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 October 31, 2022

OR

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

For the transition period from to

Commission File Number: 001-39504

SNOWFLAKE INC.

(Exact name of registrant as specified in its charter)

Delaware	**46-0636374**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

Suite 3A, 106 East Babcock Street
Bozeman, MT 59715
(Address of principal executive offices and zip code)[1]
(844) 766-9355
(Registrant's telephone number, including area code)
Not Applicable
(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A Common Stock, $0.0001 par value	SNOW	The New York Stock Exchange

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

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

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

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

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

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

As of November 18, 2022, there were 321.6 million shares of the registrant's Class A common stock, par value of $0.0001 per share, outstanding.

[1] We are a Delaware corporation with a globally distributed workforce and no corporate headquarters. Under the Securities and Exchange Commission's rules, we are required to designate a "principal executive office." For purposes of this report, we have designated our office in Bozeman, Montana as our principal executive office, as that is where our Chief Executive Officer and Chief Financial Officer are based.

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SPECIAL NOTE ABOUT FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, (Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended (Exchange Act), about us and our industry that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this report, including statements regarding our future results of operations and financial condition, business strategy, and plans and objectives of management for future operations, are forward-looking statements. In some cases, forward-looking statements may be identified by words such as “anticipate,” “believe,” “continue,” “could,” “design,” “estimate,” “expect,” “intend,” “may,” “plan,” “potentially,” “predict,” “project,” “should,” “will,” “would,” or the negative of these terms or other similar expressions. These forward-looking statements include, but are not limited to, statements concerning the following:

- our expectations regarding our revenue, expenses, and other operating results, including statements relating to the portion of our remaining performance obligations that we expect to recognize as revenue in future periods;
- our ability to acquire new customers and successfully retain existing customers;
- our ability to increase consumption on our platform;
- our ability to continue to innovate and make new features generally available to customers;
- our ability to achieve or sustain our profitability;
- future investments in our business, our anticipated capital expenditures, and our estimates regarding our capital requirements;
- the costs and success of our sales and marketing efforts, and our ability to promote our brand;
- our growth strategies for, and market acceptance of, our platform and the Data Cloud, as well as our ability to execute such strategies;
- our ability to successfully integrate and realize the benefits of strategic acquisitions;
- our reliance on key personnel and our ability to identify, recruit, and retain skilled personnel;
- our ability to effectively manage our growth, including any international expansion;
- our ability to protect our intellectual property rights and any costs associated therewith;
- our expectations regarding general market conditions and the effects of those conditions, including on customer and partner activity;
- our ability to compete effectively with existing competitors and new market entrants;
- the growth rates of the markets in which we compete; and
- the effects of the COVID-19 pandemic or other public health crises and their related public health measures on our business, the business of our customers and partners, and the economy.

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

Forward-looking statements are based on our management’s beliefs and assumptions and on information currently available. These forward-looking statements are subject to a number of known and unknown risks, uncertainties and assumptions, including risks described in the section titled “Risk Factors” and elsewhere in this Quarterly Report on Form 10-Q. Other sections of this Quarterly Report on Form 10-Q may include additional factors that could harm our business and financial performance. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time, and it is not possible for our management to predict all risk factors nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ from those contained in, or implied by, any forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. We cannot assure you that the events and circumstances reflected in the forward-looking statements will be achieved or occur. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this report or to conform these statements to actual results or to changes in our expectations. You should read this Quarterly Report on Form 10-Q and the documents that we reference in this Quarterly Report on Form 10-Q and have filed as exhibits to this report with the understanding that our actual future results, levels of activity, performance, and achievements may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

Investors and others should note that we may announce material business and financial information to our investors using our investor relations website (investors.snowflake.com), our filings with the Securities and Exchange Commission (SEC), webcasts, press releases, and conference calls. We use these mediums, including our website, to communicate with investors and the general public about our company, our products, and other issues. It is possible that the information that we make available on our website may be deemed to be material information. We therefore encourage investors and others interested in our company to review the information that we make available on our website.

SELECTED RISKS AFFECTING OUR BUSINESS

Investing in our common stock involves numerous risks, including those set forth below. This summary does not contain all of the information that may be important to you, and you should read this summary together with the more detailed discussion of risks and uncertainties set forth in the section titled “Risk Factors” included elsewhere in this Quarterly Report on Form 10-Q. Below are summaries of some of these risks, any one of which could materially adversely affect our business, results of operations, and financial condition. In that event, the market price of our common stock could decline, and you could lose part or all of your investment. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that adversely affect our business. You should not interpret our disclosure of any of the following risks to imply that such risks have not already materialized.

- We have experienced rapid revenue growth, which may not be indicative of our future performance, and we have a limited operating history, both of which make it difficult to forecast our future results of operations.
- We may not have visibility into our future financial position and results of operations.
- We have a history of operating losses and may not achieve or sustain profitability in the future.
- General market conditions, volatility, or disruptions, including higher inflation, higher interest rates, and fluctuations or volatility in capital markets or foreign currency exchange rates, could have an adverse impact on our or our customers’ or partners’ businesses, which could negatively impact our financial condition or results of operations.
- The markets in which we operate are highly competitive, and if we do not compete effectively, our business, financial condition, and results of operations could be harmed.
- If we fail to innovate in response to changing customer needs, new technologies, or other market requirements, our business, financial condition, and results of operations could be harmed.
- If we or our third-party service providers experience an actual or perceived security breach or unauthorized parties otherwise obtain access to our customers’ data, our data, or our platform, our platform may be perceived as not being secure, our reputation may be harmed, demand for our platform may be reduced, and we may incur significant liabilities.
- We could suffer disruptions, outages, defects, and other performance and quality problems with our platform or with the public cloud and internet infrastructure on which it relies.
- We expect fluctuations in our financial results, making it difficult to project future results, and if we fail to meet the expectations of securities analysts or investors with respect to our results of operations, our stock price could decline.
- Failure to effectively develop and expand our sales and marketing capabilities could harm our ability to increase our customer base and achieve broader market acceptance of our products and platform.
- Sales efforts to large customers involve risks that may not be present or that are present to a lesser extent with respect to sales to smaller organizations.
- Unfavorable conditions in our industry or the global economy, or reductions in cloud spending, could limit our ability to grow our business and negatively affect our results of operations.

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS (UNAUDITED)

SNOWFLAKE INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except per share data)
(unaudited)

	October 31, 2022	January 31, 2022
Assets		
Current assets:		
Cash and cash equivalents	$ 819,003	$ 1,085,729
Short-term investments	3,123,879	2,766,364
Accounts receivable, net	394,063	545,629
Deferred commissions, current	61,738	51,398
Prepaid expenses and other current assets	160,221	149,523
Total current assets	4,558,904	4,598,643
Long-term investments	943,081	1,256,207
Property and equipment, net	145,974	105,079
Operating lease right-of-use assets	234,678	190,356
Goodwill	649,092	8,449
Intangible assets, net	196,165	37,141
Deferred commissions, non-current	133,939	124,517
Other assets	293,855	329,306
Total assets	$ 7,155,688	$ 6,649,698
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 24,757	$ 13,441
Accrued expenses and other current liabilities	225,321	200,664
Operating lease liabilities, current	29,263	25,101
Deferred revenue, current	1,199,701	1,157,887
Total current liabilities	1,479,042	1,397,093
Operating lease liabilities, non-current	225,013	181,196
Deferred revenue, non-current	7,333	11,180
Other liabilities	21,029	11,184
Total liabilities	1,732,417	1,600,653
Commitments and contingencies (Note 9)		
Stockholders' equity:		
Preferred stock; $0.0001 par value per share; 200,000 shares authorized, zero shares issued and outstanding as of October 31, 2022 and January 31, 2022	—	—
Common stock; $0.0001 par value per share; 2,500,000 Class A shares authorized, 321,497 and 312,377 shares issued and outstanding as of October 31, 2022 and January 31, 2022, respectively; 185,461 Class B shares authorized, zero shares issued and outstanding as of each October 31, 2022 and January 31, 2022	32	31
Additional paid-in capital	7,988,829	6,984,669
Accumulated other comprehensive loss	(69,179)	(16,286)
Accumulated deficit	(2,508,905)	(1,919,369)
Total Snowflake Inc. stockholders' equity	5,410,777	5,049,045
Noncontrolling interest	12,494	—
Total stockholders' equity	5,423,271	5,049,045
Total liabilities and stockholders' equity	$ 7,155,688	$ 6,649,698

See accompanying notes to condensed consolidated financial statements.

SNOWFLAKE INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)
(unaudited)

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2022	2021	2022	2021
Revenue	$ 557,028	$ 334,441	$ 1,476,647	$ 835,553
Cost of revenue	190,721	120,786	511,883	324,253
Gross profit	366,307	213,655	964,764	511,300
Operating expenses:				
Sales and marketing	284,477	190,971	803,034	540,678
Research and development	211,387	115,900	545,933	343,783
General and administrative	76,462	64,055	218,314	189,846
Total operating expenses	572,326	370,926	1,567,281	1,074,307
Operating loss	(206,019)	(157,271)	(602,517)	(563,007)
Interest income	21,857	1,985	38,308	6,787
Other income (expense), net	(13,271)	1,609	(44,672)	9,867
Loss before income taxes	(197,433)	(153,677)	(608,881)	(546,353)
Provision for (benefit from) income taxes	4,009	1,179	(18,839)	1,442
Net loss	(201,442)	(154,856)	(590,042)	(547,795)
Less: net loss attributable to noncontrolling interest	(506)	—	(506)	—
Net loss attributable to Snowflake Inc.	$ (200,936)	$ (154,856)	$ (589,536)	$ (547,795)
Net loss per share attributable to Snowflake Inc. Class A and Class B common stockholders—basic and diluted[1]	$ (0.63)	$ (0.51)	$ (1.86)	$ (1.84)
Weighted-average shares used in computing net loss per share attributable to Snowflake Inc. Class A and Class B common stockholders—basic and diluted[1]	320,135	303,007	317,653	297,436

[1] On March 1, 2021, all shares of the Company's then-outstanding Class B common stock were automatically converted into the same number of shares of Class A common stock, pursuant to the terms of the Company's amended and restated certificate of incorporation. No additional shares of Class B common stock will be issued following such conversion. See Note 10 for further details.

See accompanying notes to condensed consolidated financial statements.

SNOWFLAKE INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands)
(unaudited)

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2022	**2021**	**2022**	**2021**
Net loss	$ (201,442)	$ (154,856)	$ (590,042)	$ (547,795)
Other comprehensive loss:				
Foreign currency translation adjustments	(1,108)	(361)	(4,158)	(63)
Net change in unrealized gains (losses) on available-for-sale debt securities	(20,214)	(4,266)	(48,735)	(3,862)
Total other comprehensive loss	(21,322)	(4,627)	(52,893)	(3,925)
Comprehensive loss attributable to Snowflake Inc.	$ (222,764)	$ (159,483)	$ (642,935)	$ (551,720)

See accompanying notes to condensed consolidated financial statements.

