the sale transactions are consummated than has been the case in prior periods, with more revenue being recognized in future periods. This change in the timing of revenue recognition could materially adversely affect our operating results and cash flows for the periods during which such a shift or change in purchasing occurs. Accordingly, in any particular reporting period, cloud subscription sales could negatively impact product license sales to our existing and prospective customers, which could reduce product licenses and product support revenues. Finally, our ability to accelerate our cloud strategy could be negatively impacted by any inability to provide necessary sales and sales engineering support, including the support of channel partners, our internal sales team, and digital marketing.

We use channel partners and if we are unable to maintain successful relationships with them, our business, operating results, and financial condition could be materially adversely affected

In addition to our direct sales force, we use channel partners, such as system integrators, consulting firms, resellers, solution providers, managed service providers, OEMs, and technology companies, to license and support our offerings. For the nine months ended September 30, 2022, transactions by channel partners for which we recognized revenue accounted for 25.2% of our total product licenses revenues, and our ability to achieve revenue growth in the future will depend in part on our ability to maintain these relationships. Our channel partners may offer customers the products and services of several different companies, including competing offerings, and we cannot be certain that they will prioritize or devote adequate resources to selling our offerings. If we are unable to maintain our relationships with our channel partners, or if we experience a reduction in sales by our channel partners, our business, operating results, and financial condition could be materially adversely affected.

In addition, we rely on our channel partners to operate in accordance with applicable laws and regulatory requirements. If they fail to do so, we may need to incur significant costs in responding to investigations or enforcement actions or paying penalties assessed by the applicable authorities. We also rely on our channel partners to operate in accordance with the terms of their contractual agreements with us. For example, some of our agreements with our channel partners prescribe the terms and conditions pursuant to which they are authorized to resell or distribute our software and offer technical support and related services. If our channel partners do not comply with their contractual obligations to us, our business, operating results, and financial condition may be materially adversely affected.

Our recognition of deferred revenue and advance payments is subject to future performance obligations and may not be representative of revenues for succeeding periods

Our deferred revenue and advance payments totaled \$174.7 million as of September 30, 2022. The timing and ultimate recognition of our deferred revenue and advance payments depend on various factors, including our performance of various service obligations.

Because of the possibility of customer changes or delays in customer development or implementation schedules or budgets, and the need for us to satisfactorily perform product support and other services, deferred revenue and advance payments at any particular date may not be representative of actual revenue for any succeeding period.

In addition, we had \$81.2 million of other remaining performance obligations as of September 30, 2022, consisting of the portions of multi-year contracts that will be invoiced in the future that are not reflected on our balance sheet. As with deferred revenue and advance payments, these other remaining performance obligations at any particular date may not be representative of actual revenue for any succeeding period.

We may lose sales, or sales may be delayed, due to the long sales and implementation cycles of certain of our offerings, which could materially adversely affect our revenues and operating results

The decision to purchase our offerings typically requires our customers to invest substantial time, money, personnel, and other resources, which can result in long sales cycles that can exceed nine months. These long sales cycles increase the risk that intervening events, such as the introduction of new offerings and changes in customer budgets and purchasing priorities, will affect the size, timing, and completion of an order. Even if an order is completed, the time and resources required to implement and integrate our offerings vary widely depending on customer needs and the complexity of deployment. If we lose sales or sales are delayed due to these long sales and implementation cycles, our revenues and operating results for that period may be materially adversely affected.

Our results in any particular period may depend on the number and volume of large transactions in that period and these transactions may involve lengthier, more complex, and more unpredictable sales cycles than other transactions

Larger, enterprise-level transactions often require considerably more resources, are often more complex to implement, and typically require additional management approval, which may result in a lengthier, more complex, and less predictable sales cycle and may increase the risk that an order is delayed or not brought to completion. We may also encounter greater competition and pricing pressure on these larger transactions, and our sales and delivery efforts may be more costly. The presence or absence of one or more large transactions in a particular period may have a material effect on our revenues and operating results for that period and may result in lower estimated revenues and earnings in future periods. For the nine months ended September 30, 2022, our top three product licenses transactions with recognized revenue totaled \$12.1 million, or 20.5% of total product licenses revenues, compared to \$10.1 million, or 14.6% of total product licenses revenues, for the nine months ended September 30, 2021.

Our offerings face intense competition, which may lead to lower prices for our offerings, reduced gross margins, loss of market share, and reduced revenue

The analytics market is highly competitive and subject to rapidly changing technology. Within the analytics space, we compete with many different software vendors, including IBM, Microsoft, Oracle, Qlik, Salesforce, and SAP. Our future success depends on our

ability to differentiate our offerings and successfully compete across analytics implementation projects of varying sizes. Our ability to compete successfully depends on a number of factors, both within and outside of our control. Some of these factors include software deployment options; analytical, mobility, data discovery, and visualization capabilities; performance and scalability; the quality and reliability of our customer service and support; and brand recognition. Failure to compete successfully in any one of these or other areas may reduce the demand for our offerings and materially adversely affect our revenue from both existing and prospective customers.

Some of our competitors have longer operating histories, more focused business strategies and significantly greater financial, technical, and marketing resources than we do. As a result, they may be able to respond more quickly to new or emerging technologies and changes in customer requirements or devote greater resources to the development, promotion, sale, and marketing of their offerings than we can, such as offering certain analytics products free of charge when bundled with other products. In addition, many of our competitors have strong relationships with current and potential customers, extensive industry and specialized business knowledge, and corresponding proprietary technologies that they can leverage. As a result, they may be able to prevent us from penetrating new accounts or expanding existing accounts.

Increased competition may lead to price cuts, reduced gross margins, and loss of market share. The failure to compete successfully and meet the competitive pressures we face may have a material adverse effect on our business, operating results, and financial condition.

Current and future competitors may also make strategic acquisitions or establish cooperative relationships among themselves or with others. By doing so, these competitors may increase their ability to meet the needs of our potential customers by their expanded offerings and rapidly gain significant market share, which could limit our ability to obtain revenues from new customers and to sustain software maintenance revenues from our installed customer base. In addition, basic office productivity software suites, such as Microsoft Office, could evolve to offer advanced analysis and reporting capabilities that may reduce the demand for our analytics offerings.

Risks Related to Our Technology and Intellectual Property

If we are unable to develop and release new offerings and software enhancements to respond to rapid technological change, new customer requirements, or evolving industry standards in a timely and cost-effective manner, our business, operating results, and financial condition could be materially adversely affected

The market for our offerings is characterized by frequent new offerings and software enhancements in response to rapid technological change, new customer requirements, and evolving industry standards. The introduction of new or enhanced offerings can quickly make existing ones obsolete. We believe our future success depends largely on our ability to continue to support popular operating systems and databases, maintain and improve our current offerings, rapidly develop new offerings and software enhancements that achieve market acceptance, maintain technological competitiveness, and meet an expanding range of customer requirements.

Analytics applications are inherently complex, and research and development can be costly and time consuming. In addition, customers may delay their purchasing decisions because they anticipate that new or enhanced versions of our offerings will soon become available or because of concerns regarding the complexity of migration or performance issues related to new offerings. We cannot be sure that we will succeed in developing, marketing, and delivering, on a timely and cost-effective basis, new or enhanced offerings that will achieve market acceptance. Moreover, even if our new offerings achieve market acceptance, we may experience a decline in revenues of our existing offerings that is not fully matched by the new offering's revenue. This could result in a temporary or permanent revenue shortfall and materially adversely affect our business, operating results, and financial condition.

We depend on technology licensed to us by third parties, and changes in or discontinuances of such licenses could impair our software, delay implementation of our offerings, or force us to pay higher license fees

We license third-party technologies that are incorporated into or utilized by our existing offerings. These licenses may be terminated, or we may be unable to license third-party technologies for future offerings. In addition, we may be unable to renegotiate acceptable third-party license terms, or we may be subject to infringement liability if third-party technologies that we license are found to infringe intellectual property rights of others. Changes in or discontinuance of third-party licenses could lead to a material increase in our costs or to our offerings becoming inoperable or their performance being materially reduced. As a result, we may need to incur additional development costs to help ensure continued performance of our offerings, and we may experience a decreased demand for our offerings.