SNOWFLAKE INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands)
(unaudited)

	Three Months Ended October 31, 2022							
	Class A Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Snowflake Inc. Stockholders' Equity	Noncontrolling Interest	Total Stockholders' Equity
	Shares	Amount						
BALANCE—July 31, 2022	319,897	$ 32	$ 7,782,117	$ (47,857)	$ (2,307,969)	$ 5,426,323	$ —	$ 5,426,323
Issuance of common stock upon exercise of stock options	984	—	7,366	—	—	7,366	—	7,366
Issuance of common stock under employee stock purchase plan	102	—	14,837	—	—	14,837	—	14,837
Issuance of common stock in connection with a business combination	2	—	—	—	—	—	—	—
Vesting of early exercised stock options	—	—	61	—	—	61	—	61
Vesting of restricted stock units	786	—	—	—	—	—	—	—
Shares withheld related to net share settlement of equity awards	(274)	—	(52,507)	—	—	(52,507)	—	(52,507)
Stock-based compensation	—	—	236,955	—	—	236,955	—	236,955
Capital contributions from noncontrolling interest holders	—	—	—	—	—	—	13,000	13,000
Other comprehensive loss	—	—	—	(21,322)	—	(21,322)	—	(21,322)
Net loss	—	—	—	—	(200,936)	(200,936)	(506)	(201,442)
BALANCE—October 31, 2022	321,497	$ 32	$ 7,988,829	$ (69,179)	$ (2,508,905)	$ 5,410,777	$ 12,494	$ 5,423,271

	Three Months Ended October 31, 2021							
	Class A Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Snowflake Inc. Stockholders' Equity	Noncontrolling Interest	Total Stockholders' Equity
	Shares	Amount						
BALANCE—July 31, 2021	300,585	$ 30	$ 6,596,154	$ 1,141	$ (1,632,360)	$ 4,964,965	$ —	$ 4,964,965
Issuance of common stock upon exercise of stock options	4,222	—	24,708	—	—	24,708	—	24,708
Issuance of common stock under employee stock purchase plan	111	—	25,829	—	—	25,829	—	25,829
Vesting of early exercised stock options	—	—	191	—	—	191	—	191
Vesting of restricted stock units	981	—	—	—	—	—	—	—
Stock-based compensation	—	—	150,472	—	—	150,472	—	150,472
Other comprehensive loss	—	—	—	(4,627)	—	(4,627)	—	(4,627)
Net loss	—	—	—	—	(154,856)	(154,856)	—	(154,856)
BALANCE—October 31, 2021	305,899	$ 30	$ 6,797,354	$ (3,486)	$ (1,787,216)	$ 5,006,682	$ —	$ 5,006,682

SNOWFLAKE INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (CONTINUED)
(in thousands)
(unaudited)

	Nine Months Ended October 31, 2022							
	Class A Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Snowflake Inc. Stockholders' Equity	Noncontrolling Interest	Total Stockholders' Equity
	Shares	Amount						
BALANCE—January 31, 2022	312,377	$ 31	$ 6,984,669	$ (16,286)	$ (1,919,369)	$ 5,049,045	$ —	$ 5,049,045
Issuance of common stock upon exercise of stock options	4,926	1	30,932	—	—	30,933	—	30,933
Issuance of common stock under employee stock purchase plan	286	—	40,931	—	—	40,931	—	40,931
Issuance of common stock in connection with a business combination	1,916	—	438,916	—	—	438,916	—	438,916
Issuance of common stock in connection with a business combination subject to future vesting	409	—	—	—	—	—	—	—
Vesting of early exercised stock options	—	—	183	—	—	183	—	183
Vesting of restricted stock units	2,409	—	—	—	—	—	—	—
Shares withheld related to net share settlement of equity awards	(826)	—	(138,641)	—	—	(138,641)	—	(138,641)
Stock-based compensation	—	—	631,839	—	—	631,839	—	631,839
Capital contributions from noncontrolling interest holders	—	—	—	—	—	—	13,000	13,000
Other comprehensive loss	—	—	—	(52,893)	—	(52,893)	—	(52,893)
Net loss	—	—	—	—	(589,536)	(589,536)	(506)	(590,042)
BALANCE—October 31, 2022	321,497	$ 32	$ 7,988,829	$ (69,179)	$ (2,508,905)	$ 5,410,777	$ 12,494	$ 5,423,271

	Nine Months Ended October 31, 2021							
	Class A and Class B Common Stock[(1)]		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Snowflake Inc. Stockholders' Equity	Noncontrolling Interest	Total Stockholders' Equity
	Shares	Amount						
BALANCE—January 31, 2021	287,918	$ 28	$ 6,175,425	$ 439	$ (1,239,421)	$ 4,936,471	$ —	$ 4,936,471
Issuance of common stock upon exercise of stock options	15,279	2	90,374	—	—	90,376	—	90,376
Issuance of common stock under employee stock purchase plan	370	—	52,227	—	—	52,227	—	52,227
Vesting of early exercised stock options	—	—	614	—	—	614	—	614
Vesting of restricted stock units	2,332	—	—	—	—	—	—	—
Stock-based compensation	—	—	478,714	—	—	478,714	—	478,714
Other comprehensive loss	—	—	—	(3,925)	—	(3,925)	—	(3,925)
Net loss	—	—	—	—	(547,795)	(547,795)	—	(547,795)
BALANCE—October 31, 2021	305,899	$ 30	$ 6,797,354	$ (3,486)	$ (1,787,216)	$ 5,006,682	$ —	$ 5,006,682

(1) On March 1, 2021, all shares of the Company's then-outstanding Class B common stock were automatically converted into the same number of shares of Class A common stock, pursuant to the terms of the Company's amended and restated certificate of incorporation. No additional shares of Class B common stock will be issued following such conversion. See Note 10 for further details.

See accompanying notes to condensed consolidated financial statements.

SNOWFLAKE INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(unaudited)

	Nine Months Ended October 31,	
	2022	**2021**
Cash flows from operating activities:		
Net loss	$ (590,042)	$ (547,795)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization	43,809	15,586
Non-cash operating lease costs	33,579	25,895
Amortization of deferred commissions	41,525	26,824
Stock-based compensation, net of amounts capitalized	610,837	459,392
Net amortization of premiums on investments	12,331	36,938
Net unrealized losses (gains) on strategic investments in equity securities	45,096	(8,515)
Deferred income tax	(25,277)	—
Other	678	2,535
Changes in operating assets and liabilities, net of effects of business combinations:		
Accounts receivable	150,723	39,142
Deferred commissions	(63,627)	(52,892)
Prepaid expenses and other assets	13,169	(112,798)
Accounts payable	10,304	4,591
Accrued expenses and other liabilities	27,727	43,106
Operating lease liabilities	(29,176)	(24,758)
Deferred revenue	46,667	124,030
Net cash provided by operating activities	328,323	31,281
Cash flows from investing activities:		
Purchases of property and equipment	(19,766)	(12,209)
Capitalized internal-use software development costs	(17,319)	(8,612)
Cash paid for business combinations, net of cash and cash equivalents acquired	(352,555)	—
Purchases of intangible assets	(700)	(11,182)
Purchases of investments	(2,796,167)	(3,042,396)
Sales of investments	58,813	407,003
Maturities and redemptions of investments	2,594,593	2,610,429
Net cash used in investing activities	(533,101)	(56,967)
Cash flows from financing activities:		
Proceeds from exercise of stock options	31,095	90,444
Proceeds from issuance of common stock under employee stock purchase plan	40,931	52,227
Taxes paid related to net share settlement of equity awards	(135,766)	—
Capital contributions from noncontrolling interest holders	13,000	—
Payments of deferred purchase consideration for a business combination	(1,800)	—
Net cash provided by (used in) financing activities	(52,540)	142,671

	Nine Months Ended October 31,	
	2022	2021
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	(9,390)	21
Net increase (decrease) in cash, cash equivalents, and restricted cash	(266,708)	117,006
Cash, cash equivalents, and restricted cash—beginning of period	1,102,534	835,193
Cash, cash equivalents, and restricted cash—end of period	$ 835,826	$ 952,199
Supplemental disclosures of non-cash investing and financing activities:		
Property and equipment included in accounts payable and accrued expenses	$ 5,841	$ 3,115
Stock-based compensation included in capitalized software development costs	$ 20,295	$ 18,923
Issuance of common stock in connection with a business combination	$ 438,916	$ —
Purchases of intangible assets included in accrued expenses and other liabilities	$ —	$ 4,544
Unpaid taxes related to net share settlement of equity awards included in accrued expenses and other current liabilities	$ 2,874	$ —
Reconciliation of cash, cash equivalents, and restricted cash:		
Cash and cash equivalents	$ 819,003	$ 935,217
Restricted cash—included in other assets and prepaid expenses and other current assets	16,823	16,982
Total cash, cash equivalents, and restricted cash	$ 835,826	$ 952,199

See accompanying notes to condensed consolidated financial statements.

SNOWFLAKE INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

1. Organization and Description of Business

Snowflake Inc. (Snowflake or the Company) provides a cloud-based data platform, which enables customers to consolidate data to drive meaningful business insights, build data-driven applications, and share data. The Company provides its platform through a customer-centric, consumption-based business model, only charging customers for the resources they use. Through its platform, the Company delivers the Data Cloud, a network where Snowflake customers, partners, data providers, and data consumers can break down data silos and derive value from rapidly growing data sets in secure, governed, and compliant ways. Snowflake was incorporated in the state of Delaware on July 23, 2012.

2. Basis of Presentation and Summary of Significant Accounting Policies

Fiscal Year

The Company's fiscal year ends on January 31. For example, references to fiscal 2023 refer to the fiscal year ended January 31, 2023.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) and applicable rules and regulations of the U.S. Securities and Exchange Commission (SEC) regarding interim financial reporting. Accordingly, they do not include all disclosures normally required in annual consolidated financial statements prepared in accordance with GAAP. Therefore, these unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes included in the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2022, which was filed with the SEC on March 30, 2022.

In management's opinion, these unaudited condensed consolidated financial statements have been prepared on the same basis as the annual financial statements and reflect all adjustments, which include only normal recurring adjustments necessary for the fair statement of the Company's financial position as of October 31, 2022 and the results of operations for the three and nine months ended October 31, 2022 and 2021, and cash flows for the nine months ended October 31, 2022 and 2021. The condensed balance sheet as of January 31, 2022 was derived from the audited financial statements but does not include all disclosures required by GAAP. The results of operations for the three and nine months ended October 31, 2022 are not necessarily indicative of the results to be expected for the full year or any other future interim or annual period.