Changes in third-party software or systems or the emergence of new industry standards could materially adversely affect the operation of and demand for our existing software

The functionalities of our software depend in part on the ability of our software to interface with our customers' information technology ("IT") infrastructure and cloud environments, including software applications, network infrastructure, and end user devices, which are supplied to our customers by various other vendors. When new or updated versions of these third-party software or systems are introduced, or new industry standards in related fields emerge, we may be required to develop updated versions of or enhancements to

our software to help ensure that it continues to effectively interoperate with our customers' IT infrastructure and cloud environments. If new or modified operating systems are introduced or new web standards and technologies or new standards in the field of database access technology emerge that are incompatible with our software, development efforts to maintain the interoperability of our software with our customers' IT infrastructure and cloud environments could require substantial capital investment and employee resources. If we are unable to update our software in a timely manner, cost-effectively, or at all, the ability of our software to perform key functions could be impaired, which may impact our customers' satisfaction with our software, potentially result in breach of warranty or other claims, and materially adversely affect demand for our software.

The nature of our software makes it particularly susceptible to undetected errors, bugs, or security vulnerabilities, which could cause problems with how the software performs and, in turn, reduce demand for our software, reduce our revenue, and lead to litigation claims against us

Despite extensive testing by us and our current and potential customers, we have in the past discovered software errors, bugs, or security vulnerabilities (including the log4j and SpringShell vulnerabilities which surfaced in December 2021 and March 2022, respectively, and affected companies worldwide) in our offerings after commercial shipments began and they may be found in future offerings or releases. This could result in lost revenue, damage to our reputation, or delays in market acceptance, which could have a material adverse effect on our business, operating results, and financial condition. We may also need to expend resources and capital to correct these defects if they occur.

Our customer agreements typically contain provisions designed to limit our exposure to product liability, warranty, and other claims. It is possible these provisions are unenforceable in certain domestic or international jurisdictions, and we may be exposed to such claims. A successful claim against us could have a material adverse effect on our business, operating results, and financial condition.

Our intellectual property is valuable, and any inability to protect it could reduce the value of our offerings and brand

Unauthorized third parties may try to copy or reverse engineer portions of our software or otherwise obtain and use our intellectual property. Copyrights, patents, trademarks, trade secrets, confidentiality procedures, and contractual commitments can only provide limited protection. Any intellectual property owned by us may be invalidated, circumvented, or challenged. Any of our pending or future intellectual property applications, whether or not currently being challenged, may not be issued with the scope we seek, if at all. Moreover, amendments to and developing jurisprudence regarding U.S. and international law may affect our ability to protect our intellectual property and defend against claims of infringement. In addition, although we generally enter into confidentiality agreements with our employees and contractors, the confidential nature of our intellectual property may not be maintained. Furthermore, the laws of some countries do not provide the same level of protection of our intellectual property as do the laws of the United States. If we cannot protect our intellectual property against unauthorized copying or use, we may not remain competitive.

Third parties may claim we infringe their intellectual property rights

We periodically receive notices from third parties claiming we are infringing their intellectual property rights. The number of such claims may increase as we expand our offerings and branding, the number of offerings and level of competition in our industry grow, the functionality of offerings overlaps, and the volume of issued patents, patent applications, and copyright and trademark registrations continues to increase. Responding to any infringement claim, regardless of its validity, could:

- be time-consuming, costly, and/or result in litigation;
- divert management's time and attention from developing our business;
- require us to pay monetary damages or enter into royalty or licensing agreements that we would normally find unacceptable;
- require us to stop selling certain of our offerings;
- require us to redesign certain of our offerings using alternative non-infringing technology or practices, which could require significant effort and expense;
- require us to rename certain of our offerings or entities; or
- require us to satisfy indemnification obligations to our customers or channel partners.

Additionally, while we monitor our use of third-party software, including open source software, our processes for controlling such use in our offerings may not be effective. If we fail to comply with the terms or conditions associated with third-party software that we use, if we inadvertently embed certain types of third-party software into one or more of our offerings, or if third-party software that we license is found to infringe the intellectual property rights of others, we could subject ourselves to infringement liability and be required to re-engineer our offerings, discontinue the sale of our offerings, or make available to certain third parties or generally available, in source code form, our proprietary code, any of which could materially adversely affect our business, operating results, and financial condition.

If a successful infringement claim is made against us and we fail to develop or license a substitute technology or brand name, as applicable, our business, results of operations, financial condition, or cash flows could be materially adversely affected.

Risks Related to Our Operations

We face risks related to the COVID-19 pandemic that could significantly disrupt or materially adversely affect our business and operating results

The COVID-19 pandemic has had a significant adverse impact on global commercial activity and has created significant volatility in financial markets. Government recommendations and requirements are continuing to change, and we may not be able to immediately respond to, meet or enforce all required health and safety measures or other government requirements in all of our locations. There is significant uncertainty around the breadth and duration of business disruptions related to COVID-19, as well as its impact on the global economy and consumer confidence. The COVID-19 pandemic could have a sustained adverse impact on economic and market conditions and trigger a period of prolonged global economic slowdown, which could decrease technology spending, adversely affect demand for our offerings, and harm our business and operating results.

Although our total revenues for the nine months ended September 30, 2022 were not materially impacted by COVID-19, our revenues may be negatively impacted in future periods until the effects of the pandemic and the efforts to address it have fully subsided and the current macroeconomic environment has substantially recovered. The uncertainty related to COVID-19 may also result in increased volatility in the financial projections we use as the basis for estimates and assumptions used in our financial statements.

In light of the uncertain and rapidly evolving situation relating to COVID-19, we have taken precautionary measures intended to reduce the risk of the virus to our employees, customers, and communities in which we operate. We established flexible working arrangements for our employees, reduced business travel, and shifted certain of our customer, employee, and industry events to virtual formats. As a result of these precautionary measures, there could be a negative impact on our sales, marketing, and customer success efforts, continued delays in our sales cycles, delays in the release or delivery of new or enhanced offerings or unexpected changes to such offerings, or operational or other challenges, any of which could significantly disrupt our business and operating results. For example, our shift to creating virtual customer and industry events may not be successful, and we may not be able to showcase our products as effectively or generate the same customer interest, opportunities, and leads through virtual events as we have historically done through in-person events. Additionally, while we have not experienced any material disruptions to date, our technological systems or infrastructure may not be equipped to facilitate effective remote working arrangements or operate in compliance with all laws and regulations for our employees in the short or long term.

Considerable uncertainty still surrounds COVID-19, the evolution of its variants, its potential long-term economic effects, as well as the effectiveness of any responses taken by government authorities and businesses and of various efforts to inoculate the global population and develop effective treatments. Although we continue to actively monitor the situation and may take further actions as may be required or recommended by government authorities or as more information and public health guidance become available, we may not be able to immediately respond to, meet or enforce all required or recommended health and safety measures or other government requirements or recommendations in all of our locations, and the full extent to which COVID-19 impacts our business and operating results will depend on future developments, including the duration, spread, severity, and potential recurrence of the COVID-19 pandemic, impact on our customers and our sales cycles, our ability to generate new business leads, impact on our customer, employee, and industry events, and effect on our vendors, all of which are highly uncertain and cannot be predicted.

In addition, the effects of the COVID-19 pandemic may heighten many of the other risks described in this “Risk Factors” section.

Business disruptions, including interruptions, delays, or failures of our systems, third-party data center hosting facility, or other third-party services, could materially adversely affect our operating results or result in a material weakness in our internal controls that could adversely affect the market price of our stock

A significant portion of our research and development activities or certain other critical business operations are concentrated in facilities in Northern Virginia, China, Argentina, and Poland. In addition, we serve our customers and manage certain critical internal processes using a third-party data center hosting facility located in the United States and other third-party services, including AWS, Azure, and other cloud services. Any disruptions or failures of our systems or the third-party hosting facility or other services that we use, including as a result of a natural disaster, fire, cyberattack (including the potential increase in risk for such attacks due to cyberwarfare in connection with the ongoing conflict between Russia and Ukraine), act of terrorism, geopolitical conflict (including due to the ongoing conflict between Russia and Ukraine and any potential conflict involving China and Taiwan), pandemic (including the ongoing COVID-19 pandemic), the effects of climate change, or other catastrophic event, as well as power outages, telecommunications infrastructure outages, a decision by one of our third-party service providers to close facilities that we use without adequate notice or to materially change the pricing or terms of their services, host country restrictions on the conduct of our business operations or the availability of our offerings, or other unanticipated problems with our systems or the third-party services that we use, such as a failure to meet service

standards, could severely impact our ability to conduct our business operations or to attract new customers or maintain existing customers, or result in a material weakness in our internal control over financial reporting, any of which could materially adversely affect our future operating results.