Principles of Consolidation

The condensed consolidated financial statements include the accounts of Snowflake Inc., its wholly-owned subsidiaries, and a majority-owned subsidiary in which the Company has a controlling financial interest. All intercompany transactions and balances have been eliminated in consolidation. The Company records noncontrolling interest in its condensed consolidated financial statements to recognize the minority ownership interest in its majority-owned subsidiary. Profits and losses of the majority-owned subsidiary are attributed to controlling and noncontrolling interests using the hypothetical liquidation at book value method.

Segment Information

The Company has a single operating and reportable segment. The Company's chief operating decision maker is its Chief Executive Officer, who reviews financial information presented on a consolidated basis for purposes of making operating decisions, assessing financial performance, and allocating resources. For information regarding the Company's revenue by geographic area, see Note 3.

The following table presents the Company's long-lived assets, comprising property and equipment, net and operating lease right-of-use assets, by geographic area (in thousands):

	October 31, 2022	January 31, 2022
United States	$ 322,199	$ 272,895
Other[(1)]	58,453	22,540
Total	$ 380,652	$ 295,435

(1) No individual country outside of the United States accounted for more than 10% of the Company's long-lived assets as of October 31, 2022 and January 31, 2022.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. Such estimates include, but are not limited to, stand-alone selling prices (SSP) for each distinct performance obligation, internal-use software development costs, the expected period of benefit for deferred commissions, the fair value of intangible assets acquired in business combinations, the useful lives of long-lived assets, the carrying value of operating lease right-of-use assets, stock-based compensation, accounting for income taxes, and the fair value of investments in marketable and non-marketable securities.

The Company bases its estimates on historical experience and also on assumptions that management considers reasonable. These estimates are assessed on a regular basis; however, actual results could differ from these estimates.

Summary of Significant Accounting Policies

The Company's significant accounting policies are discussed in "Note 2 – Basis of Presentation and Summary of Significant Accounting Policies" of the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2022, which was filed with the SEC on March 30, 2022. There have been no significant changes to these policies during the nine months ended October 31, 2022, except for the addition of the derivative financial instruments accounting policy with respect to the Company's foreign currency forward contracts entered into during the nine months ended October 31, 2022.

Derivative Financial Instruments

During the nine months ended October 31, 2022, the Company began using derivative financial instruments to manage its exposure to certain foreign currency exchange risks associated with certain intercompany balances denominated in currencies other than the U.S. dollar. These derivative financial instruments consist of deliverable foreign currency forward contracts entered into with high-quality financial institutions that have investment-grade ratings with maturities of one month or less and are not designated as hedging instruments. As such, all changes in the fair value of these derivative instruments are recorded in other income (expense), net on the condensed consolidated statements of operations, and are intended to offset the foreign currency transaction gains or losses associated with the underlying intercompany balances. The resulting derivative assets and liabilities are measured at fair value using Level 2 inputs and presented as prepaid expenses and other current assets and accrued expenses and other current liabilities, as applicable, on the condensed consolidated balance sheets. Cash flows at settlement of such foreign currency forward contracts are classified as operating activities in the condensed consolidated statement of cash flows.

As of October 31, 2022, all of the Company's derivative assets and liabilities were settled, and the related realized gains (losses) were not material for the three and nine months ended October 31, 2022.

3. Revenue, Accounts Receivable, Deferred Revenue, and Remaining Performance Obligations

Disaggregation of Revenue

Revenue consists of the following (in thousands):

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2022	2021	2022	2021
Product revenue	$ 522,752	$ 312,458	$ 1,383,454	$ 780,911
Professional services and other revenue	34,276	21,983	93,193	54,642
Total	$ 557,028	$ 334,441	$ 1,476,647	$ 835,553

Revenue by geographic area, based on the location of the Company's customers (or end-customers under reseller arrangements), was as follows (in thousands):

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2022	2021	2022	2021
Americas:				
United States	$ 441,432	$ 265,605	$ 1,171,641	$ 669,172
Other Americas[1]	11,637	7,703	31,316	18,860
EMEA[1][2]	79,326	47,671	207,010	117,149
Asia-Pacific and Japan[1]	24,633	13,462	66,680	30,372
Total	$ 557,028	$ 334,441	$ 1,476,647	$ 835,553

(1) No individual country in these areas represented more than 10% of the Company's revenue for all periods presented.
(2) Includes Europe, the Middle East, and Africa.

Accounts Receivable, Net

As of October 31, 2022 and January 31, 2022, allowance for credit losses of $2.2 million and $1.3 million, was included in the Company's accounts receivable, net balance, respectively.

Significant Customers

For purposes of assessing the concentration of credit risk and significant customers, a group of customers under common control or customers that are affiliates of each other are regarded as a single customer. As of October 31, 2022 and January 31, 2022, there were no customers that represented 10% or more of the Company's accounts receivable, net balance. Additionally, there were no customers that represented 10% or more of the Company's revenue for each of the three and nine months ended October 31, 2022 and 2021.

Deferred Revenue

Revenue recognized for the three months ended October 31, 2022 from amounts included in deferred revenue as of July 31, 2022 was $427.4 million. Revenue recognized for the three months ended October 31, 2021 from amounts included in deferred revenue as of July 31, 2021 was $255.0 million.

Revenue recognized for the nine months ended October 31, 2022 from amounts included in deferred revenue as of January 31, 2022 was $841.8 million. Revenue recognized for the nine months ended October 31, 2021 from amounts included in deferred revenue as of January 31, 2021 was $464.0 million.

Remaining Performance Obligations

Remaining performance obligations (RPO) represent the amount of contracted future revenue that has not yet been recognized, including (i) deferred revenue and (ii) non-cancelable contracted amounts that will be invoiced and recognized as revenue in future periods. The Company's RPO excludes performance obligations from on-demand arrangements as there are no minimum purchase commitments associated with these arrangements, and certain time and materials contracts that are billed in arrears. Portions of RPO that are not yet invoiced and are denominated in foreign currencies are revalued into U.S. dollars each period based on the applicable period-end exchange rates.

As of October 31, 2022, the Company's RPO was $3.0 billion, of which the Company expects approximately 55% to be recognized as revenue in the twelve months ending October 31, 2023 based on historical customer consumption patterns. However, the amount and timing of revenue recognition are generally dependent upon customers' future consumption, which is inherently variable at customers' discretion and can extend beyond the original contract term in cases where customers are permitted to roll over unused capacity to future periods, generally on the purchase of additional capacity at renewal.

4. Cash Equivalents and Investments

The following is a summary of the Company's cash equivalents, short-term investments, and long-term investments on the condensed consolidated balance sheets (in thousands):

	October 31, 2022			
	Amortized Cost	**Gross Unrealized Gains**	**Gross Unrealized Losses**	**Estimated Fair Value**
Cash equivalents:				
Money market funds	$ 425,221	$ —	$ —	$ 425,221
Commercial paper	89,834	—	(27)	89,807
Corporate notes and bonds	1,600	—	—	1,600
Total cash equivalents	516,655	—	(27)	516,628
Investments:				
Corporate notes and bonds	2,340,262	11	(40,916)	2,299,357
Commercial paper	784,220	18	(5,121)	779,117
U.S. government and agency securities	598,365	4	(15,722)	582,647
Certificates of deposit	408,197	15	(2,373)	405,839
Total investments	4,131,044	48	(64,132)	4,066,960
Total cash equivalents and investments	$ 4,647,699	$ 48	$ (64,159)	$ 4,583,588

	January 31, 2022			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Cash equivalents:				
Money market funds	$ 722,492	$ —	$ —	$ 722,492
Commercial paper	77,795	1	(2)	77,794
U.S. government securities	36,997	—	(2)	36,995
Corporate notes and bonds	7,950	—	(1)	7,949
Total cash equivalents	845,234	1	(5)	845,230
Investments:				
Corporate notes and bonds	2,610,010	91	(12,062)	2,598,039
Commercial paper	884,376	81	(821)	883,636
U.S. government and agency securities	439,449	28	(2,558)	436,919
Certificates of deposit	104,108	4	(135)	103,977
Total investments	4,037,943	204	(15,576)	4,022,571
Total cash equivalents and investments	$ 4,883,177	$ 205	$ (15,581)	$ 4,867,801

The Company included $17.0 million and $14.1 million of interest receivable in prepaid expenses and other current assets on the condensed consolidated balance sheets as of October 31, 2022 and January 31, 2022, respectively. The Company did not recognize an allowance for credit losses against interest receivable as of October 31, 2022 and January 31, 2022 because such potential losses were not material.

As of October 31, 2022, the contractual maturities of the Company's available-for-sale marketable debt securities did not exceed 36 months. The estimated fair values of available-for-sale marketable debt securities, by remaining contractual maturity, are as follows (in thousands):

	October 31, 2022
	Estimated Fair Value
Due within 1 year	$ 3,215,286
Due in 1 year to 3 years	943,081
Total	$ 4,158,367

The following tables show the fair values of, and the gross unrealized losses on, the Company's available-for-sale marketable debt securities, classified by the length of time that the securities have been in a continuous unrealized loss position and aggregated by investment type, on the condensed consolidated balance sheets (in thousands):

	October 31, 2022					
	Less than 12 Months		12 Months or Greater		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
Cash equivalents:						
Commercial paper	$ 89,807	$ (27)	$ —	$ —	$ 89,807	$ (27)
Total cash equivalents	89,807	(27)	—	—	89,807	(27)
Investments:						
Corporate notes and bonds	1,541,456	(25,874)	710,475	(15,042)	2,251,931	(40,916)
Commercial paper	738,280	(5,121)	—	—	738,280	(5,121)
U.S. government and agency securities	455,945	(10,440)	120,697	(5,282)	576,642	(15,722)
Certificates of deposit	320,894	(2,368)	8,996	(5)	329,890	(2,373)
Total investments	3,056,575	(43,803)	840,168	(20,329)	3,896,743	(64,132)
Total cash equivalents and investments	$ 3,146,382	$ (43,830)	$ 840,168	$ (20,329)	$ 3,986,550	$ (64,159)

	January 31, 2022					
	Less than 12 Months		12 Months or Greater		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
Cash equivalents:						
Commercial paper	$ 55,819	$ (2)	$ —	$ —	$ 55,819	$ (2)
U.S. government securities	36,995	(2)	—	—	36,995	(2)
Corporate notes and bonds	7,629	(1)	—	—	7,629	(1)
Total cash equivalents	100,443	(5)	—	—	100,443	(5)
Investments:						
Corporate notes and bonds	2,378,956	(12,044)	8,935	(18)	2,387,891	(12,062)
Commercial paper	653,827	(821)	—	—	653,827	(821)
U.S. government and agency securities	334,980	(2,558)	—	—	334,980	(2,558)
Certificates of deposit	49,118	(135)	—	—	49,118	(135)
Total investments	3,416,881	(15,558)	8,935	(18)	3,425,816	(15,576)
Total cash equivalents and investments	$ 3,517,324	$ (15,563)	$ 8,935	$ (18)	$ 3,526,259	$ (15,581)

For available-for-sale marketable debt securities with unrealized loss positions, the Company does not intend to sell these securities and it is more likely than not that the Company will hold these securities until maturity or a recovery of the cost basis. The decline in fair value of these securities due to credit related factors was not material as of October 31, 2022 and January 31, 2022.

See Note 5 for information regarding the Company's strategic investments.

5. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date. The accounting guidance establishes a three-tiered hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value as follows:

Level 1 Inputs: Unadjusted quoted prices in active markets for identical assets or liabilities accessible to the reporting entity at the measurement date.

Level 2 Inputs: Other than quoted prices included in Level 1 inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the asset or liability.

Level 3 Inputs: Unobservable inputs for the asset or liability used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date.

The following table presents the fair value hierarchy for the Company's assets measured at fair value on a recurring basis as of October 31, 2022 (in thousands):

	Level 1	Level 2	Total
Cash equivalents:			
Money market funds	$ 425,221	$ —	$ 425,221
Commercial paper	—	89,807	89,807
Corporate notes and bonds	—	1,600	1,600
Short-term investments:			
Corporate notes and bonds	—	1,715,493	1,715,493
Commercial paper	—	779,117	779,117
Certificates of deposit	—	405,839	405,839
U.S. government and agency securities	—	223,430	223,430
Long-term investments:			
Corporate notes and bonds	—	583,864	583,864
U.S. government and agency securities	—	359,217	359,217
Total	$ 425,221	$ 4,158,367	$ 4,583,588

The following table presents the fair value hierarchy for the Company's assets measured at fair value on a recurring basis as of January 31, 2022 (in thousands):

	Level 1	Level 2	Total
Cash equivalents:			
Money market funds	$ 722,492	$ —	$ 722,492
Commercial paper	—	77,794	77,794
U.S. government securities	—	36,995	36,995
Corporate notes and bonds	—	7,949	7,949
Short-term investments:			
Corporate notes and bonds	—	1,662,436	1,662,436
Commercial paper	—	883,636	883,636
U.S. government and agency securities	—	116,712	116,712
Certificates of deposit	—	103,580	103,580
Long-term investments:			
Corporate notes and bonds	—	935,603	935,603
U.S. government and agency securities	—	320,207	320,207
Certificates of deposit	—	397	397
Total	$ 722,492	$ 4,145,309	$ 4,867,801

The Company determines the fair value of its security holdings based on pricing from the Company's service providers and market prices from industry-standard independent data providers. Such market prices may be quoted prices in active markets for identical assets (Level 1 inputs) or pricing determined using inputs other than quoted prices that are observable either directly or indirectly (Level 2 inputs), such as yield curve, volatility factors, credit spreads, default rates, loss severity, current market and contractual prices for the underlying instruments or debt, broker and dealer quotes, as well as other relevant economic measures.

Strategic Investments

The tables above do not include the Company's strategic investments, which consist primarily of (i) non-marketable equity securities recorded at cost minus impairment, if any, and adjusted for observable transactions for the same or similar investments of the same issuer (referred to as the Measurement Alternative), and (ii) marketable equity securities.

The Company's non-marketable equity securities accounted for using the Measurement Alternative are recorded at fair value on a non-recurring basis and classified within Level 3 of the fair value hierarchy because significant unobservable inputs or data in an inactive market are used in estimating their fair value. The estimation of fair value for these assets requires the use of an observable transaction price or other unobservable inputs, including the volatility, rights, and obligations of the securities the Company holds. The Company's marketable equity securities are recorded at fair value on a recurring basis and classified within Level 1 of the fair value hierarchy because they are valued using the quoted market price.

The following table presents the Company's strategic investments by type (in thousands):

	October 31, 2022	January 31, 2022
Equity securities:		
Non-marketable equity securities under Measurement Alternative	$ 170,446	$ 170,860
Non-marketable equity securities under equity method	5,000	—
Marketable equity securities	22,462	34,646
Debt securities:		
Non-marketable debt securities	1,500	2,250
Total strategic investments—included in other assets	$ 199,408	$ 207,756

The following table summarizes the unrealized gains and losses included in the carrying value of the Company's strategic investments in equity securities held as of October 31, 2022 (in thousands):

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2022	2021	2022	2021
Non-marketable equity securities under Measurement Alternative:				
Upward adjustments	$ 1,124	$ —	$ 1,124	$ 8,060
Impairments	(7,482)	—	(34,037)	—
Marketable equity securities:				
Net unrealized gains (losses)	(6,706)	455	(12,183)	455
Total—included in other income (expense), net	$ (13,064)	$ 455	$ (45,096)	$ 8,515

No realized gains or losses were recognized on the Company's strategic investments in equity securities during any of periods presented. The cumulative upward adjustments and the cumulative impairments to the carrying value of the non-marketable equity securities accounted for using the Measurement Alternative that the Company held as of October 31, 2022 were $34.1 million and $34.0 million, respectively.

6. Property and Equipment, Net

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

	October 31, 2022	January 31, 2022
Leasehold improvements	$ 54,336	$ 51,801
Computers, equipment, and software	17,265	8,735
Furniture and fixtures	12,068	8,488
Capitalized internal-use software development costs	39,435	17,154
Construction in progress—capitalized internal-use software development costs	51,296	36,163
Construction in progress—other	10,845	6,185
Total property and equipment, gross	185,245	128,526
Less: accumulated depreciation and amortization[1]	(39,271)	(23,447)
Total property and equipment, net	$ 145,974	$ 105,079

[1] Includes $16.5 million and $9.7 million of accumulated amortization related to capitalized internal-use software development costs as of October 31, 2022 and January 31, 2022, respectively.

Depreciation and amortization expense was $6.6 million and $17.1 million for the three and nine months ended October 31, 2022, respectively. Included in these amounts were the amortization of capitalized internal-use software development costs of $2.9 million and $6.8 million for the three and nine months ended October 31, 2022, respectively.

Depreciation and amortization expense was $3.6 million and $9.9 million for the three and nine months ended October 31, 2021, respectively. Included in these amounts were the amortization of capitalized internal-use software development costs of $1.1 million and $3.1 million for the three and nine months ended October 31, 2021, respectively.

7. Business Combinations, Intangible Assets, and Goodwill

Business Combinations

Applica Sp. z.o.o.

On September 23, 2022, the Company acquired all outstanding stock of Applica Sp. z.o.o. (Applica), a privately-held company which provides an artificial intelligence platform for document understanding, for $174.7 million in cash. The Company acquired Applica primarily for its talent and developed technology. The Company has accounted for this transaction as a business combination.

The following table summarizes the preliminary allocation of purchase consideration to assets acquired and liabilities assumed based on their respective estimated fair values as of the date of acquisition:

	Estimated Fair Value (in thousands)	Estimated Useful Life (in years)
Cash	$ 61	
Goodwill[1]	146,478	
Developed technology intangible asset	35,000	5
Other net tangible liabilities	(612)	
Deferred tax liabilities, net[2]	(6,236)	
Total	$ 174,691	

(1) The excess of purchase consideration over the preliminary fair value of identifiable net assets acquired was recorded as goodwill, which is generally not deductible for income tax purposes.
(2) Deferred tax liabilities, net primarily relates to the intangible asset acquired and the amount presented is net of deferred tax assets.

The fair value of the developed technology intangible asset was estimated using the replacement cost method, which utilizes assumptions for the cost to replace it, such as time and resources required, as well as a theoretical profit margin and opportunity cost.

Acquisition-related costs of $3.4 million associated with this business combination were recorded as a general and administrative expense during the nine months ended October 31, 2022.

The results of operations of Applica from the date of acquisition, which were not material, have been included in the Company's condensed consolidated statements of operations for the three and nine months ended October 31, 2022.

Streamlit, Inc.

On March 31, 2022, the Company acquired all outstanding stock of Streamlit, Inc. (Streamlit), a privately-held company which provides an open-source framework for creating and deploying data applications. The Company acquired Streamlit primarily for its talent and developer community. The Company has accounted for this transaction as a business combination. The acquisition date fair value of the purchase consideration was $650.8 million, which was comprised of the following (in thousands):

	Estimated Fair Value
Cash	$ 211,839
Common stock[1]	438,916
Total	$ 650,755

(1) Approximately 1.9 million shares of the Company's Class A common stock were included in the purchase consideration and the fair values of these shares were determined based on the closing market price of $229.13 per share on the acquisition date.

In addition, in connection with this business combination, the Company issued to Streamlit's three founders a total of 0.4 million shares of the Company's Class A common stock in exchange for a portion of their Streamlit stock. These shares are subject to vesting agreements pursuant to which the shares will vest over three years, subject to each founder's continued employment with the Company or its affiliates. The $93.7 million fair value of these shares are accounted for as post-combination stock-based compensation over the requisite service period of three years. See Note 10 for further discussion.

The following table summarizes the preliminary allocation of purchase consideration to assets acquired and liabilities assumed based on their respective estimated fair values as of the date of acquisition:

	Estimated Fair Value (in thousands)	Estimated Useful Life (in years)
Cash and cash equivalents	$ 33,914	
Goodwill[1]	494,165	
Developer community intangible asset	150,000	5
Other net tangible liabilities	(660)	
Deferred tax liabilities, net[2]	(26,664)	
Total	$ 650,755	

(1) The excess of purchase consideration over the preliminary fair value of identifiable net assets acquired was recorded as goodwill, which is not deductible for income tax purposes.
(2) Deferred tax liabilities, net primarily relates to the intangible asset acquired and the amount presented is net of deferred tax assets.

The fair value of the developer community intangible asset was estimated using the replacement cost method which utilizes assumptions for the cost to replace it, such as time and resources required, as well as a theoretical profit margin and opportunity cost.

Acquisition-related costs of $2.0 million associated with this business combination were recorded as a general and administrative expense during the nine months ended October 31, 2022.

From the date of acquisition through October 31, 2022, revenue attributable to Streamlit was not material. It was impracticable to determine the effect on the Company's net loss attributable to Streamlit as its operations have been integrated into the Company's ongoing operations since the date of acquisition.

During the measurement period of up to one year from the acquisition date, the Company may record adjustments to the preliminary fair value of the assets acquired and liabilities assumed with a corresponding offset to goodwill for these business combinations. The excess of purchase consideration over the preliminary fair value of identifiable net assets acquired was recorded as goodwill. The Company believes the goodwill balances associated with these business combinations represent the synergies expected from expanded market opportunities when integrating the acquired developed technologies with the Company's offerings.