Our international operations are complex and expose us to risks that could have a material adverse effect on our business, operating results, and financial condition

We receive a significant portion of our total revenues from international sales and conduct our business activities in various foreign countries, including some emerging markets where we have limited experience, where the challenges of conducting our business can be significantly different from those we have faced in more developed markets, and where business practices may create internal control risks. International revenues accounted for 38.1% and 41.8% of our total revenues for the three months ended September 30, 2022 and 2021, respectively, and 39.7% and 43.3% of our total revenues for the nine months ended September 30, 2022 and 2021, respectively. Our international operations require significant management attention and financial resources and expose us to additional risks, including:

- fluctuations in foreign currency exchange rates;
- new, or changes in, regulatory requirements;
- tariffs, export and import restrictions, restrictions on foreign investments, tax laws, sanctions, laws and policies that favor local competitors (such as mandatory technology transfers), and other trade barriers or protection measures;
- compliance with a wide variety of laws, including those relating to labor matters, antitrust, procurement and contracting, consumer and data protection, privacy, data localization, governmental access to data, network security, and encryption;
- costs of localizing offerings and lack of acceptance of localized offerings;
- difficulties in and costs of staffing, managing, and operating our international operations;
- economic weakness or currency-related crises;
- generally longer payment cycles and greater difficulty in collecting accounts receivable;
- weaker intellectual property protection;
- increased risk of corporate espionage or misappropriation, theft, or misuse of intellectual property, particularly in foreign countries where we have significant software development operations that have access to product source code, such as China;
- our ability to adapt to sales practices and customer requirements in different cultures;
- natural disasters, acts of war (including risks relating to the ongoing conflict between Russia and Ukraine and any potential conflict involving China and Taiwan), terrorism, or pandemics (including the ongoing COVID-19 pandemic); and
- political instability and security risks in the countries where we are doing business, including, without limitation, political and economic instability caused by the current conflict between Russia and Ukraine and economic sanctions adopted in response to the conflict.

Disruptions to trade, weakening of economic conditions, economic and legal uncertainties, or changes in currency rates may adversely affect our business, financial condition, operating results, and cash flows. For example, we may face heightened risks in connection with our international operations as a result of the withdrawal of the United Kingdom from the European Union, commonly referred to as “Brexit.” The future effects of Brexit are uncertain and will depend on the implementation of the Trade and Cooperation Agreement between the United Kingdom and the European Union and any other future agreements the United Kingdom may make to retain access to European Union markets. Brexit could, among other outcomes, disrupt the free movement of goods, services, and people between the United Kingdom and the European Union. Brexit could also lead to legal uncertainty and potentially divergent national laws and regulations as the United Kingdom determines which EU laws to replace or replicate. Recently, the United States has put in place higher tariffs and other trade restrictions and signaled that it may additionally alter trade agreements and terms between the United States and China, the European Union, Canada, and Mexico, among others, including limiting trade and/or imposing tariffs on imports from such countries. In addition, China, the European Union, Canada, and Mexico, among others, have either threatened or put into place retaliatory tariffs of their own. These tariffs and any further escalation of protectionist trade measures could adversely affect the markets in which we sell our offerings and, in turn, our business, financial condition, operating results, and cash flows. While the Biden administration has indicated that it may pursue temporary repeals of such measures, it is unclear whether and to what extent such measures will be reversed in the future or whether the Biden administration will make additional changes to U.S. trade policy that may result in further impacts on our business.

Changes to the U.S. taxation of our international income, or changes in foreign tax laws, could have a material effect on our future operating results. For example, the TaxAct led to corporate income tax rate changes, the modification or elimination of certain tax incentives, changes to the existing regime for taxing overseas earnings, and measures to prevent BEPS, and the United Kingdom adopted legislation imposing a tax related to offshore receipts in respect of intangible property held in low tax jurisdictions.

Moreover, compliance with foreign and U.S. laws and regulations that are applicable to our international operations is complex and may increase our cost of doing business in international jurisdictions. Our failure to comply with these laws and regulations has exposed, and may in the future expose, us to fines and penalties. These laws and regulations include anti-bribery laws, such as the U.S. Foreign Corrupt Practices Act, the UK Bribery Act, local laws prohibiting corrupt payments to government officials, and local laws relating to

procurement, contracting, and antitrust. These laws and regulations also include import and export requirements and economic and trade sanctions administered by the Office of Foreign Assets Control and the U.S. Department of Commerce based on U.S. foreign policy and national security goals against targeted foreign states, organizations, and individuals. Although we have implemented policies and procedures designed to help ensure compliance with these laws, our employees, channel partners, and other persons with whom we do business may take actions in violation of our policies or these laws. For example, following an internal review initiated in 2018, we believe our Brazilian subsidiary failed or likely failed to comply with local procurement regulations in conducting business with certain Brazilian government entities. Any violation of these laws could subject us to civil or administrative penalties, including substantial fines, prohibitions, or other limitations on our ability to sell our offerings to one or more countries, and could also materially damage our reputation and our brand.

These factors may have a material adverse effect on our future sales, business, operating results, and financial condition.

We face a variety of risks in doing business with U.S. and foreign federal, state, and local governments and government agencies, including risks related to the procurement process, budget constraints and cycles, termination of contracts, and compliance with government contracting requirements

Our customers include the U.S. government, state and local governments and government agencies. There are a variety of risks in doing business with government entities, including:

Procurement. Contracting with public sector customers is highly competitive and can be time-consuming and expensive, requiring us to incur significant up-front time and expense without any assurance that we will win a contract.

Budgetary Constraints and Cycles. Public sector funding reductions or delays adversely impact demand and payment for our offerings.

Termination of Contracts. Public sector customers often have contractual or other legal rights to terminate contracts for convenience or due to a default. If a contract is terminated for convenience, we may only be able to collect fees for software or services delivered prior to termination and settlement expenses. If a contract is terminated due to a default, we may not recover even those amounts, and we may be liable for excess costs incurred by the customer for procuring alternative software or services.

Compliance with Government Contracting Requirements. Government contractors are required to comply with a variety of complex laws, regulations, and contractual provisions relating to the formation, administration, or performance of government contracts that give public sector customers substantial rights and remedies, many of which are not typical for commercial contracts. These may include rights regarding price protection, the accuracy of information provided to the government, contractor compliance with socio-economic policies, and other terms unique to government contracts. Governments and government agencies routinely investigate and audit contractors for compliance with these requirements. If, as a result of an audit or review, it is determined that we have failed to comply with these requirements, we may be subject to civil and criminal penalties or administrative sanctions, including contract termination, forfeiture of profits, fines, and suspensions or debarment from future government business and we may suffer harm to our reputation.

Our customers also include foreign governments and government agencies. Similar procurement, budgetary, contract, and audit risks also apply to these entities. In addition, compliance with complex regulations and contracting provisions in a variety of jurisdictions can be expensive and consume significant management resources. In certain jurisdictions, our ability to win business may be constrained by political and other factors unrelated to our competitive position in the market. Each of these difficulties could materially adversely affect our business and results of operations.

If we are unable to recruit or retain skilled personnel, or if we lose the services of Michael J. Saylor, our business, operating results, and financial condition could be materially adversely affected

Our future success depends on our continuing ability to attract, train, assimilate, and retain highly skilled personnel. Competition for qualified employees in the technology industry has historically been high, and may be further amplified by evolving restrictions on immigration, travel, or availability of visas for skilled technology workers, including restrictions imposed in response to the COVID-19 pandemic. We may not be able to retain our current key employees or attract, train, assimilate, and retain other highly skilled personnel in the future. Our future success also depends in large part on the continued service of Michael J. Saylor, our Chairman of the Board of Directors and Executive Chairman. If we lose the services of Mr. Saylor, or if we are unable to attract, train, assimilate, and retain the highly skilled personnel we need, our business, operating results, and financial condition could be materially adversely affected.