Unaudited Pro Forma Financial Information

The following unaudited pro forma financial information summarizes the combined results of operations of the Company and both of Applica and Streamlit, as if each had been acquired as of February 1, 2021 (in thousands):

	Pro Forma			
	Three Months Ended October 31,		Nine Months Ended October 31,	
	2022	2021	2022	2021
	(unaudited)			
Revenue	$ 557,116	$ 334,839	$ 1,477,232	$ 836,607
Net loss	$ (201,510)	$ (191,273)	$ (650,406)	$ (640,111)

The pro forma financial information for all periods presented above has been calculated after adjusting the results of operations of Applica and Streamlit to reflect certain business combination effects, including the amortization of the acquired intangible asset, stock-based compensation, income tax impact, and acquisition-related costs incurred by the Company, Applica, and Streamlit as though these business combinations occurred as of February 1, 2021, the beginning of the Company's fiscal 2022. The historical condensed consolidated financial information in the unaudited pro forma tables above has been adjusted in the pro forma combined financial results to give effect to pro forma events that are directly attributable to these business combinations, reasonably estimable, and factually supportable. The pro forma financial information is for informational purposes only and is not indicative of the results of operations that would have been achieved if the business combinations had taken place as of February 1, 2021.

Intangible Assets, Net

Intangible assets, net consisted of the following (in thousands):

	October 31, 2022		
	Gross	**Accumulated Amortization**	**Net**
Finite-lived intangible assets:			
Developer community	$ 150,000	$ (17,653)	$ 132,347
Developed technology	46,332	(7,244)	39,088
Assembled workforce	28,252	(9,252)	19,000
Patents	8,874	(3,970)	4,904
Other	47	(47)	—
Total finite-lived intangible assets	$ 233,505	$ (38,166)	$ 195,339
Indefinite-lived intangible assets—trademarks			826
Total intangible assets, net			$ 196,165

	January 31, 2022		
	Gross	**Accumulated Amortization**	**Net**
Finite-lived intangible assets:			
Assembled workforce	$ 28,252	$ (3,941)	$ 24,311
Developed technology	11,332	(4,812)	6,520
Patents	8,174	(2,690)	5,484
Other	47	(47)	—
Total finite-lived intangible assets	$ 47,805	$ (11,490)	$ 36,315
Indefinite-lived intangible assets—trademarks			826
Total intangible assets, net			$ 37,141

Amortization expense of intangible assets was $11.1 million and $26.7 million for the three and nine months ended October 31, 2022, respectively, and $1.9 million and $5.7 million for the three and nine months ended October 31, 2021, respectively.

As of October 31, 2022, future amortization expense is expected to be as follows (in thousands):

	Amount
Fiscal Year Ending January 31,	
Reminder of 2023	$ 12,124
2024	48,101
2025	47,379
2026	41,249
2027	37,097
Thereafter	9,389
Total	$ 195,339

Goodwill

Changes in goodwill were as follows (in thousands):

	Amount
Balance—January 31, 2022	$ 8,449
Additions	640,643
Balance—October 31, 2022	$ 649,092

8. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following (in thousands):

	October 31, 2022	January 31, 2022
Accrued compensation	$ 109,406	$ 98,916
Accrued third-party cloud infrastructure expenses	26,851	13,341
Liabilities associated with marketing and business development programs	20,956	16,284
Employee contributions under employee stock purchase plan	14,730	28,497
Accrued taxes	12,543	12,709
Accrued professional services	8,779	7,068
Accrued purchases of property and equipment	4,096	4,204
Other	27,960	19,645
Total accrued expenses and other current liabilities	$ 225,321	$ 200,664

9. Commitments and Contingencies

Operating Leases

The Company leases its facilities for office space under non-cancelable operating leases with various expiration dates through fiscal 2035. Certain lease agreements include options to renew or terminate the lease, which are not reasonably certain to be exercised and therefore are not factored into the determination of lease payments.

In May 2022, the Company entered into an agreement related to the expansion and lease term extension of an existing office facility located in the United States, which is considered a lease modification not accounted for as a separate contract. Total commitment, net of tenant incentives expected to be received, under the modified lease is $68.0 million. The modified lease commenced during the nine months ended October 31, 2022, with an expiration date in fiscal 2035, and resulted in an increase in the Company's operating lease right-of-use assets and operating lease liabilities in the amount of approximately $30 million.

In addition, the Company subleases certain of its unoccupied facilities to third parties with various expiration dates through fiscal 2030. Such subleases have all been classified as operating leases. Sublease income is recorded as a reduction to the Company's operating lease costs. Sublease income was $3.0 million and $9.7 million for the three and nine months ended October 31, 2022, respectively, and $3.4 million and $9.8 million for the three and nine months ended October 31, 2021, respectively.

Other Contractual Commitments—Other contractual commitments relate mainly to third-party cloud infrastructure agreements and subscription arrangements used to facilitate the Company's operations at the enterprise level. There were no material contractual obligations that were entered into during the nine months ended October 31, 2022 that were outside the ordinary course of business.

401(k) Plan—The Company sponsors a 401(k) defined contribution plan covering all eligible U.S. employees. Contributions to the 401(k) plan are discretionary. The Company did not make any matching contributions to the 401(k) plan for each of the three and nine months ended October 31, 2022 and 2021.

Legal Matters—The Company is involved from time to time in various claims and legal actions arising in the ordinary course of business. While it is not feasible to predict or determine the ultimate outcome of these matters, the Company believes that none of its current legal proceedings will have a material adverse effect on its financial position, results of operations, or cash flows for each of the three and nine months ended October 31, 2022 and 2021.

Letters of Credit—As of October 31, 2022, the Company had a total of $16.8 million in cash collateralized letters of credit outstanding, substantially in favor of certain landlords for the Company's leased facilities. These letters of credit renew annually and expire at various dates through fiscal 2033.

Indemnification—The Company enters into indemnification provisions under agreements with other parties in the ordinary course of business, including business partners, investors, contractors, customers, and the Company's officers, directors, and certain employees. The Company has agreed to indemnify and defend the indemnified party for claims and related losses suffered or incurred by the indemnified party from actual or threatened third-party claims due to the Company's activities or non-compliance with certain representations and warranties made by the Company. It is not possible to determine the maximum potential loss under these indemnification provisions due to the Company's limited history of prior indemnification claims and the unique facts and circumstances involved in each particular provision. For each of the three and nine months ended October 31, 2022 and 2021, losses recorded in the consolidated statements of operations in connection with the indemnification provisions were not material.

10. Equity

Preferred Stock—In connection with its Initial Public Offering (IPO), the Company's amended and restated certificate of incorporation became effective, which authorized the issuance of 200.0 million shares of undesignated preferred stock with a par value of $0.0001 per share and with rights and preferences, including voting rights, designated from time to time by the board of directors.

Common Stock and Elimination of Dual-Class Structure—The Company has two classes of common stock authorized: Class A common stock and Class B common stock. In connection with the IPO, the Company's amended and restated certificate of incorporation authorized the issuance of 2,500.0 million shares of Class A common stock and 355.0 million shares of Class B common stock. On March 1, 2021, all 169.5 million shares of the Company's then-outstanding Class B common stock, par value $0.0001 per share, were automatically converted into the same number of shares of Class A common stock, par value $0.0001 per share, pursuant to the terms of the Company's amended and restated certificate of incorporation. No additional shares of Class B common stock will be issued following such conversion.

The shares of Class A common stock and Class B common stock were identical prior to the conversion, except with respect to voting, converting, and transfer rights. Prior to the conversion, each share of Class B common stock was entitled to cast ten votes per share on any matter submitted to a vote of the Company's stockholders. As a result of the conversion, all former holders of shares of Class B common stock are now holders of shares of Class A common stock, which is entitled to only one vote per share on all matters subject to a stockholder vote. Class A and Class B common stock are referred to as common stock throughout the notes to the condensed consolidated financial statements, unless otherwise indicated. Holders of common stock are entitled to receive any dividends as may be declared from time to time by the board of directors.

Prior to the conversion, shares of Class B common stock were convertible to Class A common stock at any time at the option of the stockholder, and shares of Class B common stock would automatically convert to Class A common stock upon the following: (i) sale or transfer of such share of Class B common stock; (ii) the death of the Class B common stockholder (or nine months after the date of death if the stockholder is one of the Company's founders); and (iii) on the final conversion date, defined as the earlier to occur following an IPO of (a) the first trading day on or after the date on which the outstanding shares of Class B common stock represented less than 10% of the then outstanding Class A and Class B common stock; (b) September 15, 2027, which is the seventh anniversary of the effectiveness of the registration statement filed in connection with the IPO; or (c) the date specified by a vote of the holders of a majority of the outstanding shares of Class B common stock, voting as a single class.

In addition, on March 3, 2021, the Company filed a certificate with the Secretary of State of the State of Delaware effecting the retirement of the shares of Class B common stock that were issued but no longer outstanding following the conversion. Upon the effectiveness of the certificate, the Company's total number of authorized shares of capital stock was reduced by the retirement of 169.5 million shares of Class B common stock.

The Company had reserved shares of common stock for future issuance as follows (in thousands):

	October 31, 2022	January 31, 2022
2012 Equity Incentive Plan:		
Options outstanding	36,464	42,043
Restricted stock units outstanding	3,003	4,530
2020 Equity Incentive Plan:		
Options outstanding	642	—
Restricted stock units outstanding	12,558	5,082
Shares available for future grants	53,544	45,446
2020 Employee Stock Purchase Plan:		
Shares available for future grants	11,046	8,209
Total shares of common stock reserved for future issuance	117,257	105,310

Equity Incentive Plans—The Company's 2020 Equity Incentive Plan (2020 Plan), which became effective in connection with the IPO, provides for the grant of incentive stock options, nonqualified stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards (RSUs), performance awards and other forms of equity compensation (collectively, equity awards). All shares that remain available for future grants are under the 2020 Plan.

The Company's 2012 Equity Incentive Plan (2012 Plan) provided for the grant of equity awards to employees, non-employee directors, and other service providers of the Company. The 2012 Plan was terminated in September 2020 in connection with the IPO but continues to govern the terms of outstanding awards that were granted prior to the termination of the 2012 Plan. Upon the expiration, forfeiture, cancellation, or reacquisition of any shares of common stock underlying outstanding equity awards granted under the 2012 Plan, an equal number of shares of Class A common stock will become available for grant under the 2020 Plan. No further equity awards will be granted under the 2012 Plan.

The Company's 2020 Employee Stock Purchase Plan (2020 ESPP), which became effective in connection with the IPO, authorizes the issuance of shares of common stock pursuant to purchase rights granted to employees. Offering periods are generally six months long and begin on March 15 and September 15 of each year, except for the first two offering periods. The initial offering period began on September 15, 2020 and ended on February 26, 2021. The second offering period began on March 1, 2021 and ended on September 14, 2021.

On February 1, 2022, the shares available for grant under the 2020 Plan and the 2020 ESPP were automatically increased by 15.6 million shares and 3.1 million shares, respectively, pursuant to the annual evergreen increase provisions under the 2020 Plan and the 2020 ESPP.

Stock Options—Stock options granted under the 2012 Plan and the 2020 Plan (collectively, the Plans) generally vest based on continued service over four years and expire ten years from the date of grant. Certain stock options granted under the 2012 Plan are exercisable at any time following the date of grant and expire ten years from the date of grant.

A summary of stock option activity and activity regarding shares available for grant under the Plans during the nine months ended October 31, 2022 is as follows:

	Shares Available for Grant (in thousands)	Number of Options Outstanding (in thousands)	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (in thousands)
Balance—January 31, 2022	45,446	42,043	$ 7.53	6.9	$ 11,283,299
Shares authorized	15,619	—	$ —		
Options granted	(642)	642	$ 207.56		
Options exercised	—	(2,448)	$ 6.18		
Options canceled	400	(400)	$ 6.98		
RSUs granted	(5,763)	—			
Shares withheld related to net share settlement of RSUs	292	—			
RSUs forfeited	327	—			
Balance—April 30, 2022	55,679	39,837	$ 10.84	6.7	$ 6,421,133
Options exercised	—	(1,494)	$ 5.65		
Options canceled	180	(180)	$ 7.32		
RSUs granted	(1,374)	—			
Shares withheld related to net share settlement of RSUs	260	—			
RSUs forfeited	462	—			
Balance—July 31, 2022	55,207	38,163	$ 11.06	6.5	$ 5,336,155
Options exercised	—	(984)	$ 7.49		
Options canceled	73	(73)	$ 8.32		
RSUs granted	(2,361)	—			
Shares withheld related to net share settlement of RSUs	274	—			
RSUs forfeited	351	—			
Balance—October 31, 2022	53,544	37,106	$ 11.16	6.2	$ 5,564,360
Vested and exercisable as of October 31, 2022		28,513	$ 7.81	6.0	$ 4,352,427

The weighted-average grant-date fair value of options granted during the nine months ended October 31, 2022 was $101.66 per share. No options were granted during the nine months ended October 31, 2021. The intrinsic value of options exercised in the nine months ended October 31, 2022 and 2021 was $875.0 million and $3.8 billion, respectively. The aggregate grant-date fair value of options that vested during the nine months ended October 31, 2022 and 2021 was $60.7 million and $62.7 million, respectively.

RSUs—RSUs granted prior to the IPO had both service-based and performance-based vesting conditions, of which the performance-based vesting condition was satisfied upon the effectiveness of the IPO in September 2020. The service-based vesting condition for these awards is typically satisfied over four years with a cliff vesting period of one year and continued vesting quarterly thereafter. Stock-based compensation associated with RSUs granted prior to the IPO was recognized using an accelerated attribution method from the time it was deemed probable that the vesting condition was met through the time the service-based vesting condition had been achieved. RSUs granted after the IPO only contain the service-based vesting condition and the related stock-based compensation for such RSUs is recognized on a straight-line basis over the requisite service period.

During the nine months ended October 31, 2022, the Company began funding withholding taxes due upon the vesting of employee RSUs in certain jurisdictions by net share settlement, rather than its previous approach of selling shares of the Company's common stock. The amount of withholding taxes related to net share settlement of employee RSUs is reflected as (i) a reduction to additional paid-in-capital, and (ii) cash outflows for financing activities when the payments are made. The shares withheld by the Company as a result of the net share settlement of RSUs are not considered issued and outstanding, and do not impact the calculation of basic net income (loss) per share attributable to Snowflake Inc. common stockholders.

A summary of RSU activity during the nine months ended October 31, 2022 is as follows:

	Number of Shares (in thousands)	Weighted-Average Grant Date Fair Value per Share
Unvested Balance—January 31, 2022	9,612	$ 180.08
Granted	5,763	$ 201.89
Vested	(848)	$ 161.90
Forfeited	(327)	$ 202.80
Unvested Balance—April 30, 2022	14,200	$ 189.50
Granted	1,374	$ 145.19
Vested	(775)	$ 156.97
Forfeited	(462)	$ 196.87
Unvested Balance—July 31, 2022	14,337	$ 186.77
Granted	2,361	$ 172.86
Vested	(786)	$ 165.42
Forfeited	(351)	$ 218.21
Unvested Balance—October 31, 2022	15,561	$ 185.03

Early Exercised Stock Options—Common stock purchased pursuant to an early exercise of stock options is not deemed to be outstanding for accounting purposes until those shares vest. The consideration received for an exercise of an option is considered to be a deposit of the exercise price and the related dollar amount is recorded in other liabilities on the condensed consolidated balance sheets. The shares issued upon the early exercise of these unvested stock option awards, which are reflected as exercises in the stock option activity table above, are considered to be legally issued and outstanding on the date of exercise. Upon termination of service, the Company may repurchase unvested shares acquired through the early exercise of stock options at a price equal to the price per share paid upon the exercise of such options. As of October 31, 2022 and January 31, 2022, shares subject to repurchase as a result of early exercised options were not material.

Restricted Common Stock—Restricted common stock is not deemed to be outstanding for accounting purposes until it vests.

As discussed in Note 7, during the nine months ended October 31, 2022, in connection with the Streamlit business combination, the Company issued to Streamlit's three founders a total of 0.4 million shares of the Company's common stock outside of the Plans in exchange for a portion of their Streamlit stock. These shares are subject to vesting agreements pursuant to which the shares will vest over three years, subject to each founder's continued employment with the Company or its affiliates. The $93.7 million fair value of these shares are accounted for as post-combination stock-based compensation over the requisite service period of three years. As of October 31, 2022, all 0.4 million shares remained unvested.

A summary of restricted common stock activity during the nine months ended October 31, 2022 is as follows:

	Outside of the Plans	
	Number of Shares (in thousands)	Weighted-Average Grant Date Fair Value per Share
Unvested Balance—January 31, 2022	380	$ 2.11
Granted	409	$ 229.13
Vested	(90)	$ 2.10
Unvested Balance—April 30, 2022	699	$ 134.99
Vested	(90)	$ 2.10
Unvested Balance—July 31, 2022	609	$ 154.73
Vested	(91)	$ 2.10
Unvested Balance—October 31, 2022	518	$ 181.37

Stock-Based Compensation—The following table summarizes the assumptions used in estimating the fair value of stock options granted to employees during the nine months ended October 31, 2022:

	Nine Months Ended October 31, 2022
Expected term (in years)	6.0
Expected volatility	50.0 %
Risk-free interest rate	1.8 %
Expected dividend yield	— %

No stock options were granted during the three months ended October 31, 2022 or each of the three and nine months ended October 31, 2021.

Expected term—For stock options considered to be "plain vanilla" options, the Company estimates the expected term based on the simplified method, which is essentially the weighted average of the vesting period and contractual term, as the Company's historical option exercise experience does not provide a reasonable basis upon which to estimate the expected term.

Expected volatility—Prior to fiscal 2023, the Company performed an analysis of using the average volatility of a peer group of representative public companies with sufficient trading history over the expected term to develop an expected volatility assumption. During the nine months ended October 31, 2022, the Company began using the average volatility of its Class A common stock and the stocks of a peer group of representative public companies to develop an expected volatility assumption.

Risk-free interest rate—Risk-free rate is estimated based upon quoted market yields for the United States Treasury debt securities for a term consistent with the expected life of the awards in effect at the time of grant.

Expected dividend yield—Because the Company has never paid and has no intention to pay cash dividends on common stock, the expected dividend yield is zero.

Fair value of underlying common stock—Since the completion of the IPO, the fair value of the Company's common stock is determined by the closing price, on the date of grant, of its common stock, which is traded on the New York Stock Exchange.

The following table summarizes the assumptions used in estimating the fair value of employee stock purchase rights granted under the 2020 ESPP during the three and nine months ended October 31, 2022 and 2021:

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2022	2021	2022	2021
Expected term (in years)	0.5	0.5	0.5	0.5
Expected volatility	74.8 %	37.3 %	58.9% - 74.8%	37.3% - 49.5%
Risk-free interest rate	3.8 %	0.1 %	0.9% - 3.8%	0.1 %
Expected dividend yield	— %	— %	— %	— %

Stock-based compensation included in the condensed consolidated statements of operations was as follows (in thousands):

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2022	2021	2022	2021
Cost of revenue	$ 27,794	$ 21,163	$ 76,499	$ 66,380
Sales and marketing	65,010	43,074	177,641	141,463
Research and development	110,231	56,142	280,721	174,788
General and administrative	26,128	24,008	75,976	76,761
Stock-based compensation, net of amounts capitalized	229,163	144,387	610,837	459,392
Capitalized stock-based compensation	7,792	6,085	21,002	19,322
Total stock-based compensation	$ 236,955	$ 150,472	$ 631,839	$ 478,714

As of October 31, 2022, total compensation cost related to unvested stock-based awards not yet recognized was $2.5 billion, which will be recognized over a weighted-average period of 3.0 years.

11. Income Taxes

The Company computes its tax provision for interim periods by applying the estimated annual effective tax rate to year-to-date pre-tax income from recurring operations and adjusting for discrete tax items arising in that quarter.

The Company had an effective tax rate of (2.0%) and 3.1% for the three and nine months ended October 31, 2022, respectively, and (0.8%) and (0.3%) for the three and nine months ended October 31, 2021, respectively. The Company has incurred U.S. operating losses and has minimal profits in foreign jurisdictions.

The Company has evaluated all available evidence, both positive and negative, including historical levels of income and expectations and risks associated with estimates of future taxable income, and has determined that it is more likely than not that its net deferred tax assets will not be realized in the United States and the United Kingdom. Due to uncertainties surrounding the realization of the deferred tax assets, the Company maintains a full valuation allowance against its net deferred tax assets.

The Company is subject to income taxes in the United States and numerous foreign jurisdictions. As of October 31, 2022, tax years 2012 and forward generally remain open for examination for U.S. federal and state tax purposes, and tax years 2017 and forward generally remain open for examination for foreign tax purposes.

The Company has applied ASC 740 and determined that it has uncertain tax positions giving rise to unrecognized tax benefits for each of the three and nine months ended October 31, 2022 and 2021. The Company's policy is to recognize interest and penalties related to uncertain tax positions in income tax expense. The Company does not anticipate any significant changes to unrecognized tax benefits over the next 12 months. None of the unrecognized tax benefits are currently expected to impact the Company's effective tax rate, if realized, as a result of the full valuation allowance.