Changes in laws or regulations relating to privacy or the collection, processing, disclosure, storage, localization, or transmission of personal data, or any actual or perceived failure by us or our third-party service providers to comply with such laws and regulations, contractual obligations, or applicable privacy policies, could materially adversely affect our business

Aspects of our business involve collecting, processing, disclosing, storing, and transmitting personal data, which are subject to certain privacy policies, contractual obligations, and U.S. and foreign laws, regulations, and directives relating to privacy and data protection. We store a substantial amount of customer and employee data, including personal data, on our networks and other systems and the cloud environments we manage. In addition, the types of data subject to protection as personal data in the European Union, China, the United States, and elsewhere have been expanding. In recent years, the collection and use of personal data by companies have come under

increased regulatory and public scrutiny, especially in relation to the collection and processing of sensitive data, such as healthcare, biometric, genetic, financial services, and children's data, precise location data, and data regarding a person's race or ethnic origins, political opinions, or religious beliefs. For example, in the United States, protected health information is subject to the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), which can provide for civil and criminal penalties for noncompliance. Entities (such as us) that engage in creating, receiving, maintaining, or transmitting protected health information provided by covered entities and other business associates are subject to enforcement under HIPAA. Our access to protected health information triggers obligations to comply with certain privacy rules and data security requirements under HIPAA.

Any systems failure or security breach that results in the release of, or unauthorized access to, personal data, or any failure or perceived failure by us or our third-party service providers to comply with applicable privacy policies, contractual obligations, or any applicable laws or regulations relating to privacy or data protection, could result in proceedings against us by domestic or foreign government entities or others, including private plaintiffs in litigation. Such proceedings could result in the imposition of sanctions, fines, penalties, liabilities, government orders, and/or orders requiring that we change our data practices, any of which could have a material adverse effect on our business, operating results, reputation, and financial condition.

Various U.S. and foreign government bodies may enact new or additional laws or regulations, or issue rulings that invalidate prior laws or regulations, concerning privacy, data storage, data protection, and cross-border transfer of data that could materially adversely impact our business. In the European Union, the General Data Protection Regulation ("GDPR") took effect in May 2018. GDPR establishes requirements regarding the handling and security of personal data, requires disclosure of data breaches to individuals, customers, and data protection authorities in certain circumstances, requires companies to honor data subjects' requests relating to their personal data, permits regulators to impose fines of up to €20,000,000 or 4% of global annual revenue, whichever is higher, and establishes a private right of action. Furthermore, a new ePrivacy Regulation, regulating electronic communications, was proposed in 2017 and is under consideration by the European Commission, the European Parliament, and the European Council. More recently, the Court of Justice of the European Union ("CJEU") invalidated the U.S.-EU Privacy Shield in July 2020. The U.S.-EU Privacy Shield provided a mechanism to lawfully transfer personal data from the European Union to the United States and certain other countries. In the wake of the invalidation of the U.S.-EU Privacy Shield, we have transitioned to reliance on the EU Standard Contractual Clauses ("SCCs") to lawfully transfer certain personal data from the European Union to the United States. The rules involving this alternative data transfer option are also undergoing revision and this transfer mechanism may also be declared invalid (or require us to change our business practices) in the future, requiring us to provide an alternative means of data transfer. In addition, the required terms for contracts containing SCCs along with recommended supplemental provisions are changing and may require us to assume additional obligations, otherwise inhibit or restrict our ability to undertake certain activities, or incur additional costs related to data protection.

In addition, in June 2021, the European Data Protection Board ("EDPB") issued a new set of SCCs and formal recommendations on measures to ensure compliance with the EU data protection requirements when transferring personal data outside of the European Economic Area (the "EDPB Recommendations"). The new SCCs place obligations on us in relation to government authorities' access requests in respect of personal data transferred under the SCCs. The EDPB Recommendations are designed to be read in tandem with the new SCCs and set out new requirements for organizations to assess third countries and identify appropriate supplementary data protection and security measures to be implemented on a case-by-case basis where needed.

Moreover, due to Brexit, the SCCs issued by the European Commission are no longer automatically adopted in the United Kingdom post-Brexit. In response, the UK's Information Commissioner's Office ("ICO") published a template Addendum to the new EU SCCs which adapts the new EU SCCs for UK use. In the alternative, the ICO also published the international data transfer agreement ("IDTA"). The IDTA replaces the current set of SCCs being used in the UK. The UK SCCs Addendum and IDTA, after having been put before UK parliament, have been in force as of March 2022 and UK-based organizations were required to start using the UK IDTA or Addendum for new data transfer arrangements starting in September 2022.

The rules involving these alternative SCC data transfer options are continually undergoing revision and these transfer mechanisms may also be declared invalid (or require us to change our business practices) in the future, requiring us to provide an alternative means of data transfer or implement significant changes in our data security and protection practices. In addition, the required terms for contracts containing SCCs along with recommended supplemental provisions are changing and may require us to assume additional obligations, otherwise inhibit or restrict our ability to undertake certain activities, or incur additional costs related to data protection.

Similar requirements are also coming into force in other countries. Brazil enacted the Lei Geral de Proteção de Dados (the "Brazilian General Data Protection Law"), which became effective in August 2020 and imposes requirements largely similar to GDPR on products and services offered to users in Brazil. In China, we may also be subject to the Cybersecurity Law that went into effect in June 2017 and the revision of the Personal Information Security Specification that went into effect in October 2020, which have broad but uncertain application and impose a number of new privacy and data security obligations. China also adopted new legislation on the protection of privacy and personal data in November 2021, including the Personal Information Protection Law and Data Security Law that impose new data processing obligations on us. Under these new regulations, if an entity operating in China violates the law, regulators may order it to take corrective actions, issue warnings, confiscate illegal income, suspend services, revoke operating permits or business

licenses, or issue a fine. The fine can be up to ¥50 million or 5 percent of an organization's annual revenue for the prior financial year. Other countries are considering new or expanded laws governing privacy and data security that may impact our business practices. These developments, including in China, may impact our activities with our customers, other MicroStrategy entities and vendors, and require us to take appropriate steps in light of data transfers between the U.S. and the EU (and the UK), as well as transfers and onward transfers of personal data from the EU to other non-EU countries.

The state of California has also adopted a comprehensive privacy law, the California Consumer Privacy Act ("CCPA"), which took effect in January 2020 and became enforceable in July 2020. We may be required to devote substantial resources to implement and maintain compliance with the CCPA, and noncompliance could result in regulatory investigations and fines or private litigation. Moreover, in November 2020, California voters approved a privacy law, the California Privacy Rights Act ("CPRA"), which amends the CCPA to create privacy rights and obligations in California, and goes into effect in January 2023. Virginia, Colorado, Utah, and Connecticut have passed laws similar to the CCPA, all of which go into effect in 2023, and several other states are considering bills similar to the CCPA or other generally applicable privacy laws that may impose additional costs and obligations on us. In March 2022, the U.S. federal government also passed the Cyber Incident Reporting for Critical Infrastructure Act of 2022, which will require companies deemed to be part of U.S. critical infrastructure to report any substantial cybersecurity incidents or ransom payments to the federal government within 72 and 24 hours, respectively. The implementing regulations are not expected for another two-to-three years.

Furthermore, the U.S. Congress is considering comprehensive privacy legislation. At this time, it is unclear whether Congress will pass such a law and if so, when and what it will require and prohibit. Moreover, it is not clear whether any such legislation would give the Federal Trade Commission ("FTC") any new authority to impose civil penalties for violations of the Federal Trade Commission Act in the first instance, whether Congress will grant the FTC rulemaking authority over privacy and information security, or whether Congress will vest some or all privacy and data security regulatory authority and enforcement power in a new agency, akin to EU data protection authorities.

Complying with these and other changing requirements could cause us or our customers to incur substantial costs or pay substantial fines or penalties, require us to change our business practices, require us to take on more onerous obligations in our contracts, or limit our ability to provide certain offerings in certain jurisdictions, any of which could materially adversely affect our business and operating results. New laws or regulations restricting or limiting the collection or use of mobile data could also reduce demand for certain of our offerings or require changes to our business practices, which could materially adversely affect our business and operating results.

If we or our third-party service providers experience a disruption due to a cybersecurity attack or security breach and unauthorized parties obtain access to our customers', prospects', vendors', or channel partners' data, our data, our networks or other systems, or the cloud environments we manage, our offerings may be perceived as not being secure, our reputation may be harmed, demand for our offerings may be reduced, our operations may be disrupted, we may incur significant legal and financial liabilities, and our business could be materially adversely affected

As part of our business, we process, store, and transmit our customers', prospects', vendors', and channel partners' data as well as our own, including in our networks and other systems and the cloud environments we manage. Security breaches may occur due to technological error, computer viruses, or third-party action, including intentional misconduct by computer hackers or state actors, physical break-ins, industrial espionage, fraudulent inducement of employees, customers, or channel partners to disclose sensitive information such as user names or passwords, and employee, customer, or channel partner error or malfeasance. A security breach could result in unauthorized access to or disclosure, modification, misuse, loss, or destruction of our customers', prospects', vendors', or channel partners' data, our data (including our proprietary information, intellectual property, or trade secrets), our networks or other systems, or the cloud environments we manage. Third parties may also conduct attacks designed to prevent access to critical data or systems through ransomware or temporarily deny customers access to our cloud environments.

We, and our service providers, may experience and have experienced attempts by third parties to identify and exploit software and service vulnerabilities, penetrate or bypass our security measures, and gain unauthorized access to our or our customers' or service providers' cloud environments, networks, and other systems. Security measures that we or our third-party service providers have implemented may not be effective against all current or future security threats, including any potential threats from the exploitation of the log4j or SpringShell vulnerabilities. Because there are many different security breach techniques and such techniques continue to evolve, we may be unable to anticipate, detect, or mitigate attempted security breaches and implement adequate preventative measures.

Any security breach, ransomware attack, or successful denial of service attack could result in a loss of customer confidence in the security of our offerings and damage to our brand, reduce the demand for our offerings, disrupt our normal business operations, require us to spend material resources to investigate or correct the breach, require us to notify affected customers or individuals and/or applicable regulators and others, provide identity theft protection services to individuals, expose us to legal liabilities, including litigation, regulatory enforcement, and indemnity obligations, and materially adversely affect our revenues and operating results. Our software operates in conjunction with and is dependent on third-party products and components across a broad ecosystem. If there is a security

vulnerability in one of these products or components, and if there is a security exploit targeting it, we could face increased costs, liability claims, customer dissatisfaction, reduced revenue, or harm to our reputation or competitive position.

These risks will increase as we continue to grow the number and scale of our cloud subscriptions and process, store, and transmit increasingly large amounts of our customers', prospects', vendors', channel partners', and our own data. In particular, in connection with the COVID-19 pandemic, there has been an increase in cyberattacks and other malicious activities as remote working conditions have led businesses to increasingly rely on virtual environments and communication systems.

Our having entered into indemnification agreements with Michael J. Saylor, our Chairman of the Board of Directors and Executive Chairman, to supplement our conventional director and officer liability insurance provided by third-party insurance carriers could negatively affect our business and the market price of our class A common stock

Due to market trends toward higher premiums and the novelty of our bitcoin acquisition strategy, we were unable to obtain our desired coverage level for director and officer liability insurance from commercial carriers on acceptable terms, and in lieu of such insurance from June 2021 through June 2022, and as a supplement to commercial carrier coverage we were able to obtain beginning in June 2022, we have entered into indemnification agreements with Michael J. Saylor, our Chairman of the Board of Directors and Executive Chairman, pursuant to which Mr. Saylor has agreed to personally indemnify our directors and officers with respect to claims and expenses substantially similar to those typically covered under conventional director and officer insurance policies to the extent such claims and expenses are not covered by insurance provided by commercial carriers, for which we agreed to pay Mr. Saylor applicable fees. Our having entered into such indemnification agreements with Mr. Saylor could have adverse effects on our business, including making it more difficult to attract and retain qualified directors and officers due to the unconventional nature of the arrangement and potential concerns that the indemnification arrangement might not provide the same level of protection that might otherwise be provided by coverage obtained entirely through conventional director and officer insurance. In addition, our indemnity arrangements with Mr. Saylor may result in some investors perceiving that our independent directors are not sufficiently independent from Mr. Saylor due to their entitlement to personal indemnification from him, which may have an adverse effect on the market price of our class A common stock.

Risks Related to Our Class A Common Stock

The market price of our class A common stock has been and may continue to be volatile

The market price of our class A common stock has historically been volatile and this volatility has been significant in recent periods. Since August 11, 2020, the date on which we announced our initial purchase of bitcoin, the closing price of our class A common stock has increased from \$123.62 as of August 10, 2020, the last trading day before our announcement, to \$267.51 as of October 31, 2022. The market price of our class A common stock may fluctuate widely in response to various factors, some of which are beyond our control. These factors include, but are not limited to:

- fluctuations in the price of bitcoin, of which we have significant holdings, and in which we expect we will continue to make significant purchases and announcements about our transactions in bitcoin;
- changes to our bitcoin acquisition strategy;
- announcement of additional capital raising transactions;
- regulatory, commercial and technical developments related to bitcoin or the bitcoin blockchain;
- quarterly variations in our results of operations or those of our competitors;
- announcements about our earnings that are not in line with analyst expectations, the likelihood of which may be enhanced because it is our policy not to give guidance relating to our anticipated financial performance in future periods;
- announcements by us or our competitors of acquisitions, dispositions, new offerings, significant contracts, commercial relationships, or capital commitments;
- our ability to develop, market, and deliver new and enhanced offerings on a timely basis;
- commencement of, or our involvement in, litigation;
- recommendations by securities analysts or changes in earnings estimates and our ability to meet those estimates;
- investor perception of our Company;
- announcements by our competitors of their earnings that are not in line with analyst expectations;
- the volume of shares of our class A common stock available for public sale;
- sales or purchases of stock by us or by our stockholders and issuances of awards under our stock incentive plan; and
- general economic conditions and slow or negative growth of related markets, including as a result of the COVID-19 pandemic.

In addition, the stock market and the markets for both bitcoin-influenced and technology companies have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of companies in those markets. These market and industry factors may seriously harm the market price of our class A common stock, regardless of our actual operating performance.

Because of the rights of our two classes of common stock and because we are controlled by Michael J. Saylor, who beneficially owns the majority of our class B common stock, Mr. Saylor could transfer control of MicroStrategy to a third party without the approval of our Board of Directors or our other stockholders, prevent a third party from acquiring us, or limit the ability of our other stockholders to influence corporate matters

We have two classes of common stock: class A common stock and class B common stock. Holders of our class A common stock generally have the same rights as holders of our class B common stock, except that holders of class A common stock have one vote per share while holders of class B common stock have ten votes per share. As of October 25, 2022, holders of our class B common stock owned 1,964,025 shares of class B common stock, or 67.7% of the total voting power. As of October 25, 2022, Mr. Saylor, our Chairman of the Board of Directors and Executive Chairman, beneficially owned 1,961,668 shares of class B common stock, or 67.7% of the total voting power. Accordingly, Mr. Saylor can control MicroStrategy through his ability to determine the outcome of elections of our directors, amend our certificate of incorporation and by-laws, and take other actions requiring the vote or consent of stockholders, including mergers, going-private transactions, and other extraordinary transactions and their terms.

Our certificate of incorporation allows holders of class B common stock to transfer shares of class B common stock, subject to the approval of stockholders holding a majority of the outstanding class B common stock. Mr. Saylor could, without the approval of our Board of Directors or our other stockholders, transfer voting control of MicroStrategy to a third party. Such a transfer of control could have a material adverse effect on our business, operating results, and financial condition. Mr. Saylor could also prevent a change of control of MicroStrategy, regardless of whether holders of class A common stock might otherwise receive a premium for their shares over the then current market price. In addition, this concentrated control limits stockholders' ability to influence corporate matters and, as a result, we may take actions that our non-controlling stockholders do not view as beneficial or that conflict with their interests. As a result, the market price of our class A common stock could be materially adversely affected.