On August 16, 2022, President Biden signed the Inflation Reduction Act of 2022 (the Inflation Act) into law. The Inflation Act contains certain tax measures, including a corporate alternative minimum tax of 15% on some large corporations and an excise tax of 1% on corporate stock buy-backs. The Company is currently evaluating the various provisions of the Inflation Act and does not anticipate the impact, if any, will be material to the Company.

12. Net Loss per Share

Basic and diluted net loss per share attributable to Snowflake Inc. common stockholders is computed in conformity with the two-class method required for participating securities. The Company considers unvested common stock to be participating securities, as the holders of such stock have the right to receive nonforfeitable dividends on a pari passu basis in the event that a dividend is declared on common stock.

Basic net loss per share attributable to Snowflake Inc. common stockholders is computed by dividing net loss attributable to Snowflake Inc. common stockholders by the weighted-average number of shares of Snowflake Inc. common stock outstanding during the period. Diluted net loss per share attributable to Snowflake Inc. common stockholders is computed by giving effect to all potentially dilutive Snowflake Inc. common stock equivalents to the extent they are dilutive. For purposes of this calculation, stock options, RSUs, restricted common stock, early exercised stock options, and employee stock purchase rights under the 2020 ESPP are considered to be common stock equivalents but have been excluded from the calculation of diluted net loss per share attributable to Snowflake Inc. common stockholders as their effect is anti-dilutive for all periods presented.

As discussed above in Note 10, on March 1, 2021, all 169.5 million shares of the Company's then-outstanding Class B common stock, par value $0.0001 per share, were automatically converted into the same number of shares of Class A common stock, par value $0.0001 per share, pursuant to the terms of the Company’s amended and restated certificate of incorporation. No additional shares of Class B common stock will be issued following such conversion. In addition, on March 3, 2021, the Company filed a certificate with the Secretary of State of the State of Delaware effecting the retirement of the shares of Class B common stock that were issued but no longer outstanding following the conversion. The rights, including the liquidation and dividend rights, of the holders of Class A and Class B common stock were identical prior to the conversion, except with respect to voting, converting, and transfer rights. As the liquidation and dividend rights were identical, the undistributed earnings were allocated on a proportionate basis to each class of common stock, and the resulting basic and diluted net loss per share attributable to common stockholders were, therefore, the same for both Class A and Class B common stock on both an individual and a combined basis.

The following table presents the calculation of basic and diluted net loss per share attributable to Snowflake Inc. common stockholders (in thousands, except per share data):

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2022	2021	2022	2021
Numerator:				
Net loss	$ (201,442)	$ (154,856)	$ (590,042)	$ (547,795)
Less: net loss attributable to noncontrolling interest	(506)	—	(506)	—
Net loss attributable to Snowflake Inc. Class A and Class B common stockholders	$ (200,936)	$ (154,856)	$ (589,536)	$ (547,795)
Denominator:				
Weighted-average shares used in computing net loss per share attributable to Snowflake Inc. Class A and Class B common stockholders—basic and diluted	320,135	303,007	317,653	297,436
Net loss per share attributable to Snowflake Inc. Class A and Class B common stockholders—basic and diluted	$ (0.63)	$ (0.51)	$ (1.86)	$ (1.84)

The following potentially dilutive securities were excluded from the calculation of diluted net loss per share attributable to Snowflake Inc. common stockholders for the periods presented because the impact of including them would have been anti-dilutive (in thousands):

	Three and Nine Months Ended October 31,	
	2022	2021
Stock options	37,106	47,782
RSUs	15,561	10,116
Unvested restricted common stock and early exercised stock options	543	537
Employee stock purchase rights under the 2020 ESPP	107	40
Total	53,317	58,475

13. Subsequent Event

On November 25, 2022 (the Agreement Date), the Company entered into an agreement to acquire all outstanding stock of a privately-held company for approximately $75 million in cash, subject to customary purchase price adjustments. The acquisition is expected to close within six months of the Agreement Date, subject to certain closing conditions.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with (1) our unaudited condensed consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q, and (2) our audited consolidated financial statements and the related notes and the discussion under the heading “Management's Discussion and Analysis of Financial Condition and Results of Operations” for the fiscal year ended January 31, 2022 included in the Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission (SEC) on March 30, 2022. This discussion, particularly information with respect to our future results of operations or financial condition, business strategy and plans, and objectives of management for future operations, includes forward-looking statements that involve risks and uncertainties as described under the heading “Special Note About Forward-Looking Statements” in this Quarterly Report on Form 10-Q. You should review the disclosure under the heading “Risk Factors” in this Quarterly Report on Form 10-Q for a discussion of important factors that could cause our actual results to differ materially from those anticipated in these forward-looking statements.

In addition to our results determined in accordance with U.S. generally accepted accounting principles (GAAP), free cash flow, a non-GAAP financial measure, is included in the section titled “Key Business Metrics.” This non-GAAP financial measure is not meant to be considered in isolation or as a substitute for, or superior to, comparable GAAP financial measures and should be read only in conjunction with our unaudited condensed consolidated financial statements prepared in accordance with GAAP. Our presentation of this non-GAAP financial measure may not be comparable to similar measures used by other companies. We encourage investors to carefully consider our results under GAAP, as well as our supplemental non-GAAP information and the GAAP-to-non-GAAP reconciliation included in the section titled “Key Business Metrics—Free Cash Flow,” to more fully understand our business.

Unless the context otherwise requires, all references in this report to “Snowflake,” the “Company,” “we,” “our,” “us,” or similar terms refer to Snowflake Inc. and its consolidated subsidiaries.

Overview

We believe in a data connected world where organizations have seamless access to explore, share, and unlock the value of data. To realize this vision, we deliver the Data Cloud, a network where Snowflake customers, partners, data providers, and data consumers can break down data silos and derive value from rapidly growing data sets in secure, governed, and compliant ways.

Our platform is the innovative technology that powers the Data Cloud, enabling customers to consolidate data into a single source of truth to drive meaningful business insights, build data-driven applications, and share data. We provide our platform through a customer-centric, consumption-based business model, only charging customers for the resources they use.

Our cloud-native architecture consists of three independently scalable but logically integrated layers across storage, compute, and cloud services. The storage layer ingests massive amounts and varieties of structured, semi-structured, and unstructured data to create a unified data record. The compute layer provides dedicated resources to enable users to simultaneously access common data sets for many use cases with minimal latency. The cloud services layer intelligently optimizes each use case’s performance requirements with no administration. This architecture is built on three major public clouds across 37 regional deployments around the world. These deployments are generally interconnected to deliver the Data Cloud, enabling a consistent, global user experience.

We generate the substantial majority of our revenue from fees charged to our customers based on the storage, compute, and data transfer resources consumed on our platform as a single, integrated offering. For storage resources, consumption fees are based on the average terabytes per month of all of the customer’s data stored in our platform. For compute resources, consumption fees are based on the type of compute resource used and the duration of use or, for some features, the volume of data processed. For data transfer resources, consumption fees are based on terabytes of data transferred, the public cloud provider used, and the region to and from which the transfer is executed.

Our customers typically enter into capacity arrangements with a term of one to four years, or consume our platform under on-demand arrangements in which we charge for use of our platform monthly in arrears. Consumption for most customers accelerates from the beginning of their usage to the end of their contract terms and often exceeds their initial capacity commitment amounts. When this occurs, our customers have the option to amend their existing agreement with us to purchase additional capacity or request early renewals. When a customer's consumption during the contract term does not exceed its capacity commitment amount, it may have the option to roll over any unused capacity to future periods, generally upon the purchase of additional capacity. For these reasons, we believe our deferred revenue is not a meaningful indicator of future revenue that will be recognized in any given time period.

Our go-to-market strategy is focused on acquiring new customers and driving continued use of our platform for existing customers. We primarily focus our selling efforts on large organizations and primarily sell our platform through a direct sales force, which targets technical and business leaders who are adopting a cloud strategy and leveraging data to improve their business performance. Our sales force is comprised of sales development, inside sales, and field sales personnel and is segmented by the industry, size, and region of prospective customers. Once our platform has been adopted, we focus on increasing the migration of additional customer workloads to our platform to drive increased consumption, as evidenced by our net revenue retention rate of 165% and 177% as of October 31, 2022 and January 31, 2022, respectively. See the section titled "Key Business Metrics" for a definition of net revenue retention rate.

Our platform is used globally by organizations of all sizes across a broad range of industries. As of October 31, 2022, we had 7,292 total customers, increasing from 5,966 customers as of January 31, 2022. Our customer count is subject to adjustments for acquisitions, consolidations, spin-offs, and other market activity, and we present our total customer count for historical periods reflecting these adjustments. Our platform has been adopted by many of the world's largest organizations that view Snowflake as a key strategic partner in their cloud and data transformation initiatives. As of October 31, 2022, our customers included 543 of the Forbes Global 2000, based on the 2022 Forbes Global 2000 list, and those customers contributed approximately 41% of our revenue for the nine months ended October 31, 2022. Our Forbes Global 2000 customer count is subject to adjustments for annual updates to the Global 2000 list by Forbes, as well as acquisitions, consolidations, spin-offs, and other market activity with respect to such customers, and we present our Forbes Global 2000 customer count for historical periods reflecting these adjustments.

Business Combinations

On September 23, 2022, we acquired all outstanding stock of Applica Sp. z.o.o. (Applica), a privately-held company which provides an artificial intelligence platform for document understanding, for $174.7 million in cash.

On March 31, 2022, we acquired all outstanding stock of Streamlit, Inc. (Streamlit), a privately-held company which provides an open-source framework for creating and deploying data applications. The acquisition date fair value of the purchase consideration was $650.8 million, which was comprised of $211.8 million in cash and 1.9 million shares of our Class A common stock valued at $438.9 million as of the acquisition date. In addition, we issued to Streamlit's three founders a total of 0.4 million shares of our Class A common stock in exchange for a portion of their Streamlit stock. These shares are subject to vesting agreements pursuant to which the shares will vest over three years, subject to each founder's continued employment with us. The $93.7 million fair value of these shares are accounted for as post-combination stock-based compensation over the requisite service period of three years.

The results of operations of these business combinations have been included in our condensed consolidated financial statements from the respective dates of acquisition. See Note 7, "Business Combinations, Intangible Assets, and Goodwill," to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for details regarding these business combinations.

Impact of Macroeconomic Conditions and COVID-19

Our business and financial condition have been, and may continue to be, impacted by adverse macroeconomic conditions, including higher inflation, higher interest rates, and fluctuations or volatility in capital markets or foreign currency exchange rates, which are causing customers to optimize consumption, rationalize budgets, and prioritize cash flow management.