Our status as a "controlled company" could make our class A common stock less attractive to some investors or otherwise materially adversely affect our stock price

Because we qualify as a "controlled company" under Nasdaq corporate governance rules, we are not required to have independent directors comprise a majority of our Board of Directors. Additionally, our Board of Directors is not required to have an independent compensation or nominating committee or to have the independent directors exercise the nominating function. We are also not required to have the compensation of our executive officers be determined by a compensation committee of independent directors. In addition, we are not required to empower our Compensation Committee with the authority to engage the services of any compensation consultants, legal counsel, or other advisors, or to have the Compensation Committee assess the independence of compensation consultants, legal counsel, and other advisors that it engages.

In light of our status as a controlled company, our Board of Directors has determined not to establish an independent nominating committee or have its independent directors exercise the nominating function and has elected instead to have the Board of Directors be directly responsible for nominating members of the Board. A majority of our Board of Directors is currently comprised of independent directors, and our Board of Directors has established a Compensation Committee comprised entirely of independent directors. The Compensation Committee determines the compensation of our Chief Executive Officer and will also determine the compensation of our Executive Chairman. However, our Board of Directors has authorized our Chief Executive Officer to determine the compensation of executive officers other than himself and the Executive Chairman, except that certain performance-based executive officer compensation is determined by the Compensation Committee. Awards made to directors and officers subject to Section 16 of the Exchange Act under the 2013 Equity Plan are also approved by the Compensation Committee. Additionally, while our Compensation Committee is empowered with the authority to retain and terminate outside counsel, compensation consultants, and other experts or consultants, it is not required to assess their independence.

Although currently a majority of our Board of Directors is comprised of independent directors and the Compensation Committee is comprised entirely of independent directors, we may elect in the future not to have independent directors constitute a majority of the Board of Directors or the Compensation Committee, our Chief Executive Officer's compensation determined by a compensation committee of independent directors, or a compensation committee of the Board of Directors at all.

Accordingly, should the interests of our controlling stockholder differ from those of other stockholders, the other stockholders may not have the same protections that are afforded to stockholders of companies that are required to follow all of the Nasdaq corporate governance rules. Our status as a controlled company could make our class A common stock less attractive to some investors or otherwise materially adversely affect our stock price.

Future sales, or the perception of future sales, of our class A common stock, convertible debt instruments or other convertible securities could depress the price of our class A common stock

We may issue and sell additional shares of class A common stock, convertible notes, or other securities in subsequent offerings to raise capital or issue shares for other purposes, including in connection with the acquisition of additional bitcoin. For example, we may sell shares of our class A common stock having an aggregate offering price of up to \$500.0 million from time to time through the 2022 Sales Agents under the 2022 Sales Agreement. We cannot predict:

- the size of future issuances of equity securities;
- the size and terms of future issuances of convertible debt instruments or other convertible securities; or
- the effect, if any, that future issuances and sales of our securities will have on the market price of our class A common stock.

Transactions involving newly issued class A common stock, convertible debt instruments, or other convertible securities could result in possibly substantial dilution to holders of our class A common stock.

Our amended and restated by-laws provide that the Court of Chancery of the State of Delaware (or, if the Court of Chancery of the State of Delaware does not have jurisdiction, then any other state court located in the State of Delaware, or if no state court located within the State of Delaware has jurisdiction, the federal district court for the District of Delaware) is the exclusive forum for certain litigation that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for such disputes with us or our directors, officers or employees

Our amended and restated by-laws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery of the State of Delaware does not have jurisdiction, then any other state court located in the State of Delaware, or if no state court located within the State of Delaware has jurisdiction, the federal district court for the District of Delaware) shall, to the fullest extent permitted by law, be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Company, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer, other employee or stockholder of the Company to the Company or the Company's stockholders, (iii) any action asserting a claim arising pursuant to any provision of the General Corporation Law of the State of Delaware or the Company's certificate of incorporation or by-laws (in each case, as they may be amended from time to time), or (iv) any action asserting a claim governed by the internal affairs doctrine. This exclusive forum provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act, which provides for exclusive jurisdiction of the federal courts. It could apply, however, to a suit that falls within one or more of the categories enumerated in the choice of forum provision and asserts claims under the Securities Act, inasmuch as Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. There is uncertainty as to whether a court would enforce such provision with respect to claims under the Securities Act, and our stockholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder.

The choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find the choice of forum provision contained in our amended and restated by-laws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions.

Risks Related to Our Outstanding and Potential Future Indebtedness

Our level and terms of indebtedness could adversely affect our ability to raise additional capital to further execute on our bitcoin acquisition strategy, fund our enterprise analytics software operations, and take advantage of new business opportunities

As of September 30, 2022, we had \$1.7 billion aggregate principal amount of indebtedness under the Convertible Notes, \$500.0 million aggregate principal amount of indebtedness under the 2028 Secured Notes, \$205.0 million of outstanding borrowings under the 2025 Secured Term Loan, and \$11.0 million of other long-term indebtedness.

Our substantial indebtedness and interest expense could have important consequences to us, including:

- limiting our ability to use a substantial portion of our cash flow from operations in other areas of our business, including for acquisition of additional bitcoin, working capital, research and development, expanding our infrastructure, capital expenditures, and other general business activities and investment opportunities in our company, because we must dedicate a substantial portion of these funds to pay interest on and/or service our debt;
- limiting our ability to obtain additional financing in the future for acquisition of additional bitcoin, working capital, capital expenditures, debt service, acquisitions, execution of our strategy, and other expenses or investments planned by us;

- limiting our flexibility and our ability to capitalize on business opportunities and to react to competitive pressures and adverse changes in government regulation, our business, and our industry;
- increasing our vulnerability to a downturn in our business and to adverse economic and industry conditions generally;
- placing us at a competitive disadvantage as compared to our competitors that are less leveraged; and
- limiting our ability, or increasing the costs, to refinance indebtedness.

We may be unable to service our indebtedness, which could cause us to default on our debt obligations and could force us into bankruptcy or liquidation

Our ability to make scheduled payments on and to refinance our indebtedness depends on and is subject to our financial and operating performance, which is influenced, in part, by general economic, financial, competitive, legislative, regulatory, counterparty business, and other risks that are beyond our control, including the availability of financing in the U.S. banking and capital markets. If our cash flows and capital resources are insufficient to fund our debt service obligations, we may be forced to reduce or delay capital expenditures, sell assets, seek additional capital, or restructure or refinance our indebtedness. We cannot assure you that future borrowings will be available to us in an amount sufficient to enable us to service our indebtedness, to refinance our indebtedness, or to fund our other liquidity needs. Even if refinancing indebtedness is available, any refinancing of our indebtedness could be at higher interest rates and may require us to comply with more onerous covenants that could further restrict our business operations. In addition, our bitcoin acquisition strategy anticipates that we may issue additional debt in future periods to finance additional purchases of bitcoin, but if we are unable to generate sufficient cash flow to service our debt and make necessary capital expenditures, we may be required to sell bitcoin. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations or our financial covenants, which could cause us to default on our debt obligations. In addition, any failure to make payments of interest and principal on our outstanding indebtedness on a timely basis would likely result in a reduction of our credit rating, which could harm our ability to incur additional indebtedness.

In the event of an event of default under any of our indebtedness, the holders of the defaulted indebtedness could elect to declare all the funds borrowed to be due and payable, together with accrued and unpaid interest and, in the case of our 2028 Secured Notes, enforce their security interests on substantially all of our assets and the assets of our subsidiary guarantors, including any bitcoins or other digital assets acquired on or after the closing of our sale of the 2028 Secured Notes, but excluding our bitcoin acquired prior to that date (“Prior Bitcoins”), as well as bitcoins and digital assets acquired with the proceeds from the sale of Prior Bitcoins and bitcoins acquired from proceeds of debt secured by Prior Bitcoins. Similarly, in the event of an event of default under the Credit and Security Agreement, the lender thereunder could elect to declare all outstanding loan principal under the 2025 Secured Term Loan to be due and payable, together with accrued and unpaid interest, and enforce its security interest on the \$5.0 million cash reserve account and the bitcoin held in the account securing the borrowings under the Credit and Security Agreement. Any of these events could in turn result in cross-defaults under our other indebtedness. We may not have sufficient funds available to pay the amounts due upon any such default, particularly in the event that there has been a decrease in the market value of our bitcoin holdings, and we may not be able to raise additional funds to pay such amounts on a timely basis, on terms we find acceptable, or at all. Any financing that we may undertake under such circumstances could result in substantial dilution of our existing stockholders, and in the absence of being able to obtain such financing, we could be forced into bankruptcy or liquidation.

The indenture governing our 2028 Secured Notes imposes significant operating and financial restrictions on us and certain restricted subsidiaries of ours, which may prevent us from capitalizing on business opportunities

The indenture governing our 2028 Secured Notes imposes significant operating and financial restrictions on us and certain designated restricted subsidiaries of ours. These restrictions limit our ability, and the ability of such restricted subsidiaries, to, among other things:

- incur or guarantee additional debt or issue disqualified stock or certain preferred stock;
- create or incur liens;
- pay dividends, redeem stock, or make certain other distributions;
- make certain investments;
- create restrictions on the ability of our restricted subsidiaries to pay dividends to us or make other intercompany transfers;
- transfer or sell assets;
- merge or consolidate; and
- enter into certain transactions with affiliates.

As a result of these restrictions, we are limited as to how we conduct our business and we may be unable to raise additional indebtedness or conduct equity financing to compete effectively or to take advantage of new business opportunities. The terms of any future indebtedness we may incur could include more restrictive covenants. We cannot assure you that we will be able to maintain compliance with these covenants in the future and, if we fail to do so, that we will be able to obtain waivers from the lenders or amend the covenants.

Our failure to comply with the restrictive covenants described above, as well as other terms of our indebtedness or the terms of any future indebtedness from time to time could result in an event of default, which, if not cured or waived, could result in our being required to repay these borrowings before their due date and/or face insolvency proceedings. If we are forced to refinance these borrowings on less favorable terms or cannot refinance these borrowings, our results of operations and financial condition could be adversely affected.

We may be required to repay the 2028 Secured Notes prior to their stated maturity date, if the springing maturity feature is triggered

The 2028 Secured Notes have a stated maturity date of June 15, 2028, but include a springing maturity feature that will cause the stated maturity date to spring ahead to the date that is (i) 91 days prior to the existing maturity date of the 2025 Convertible Notes (which is September 15, 2025), (ii) 91 days prior to the existing maturity date of the 2027 Convertible Notes (which is November 16, 2026), or (iii) the maturity date of any future convertible debt that we may issue that is then outstanding, unless on such dates we meet specified liquidity requirements or less than \$100,000,000 of aggregate principal amount of the 2025 Convertible Notes, the 2027 Convertible Notes, or such future convertible debt, as applicable, remains outstanding. If such springing maturity feature is triggered, we will be required to pay all amounts outstanding under the 2028 Secured Notes sooner than they would otherwise be due, we may not have sufficient funds available to pay such amounts at that time, and we may not be able to raise additional funds to pay such amounts on a timely basis, on terms we find acceptable, or at all.

Our MacroStrategy subsidiary has no independent operations other than holding bitcoin and financing activities and will depend on cash contributions from us and/or sales of bitcoin to meet its obligations under the Credit and Security Agreement under which the 2025 Secured Term Loan was issued

Our MacroStrategy subsidiary primarily holds bitcoin, a \$5.0 million cash reserve account held as collateral for the 2025 Secured Term Loan, and certain cash proceeds retained from the 2025 Secured Term Loan. As of September 30, 2022, MacroStrategy had no operations other than purchasing and holding bitcoin and those related to the administration and repayment of the loan principal outstanding and interest due under the Credit and Security Agreement. MacroStrategy's principal sources of funds to make payments pursuant to the Credit and Security Agreement are capital contributions, loans or other cash payments from us, which may be restricted by the covenants governing the 2028 Secured Notes, and sales of bitcoin, which in turn may be restricted due to the requirement in the Credit and Security Agreement requiring MacroStrategy to maintain the LTV Ratio below 50%. Accordingly, MacroStrategy may not have sufficient funds available to pay amounts due under the Credit and Security Agreement when they become due, and MacroStrategy and we may not be able to raise additional funds to pay such amounts on a timely basis, on terms we find acceptable, or at all.

MacroStrategy has contributed and may in the future be required to contribute additional bitcoin to the collateral package securing the Credit and Security Agreement or repay certain amounts outstanding thereunder prior to its stated maturity date, if the value of bitcoin declines

The Credit and Security Agreement has a stated maturity date of March 23, 2025, but includes a requirement that MacroStrategy maintain an LTV Ratio of less than 50%. As a result, MacroStrategy is required to maintain more than \$410.0 million of bitcoin in the account securing the borrowings under the Credit and Security Agreement, assuming the full \$205.0 million aggregate principal amount of the 2025 Secured Term Loan remains outstanding. If the price of bitcoin drops such that the LTV Ratio equals or exceeds the Maximum LTV Ratio of 50%, MacroStrategy will be required to either deposit additional bitcoin into such account or prepay a portion of the outstanding borrowings under the Credit and Security Agreement such that the LTV Ratio is reduced to 25% or less (or 35% or less, provided that in such case the interest rate on the outstanding borrowings will be increased by 25 basis points until such time as the LTV Ratio is reduced to 25% or less). In June 2022, as the price of bitcoin declined causing the LTV Ratio to increase, MacroStrategy deposited 10,585 additional bitcoins into the account securing the borrowing under the Credit and Security Agreement to help ensure that the LTV Ratio remained below the Maximum LTV Ratio. If MacroStrategy is not able to maintain an LTV Ratio of less than 50% at any time prior to the maturity date of the Credit and Security Agreement, MacroStrategy may be required to repay some of the principal outstanding under the Credit and Security Agreement sooner than such amounts would otherwise be due, MacroStrategy may not have sufficient funds available to pay such amounts at that time or the ability to sell bitcoin to generate additional funds, and MacroStrategy and we may not be able to raise additional funds to pay such amounts on a timely basis, on terms we find acceptable, or at all.

We may not be able to finance required repurchases of the 2028 Secured Notes or the Convertible Notes upon a change of control or a fundamental change or the repayment of amounts due under the 2025 Secured Term Loan upon a change of control

Upon a change of control or a fundamental change as defined in the indentures governing the 2028 Secured Notes and the Convertible Notes, the holders of such notes will have the right to require us to offer to purchase all of the applicable notes then outstanding at a price equal to 101% of the principal amount of the 2028 Secured Notes and 100% of the principal amount of the Convertible Notes, respectively, plus, in each case, accrued and unpaid interest, if any, to, but excluding, the repurchase date. In order to obtain sufficient funds to pay the purchase price of such notes, we expect that we would have to refinance the notes and we may not be able to refinance the notes on reasonable terms, if at all. Our failure to offer to purchase all applicable notes or to purchase all validly tendered notes would be an event of default under the indentures governing the 2028 Secured Notes and the Convertible Notes.

If a change of control or a fundamental change occurs, we may not have enough assets to satisfy all obligations under the indentures governing the 2028 Secured Notes and the Convertible Notes. Upon the occurrence of a change of control or a fundamental change we could seek to refinance the indebtedness under the 2028 Secured Notes or the Convertible Notes or obtain a waiver from the applicable note holders. However, we may not be able to obtain a waiver or refinance the applicable notes on commercially reasonable terms, if at all. Moreover, the exercise by holders of the 2028 Secured Notes or the Convertible Notes of their right to require us to repurchase such notes could cause a default under future debt agreements, even if the change of control or fundamental change itself does not, due to the financial effect of such repurchase on us.

Similarly, the Credit and Security Agreement under which the 2025 Secured Term Loan was issued includes customary change-of-control provisions, providing the lender with a right to declare all outstanding loan principal to be immediately due and payable, together with accrued and unpaid interest, in connection with a change of control (as such term is defined therein), including the sale of all or substantially all of our or MacroStrategy's assets. In order to obtain sufficient funds to repay the amounts due under the Credit and Security Agreement, we expect that we or MacroStrategy would need to refinance the amount due and may not be able to do so on reasonable terms, if at all.

We may not have the ability to raise the funds necessary to settle for cash conversions of the Convertible Notes

Upon conversion of the 2025 Convertible Notes or the 2027 Convertible Notes, unless we elect (or have previously irrevocably elected) to deliver solely shares of our class A common stock to settle such conversion of such Convertible Notes (other than paying cash in lieu of delivering any fractional share), we will be required to make cash payments in respect of the applicable Convertible Notes being converted as described in the applicable indenture. However, we may not have enough available cash or be able to obtain financing at the time we are required to pay cash with respect to such notes being converted. In addition, our ability to pay cash upon conversions of the Convertible Notes may be limited by law, regulatory authority, the covenants contained in the indenture governing the 2028 Secured Notes, or agreements governing any future indebtedness. Our failure to pay any cash payable on future conversions of the Convertible Notes as required by the respective indentures would constitute a default under the indenture for that series of Convertible Notes and could also lead to a default under the indenture for the other series of Convertible Notes or the 2028 Secured Notes. A default under any indenture could also lead to a default under agreements governing any future indebtedness. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness.

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

In the event the conditional conversion feature of either the 2025 Convertible Notes or the 2027 Convertible Notes is triggered, holders of the applicable Convertible Notes will be entitled to convert such notes at any time during specified periods at their option. If one or more holders elect to convert their Convertible Notes, unless we elect to satisfy our conversion obligation by delivering solely shares of our class A common stock (other than paying cash in lieu of delivering any fractional share), we would be required to settle a portion or all of our conversion obligation through the payment of cash, which could adversely affect our liquidity. In addition, even if holders do not elect to convert their Convertible Notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the applicable Convertible Notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

We rely on the receipt of funds from our subsidiaries in order to meet our cash needs and service our indebtedness, including the 2028 Secured Notes, the Convertible Notes, and our other long-term indebtedness, and certain of our subsidiaries holding digital assets may not provide any dividends, distributions, or other payments to us to fund our obligations and meet our cash needs

We depend on dividends, distributions, and other payments from our subsidiaries to fund our obligations, including those arising under the 2028 Secured Notes, the Convertible Notes, and our other long-term indebtedness, and meet our cash needs. The operating results of our subsidiaries at any given time may not be sufficient to make dividends, distributions, or other payments to us in order to allow us to make payments on the 2028 Secured Notes, the Convertible Notes, and our other long-term indebtedness. Our wholly-owned subsidiary, MacroStrategy, which holds the bitcoin that we owned prior to the issuance of the 2028 Secured Notes and the bitcoin that we acquired from the proceeds of the sale of our class A shares pursuant to the 2021 Open Market Sales Agreement or may acquire from proceeds we may generate from the 2022 Sales Agreement, is not obligated to provide and may in the future be prohibited from providing any dividends, distributions, or other payments to us to fund our obligations and meet our cash needs under such indebtedness. MacroStrategy holds approximately 115,110 bitcoins that, as of September 30, 2022, had a carrying value of \$1.731 billion on our Consolidated Balance Sheet, representing 68.0% of our consolidated total assets at such date. As of September 30, 2022, approximately 30,051 bitcoins held by MacroStrategy are pledged as collateral under the Credit and Security Agreement that secures MacroStrategy's obligations under the 2025 Secured Term Loan. In addition, dividends, distributions, or other payments, as well as other transfers of assets, between our subsidiaries and from our subsidiaries to us may be subject to legal, regulatory, or contractual restrictions, which may materially adversely affect our ability to transfer cash within our consolidated companies and our ability to meet our cash needs and service our indebtedness.

Despite our current level of indebtedness, we may be able to incur substantially more indebtedness and enter into other transactions in the future which could further exacerbate the risks related to our indebtedness

Although the indenture governing our 2028 Secured Notes contains, and future debt instruments may contain, restrictions on the incurrence of additional indebtedness and entering into certain types of other transactions, these restrictions are subject to a number of qualifications and exceptions and we may be able to incur significant additional indebtedness in the future. For example, these restrictions do not prevent us from incurring obligations, such as certain trade payables and operating leases, that do not constitute indebtedness as defined under our debt instruments. To the extent we incur additional indebtedness or other obligations, the risks described herein with respect to our indebtedness may increase significantly.

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

During the three and nine months ended September 30, 2022, we did not repurchase any equity securities registered by us pursuant to Section 12 of the Exchange Act. See Note 6, Treasury Stock, to the Consolidated Financial Statements in “Part I. Item 1. Financial Statements” for further information regarding our Share Repurchase Program.

Item 5. Other Information

Earnings Release

On November 1, 2022, we issued a press release announcing the Company’s financial results for the quarter ended September 30, 2022. A copy of this press release is attached as Exhibit 99.1 to this Quarterly Report. The information regarding this press release in this Item 5 (including Exhibit 99.1) shall not be deemed “filed” for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 6. Exhibits

INDEX TO EXHIBITS

Exhibit Number	Description
3.1	Second Restated Certificate of Incorporation of the registrant (incorporated herein by reference to Exhibit 3.1 to the registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2003 (File No. 000-24435)).
3.2	Amended and Restated By-Laws of the registrant (incorporated herein by reference to Exhibit 3.1 to the registrant's Current Report on Form 8-K filed with the SEC on January 30, 2015 (File No. 000-24435)).
4.1	Form of Certificate of Class A Common Stock of the registrant (incorporated herein by reference to Exhibit 4.1 to the registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2003 (File No. 000-24435)).
4.2	Indenture, dated as of December 11, 2020, by and between the registrant and U.S. Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.1 to the registrant's Current Report on Form 8-K filed with the SEC on December 11, 2020 (File No. 000-24435)).
4.3	Form of 0.750% Convertible Senior Note due 2025 (included within Exhibit 4.2 incorporated herein by reference to Exhibit 4.1 to the registrant's Current Report on Form 8-K filed with the SEC on December 11, 2020 (File No. 000-24435)).
4.4	Indenture, dated as of February 19, 2021, by and between the registrant and U.S. Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.1 to the registrant's Current Report on Form 8-K filed with the SEC on February 19, 2021 (File No. 000-24435)).
4.5	Form of 0% Convertible Senior Note due 2027 (included within Exhibit 4.4 incorporated herein by reference to Exhibit 4.1 to the registrant's Current Report on Form 8-K filed with the SEC on February 19, 2021 (File No. 000-24435)).
4.6	Indenture, dated as of June 14, 2021, by and among the registrant, as issuer, MicroStrategy Services Corporation, as a guarantor, and U.S. Bank National Association, as trustee and notes collateral agent (incorporated herein by reference to Exhibit 4.1 to the registrant's Current Report on Form 8-K filed with the SEC on June 14, 2021 (File No. 000-24435)).
4.7	Form of 6.125% Senior Secured Note due 2028 (included within Exhibit 4.6 incorporated herein by reference to Exhibit 4.1 to the registrant's Current Report on Form 8-K filed with the SEC on June 14, 2021 (File No. 000-24435)).
10.1†*	Amendment No. 1 to Indemnification Agreement (Excess Agreement), effective as of August 30, 2022, by and between the registrant and Michael J. Saylor.
10.2	Sales Agreement, dated as of September 9, 2022, by and among the Company, Cowen and Company, LLC and BTIG, LLC (incorporated herein by reference to Exhibit 1.1 to the registrant's Current Report on Form 8-K filed with the SEC on September 9, 2022 (File No. 000-24435)).
31.1	Certification pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Principal Executive Officer.
31.2	Certification pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Principal Financial Officer.
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
99.1	Press release, dated November 1, 2022, regarding the Company's financial results for the quarter ended September 30, 2022.
101.INS	Inline XBRL Instance Document. The instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase.
104	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101).

† Management contracts and compensatory plans or arrangements.

* Portions of this exhibit have been omitted pursuant to Item 601(b)(10)(iv) of Regulation S-K.

SIGNATURES

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

MICROSTRATEGY INCORPORATED

By: /s/ Andrew Kang

Andrew Kang

Senior Executive Vice President & Chief Financial Officer

By: /s/ Jeanine Montgomery

Jeanine Montgomery

Senior Vice President & Chief Accounting Officer

Date: November 1, 2022