In addition, the ongoing COVID-19 pandemic has caused general business disruption worldwide beginning in January 2020. The full extent to which the COVID-19 pandemic, including any new variants, may continue to directly or indirectly impact general market conditions or our business, results of operations, cash flows, and financial condition remains uncertain. In response to the COVID-19 pandemic, we required virtually all of our employees to work remotely and we canceled certain of our marketing events or adjusted those events to be virtual or include both an in-person and virtual experience. As our offices reopen and we resume in-person events, we expect to continue to incur incremental expenses in connection with onsite services, incur related in-office and event costs, and manage fluctuating in-person regulations and restrictions.

We are continuing to monitor the actual and potential effects of general macroeconomic conditions and the COVID-19 pandemic across our business. For additional details, see the section titled “Risk Factors.”

Key Factors Affecting Our Performance

Adoption of our Platform and Expansion of the Data Cloud

Our future success depends in large part on the market adoption of our platform. While we see growing demand for our platform, particularly from large enterprises, many of these organizations have invested substantial technical, financial, and personnel resources in their legacy database products or big data offerings, despite their inherent limitations. While this makes it difficult to predict customer adoption rates and future demand, we believe that the benefits of our platform put us in a strong position to capture the significant market opportunity ahead.

Our platform powers the Data Cloud, a network of data providers, data consumers, and data application developers that enables our customers to securely share, connect, collaborate with, monetize, and acquire live data sets. The Data Cloud includes access to Snowflake Marketplace, through which customers can access or acquire third-party data sets and other data products. Our future growth will be increasingly dependent on our ability to increase consumption of our platform by building and expanding the Data Cloud.

Expanding Within our Existing Customer Base

Our large base of customers represents a significant opportunity for further consumption of our platform. While we have seen an increase in the number of customers that have contributed more than $1 million in product revenue in the trailing 12 months, we believe that there is a substantial opportunity to continue growing these customers further, as well as continuing to expand the usage of our platform within our other existing customers. We plan to continue investing to encourage increased consumption and adoption of new use cases among our existing customers.

Once deployed, our customers often expand their use of our platform more broadly within the enterprise and across their ecosystem of customers and partners as they migrate more data to the public cloud, identify new use cases, and realize the benefits of our platform and the Data Cloud. However, because we generally recognize product revenue on consumption and not ratably over the term of the contract, we do not have visibility into the timing of revenue recognition from any particular customer. In any given period, there is a risk that customer consumption of our platform will be slower than we expect, including in response to macroeconomic conditions, which may cause fluctuations in our revenue and results of operations. New software releases or hardware improvements, like better storage compression and cloud infrastructure processor improvements, may make our platform more efficient, enabling customers to consume fewer compute, storage, and data transfer resources to accomplish the same workloads. To the extent these improvements do not result in an offsetting increase in new workloads, we may experience lower revenue. Our ability to increase usage of our platform by, and sell additional contracted capacity to, existing customers, and, in particular, large enterprise customers, will depend on a number of factors, including our customers’ satisfaction with our platform, competition, pricing, general economic conditions, overall changes in our customers’ spending levels, the effectiveness of our and our partners’ efforts to help our customers realize the benefits of our platform, and the extent to which customers migrate new workloads to our platform over time.

Acquiring New Customers

We believe there is a substantial opportunity to further grow our customer base by continuing to make significant investments in sales and marketing and brand awareness. Our ability to attract new customers will depend on a number of factors, including our success in recruiting and scaling our sales and marketing organization, competitive dynamics in our target markets, and our ability to build and maintain partner relationships, including with global system integrators, resellers, and technology partners. We intend to continue expanding our direct sales force, with a focus on specific industries and increasing sales to large organizations. While our platform is built for organizations of all sizes, we focus our selling efforts on large enterprise customers and customers with vast amounts of data, and providing industry-specific solutions. We may not achieve anticipated revenue growth from expanding our sales force to focus on large enterprises and specific industries if we are unable to hire, develop, integrate, and retain talented and effective sales personnel; if our new and existing sales personnel are unable to achieve desired productivity levels in a reasonable period of time; or if our sales and marketing programs are not effective.

Investing in Growth and Scaling our Business

We are focused on our long-term revenue potential. We believe that our market opportunity is large, and we will continue to invest significantly in scaling across all organizational functions in order to grow our operations both domestically and internationally. We have a history of introducing successful new features and capabilities on our platform, and we intend to continue to invest heavily to grow our business to take advantage of our expansive market opportunity while also focusing on profitability and cash flow.

Key Business Metrics

We monitor the key business metrics set forth below to help us evaluate our business and growth trends, establish budgets, measure the effectiveness of our sales and marketing efforts, and assess operational efficiencies. The calculation of the key business metrics discussed below may differ from other similarly titled metrics used by other companies, securities analysts, or investors.

The following tables present a summary of key business metrics for the periods presented:

	Three Months Ended				
	October 31, 2022	**July 31, 2022**	**April 30, 2022**	**January 31, 2022**	**October 31, 2021**
Product revenue (in millions)	$522.8	$466.3	$394.4	$359.6	$312.5
Free cash flow (non-GAAP) (in millions)[(1)(2)]	$65.0	$53.8	$172.4	$70.7	$9.5

	October 31, 2022	**July 31, 2022**	**April 30, 2022**	**January 31, 2022**	**October 31, 2021**
Remaining performance obligations (in millions)[(3)]	$3,003.1	$2,715.7	$2,610.0	$2,646.5	$1,804.0
Total customers[(4)]	7,292	6,818	6,333	5,966	5,432
Net revenue retention rate[(4)]	165 %	171 %	174 %	177 %	172 %
Customers with trailing 12-month product revenue greater than $1 million[(4)]	287	246	206	184	148

(1) Includes net cash paid on payroll tax-related items on employee stock transactions as follows (in millions):

	Three Months Ended				
	October 31, 2022	**July 31, 2022**	**April 30, 2022**	**January 31, 2022**	**October 31, 2021**
Net cash paid on payroll tax-related items on employee stock transactions	$0.1	$4.8	$9.0	$31.4	$12.1

(2) Cash outflows for employee payroll tax items related to the net share settlement of equity awards, which were $51.7 million and $135.8 million for the three and nine months ended October 31, 2022, respectively, are included in cash flow for financing activities and, as a result, do not have an effect on the calculation of free cash flow. No equity awards were net settled prior to the nine months ended October 31, 2022. See the section titled “Free Cash Flow” for a reconciliation of free cash flow to the most directly comparable financial measure calculated in accordance with GAAP.

(3) As of October 31, 2022, our remaining performance obligations were approximately $3.0 billion, of which we expect approximately 55% to be recognized as revenue in the twelve months ending October 31, 2023 based on historical customer consumption patterns. The weighted-average remaining life of our capacity contracts was 2.0 years as of October 31, 2022. However, the amount and timing of revenue recognition are generally dependent upon customers’ future consumption, which is inherently variable at our customers’ discretion and can extend beyond the original contract term in cases where customers are permitted to roll over unused capacity to future periods, generally upon the purchase of additional capacity at renewal. In addition, our historical customer consumption patterns are not necessarily indicative of future results.

(4) Historical total customer count, net revenue retention rate, and number of customers with trailing 12-month product revenue greater than $1 million reflect any adjustments for acquisitions, consolidations, spin-offs, and other market activity.

Product Revenue

Product revenue is a key metric for us because we recognize revenue based on platform consumption, which is inherently variable at our customers’ discretion, and not based on the amount and duration of contract terms. Product revenue is primarily derived from the consumption of compute, storage, and data transfer resources, which are consumed by customers on our platform as a single, integrated offering. Customers have the flexibility to consume more than their contracted capacity during the contract term and may have the ability to roll over unused capacity to future periods, generally upon the purchase of additional capacity at renewal. Our consumption-based business model distinguishes us from subscription-based software companies that generally recognize revenue ratably over the contract term and may not permit rollover. Because customers have flexibility in the timing of their consumption, which can exceed their contracted capacity or extend beyond the original contract term in many cases, the amount of product revenue recognized in a given period is an important indicator of customer satisfaction and the value derived from our platform. While customer use of our platform in any period is not necessarily indicative of future use, we estimate future revenue using predictive models based on customers’ historical usage to plan and determine financial forecasts. Product revenue excludes our professional services and other revenue, which has been less than 10% of revenue for each of the periods presented.

Remaining Performance Obligations

Remaining performance obligations (RPO) represent the amount of contracted future revenue that has not yet been recognized, including (i) deferred revenue and (ii) non-cancelable contracted amounts that will be invoiced and recognized as revenue in future periods. RPO excludes performance obligations from on-demand arrangements and certain time and materials contracts that are billed in arrears. Portions of RPO that are not yet invoiced and are denominated in foreign currencies are revalued into U.S. dollars each period based on the applicable period-end exchange rates. RPO is not necessarily indicative of future product revenue growth because it does not account for the timing of customers’ consumption or their consumption of more than their contracted capacity. Moreover, RPO is influenced by a number of factors, including the timing of renewals, the timing of purchases of additional capacity, average contract terms, seasonality, changes in foreign currency exchange rates, and the extent to which customers are permitted to roll over unused capacity to future periods, generally upon the purchase of additional capacity at renewal. Due to these factors, it is important to review RPO in conjunction with product revenue and other financial metrics disclosed elsewhere herein.

Total Customers

We count the total number of customers at the end of each period. For purposes of determining our customer count, we treat each customer account, including accounts for end-customers under a reseller arrangement, that has at least one corresponding capacity contract as a unique customer, and a single organization with multiple divisions, segments, or subsidiaries may be counted as multiple customers. For purposes of determining our customer count, we do not include customers that consume our platform only under on-demand arrangements. Our customer count is subject to adjustments for acquisitions, consolidations, spin-offs, and other market activity, and we present our total customer count for historical periods reflecting these adjustments. We believe that the number of customers is an important indicator of the growth of our business and future revenue trends.

Net Revenue Retention Rate

We believe the growth in use of our platform by our existing customers is an important measure of the health of our business and our future growth prospects. We monitor our dollar-based net revenue retention rate to measure this growth. To calculate this metric, we first specify a measurement period consisting of the trailing two years from our current period end. Next, we define as our measurement cohort the population of customers under capacity contracts that used our platform at any point in the first month of the first year of the measurement period. Starting with the fiscal quarter ended October 31, 2021, the cohorts used to calculate net revenue retention rate include end-customers under a reseller arrangement. Although the impact is not material, we have adjusted all prior periods presented to reflect this inclusion. We then calculate our net revenue retention rate as the quotient obtained by dividing our product revenue from this cohort in the second year of the measurement period by our product revenue from this cohort in the first year of the measurement period. Any customer in the cohort that did not use our platform in the second year remains in the calculation and contributes zero product revenue in the second year. Our net revenue retention rate is subject to adjustments for acquisitions, consolidations, spin-offs, and other market activity, and we present our net revenue retention rate for historical periods reflecting these adjustments. Since we will continue to attribute the historical product revenue to the consolidated contract, consolidation of capacity contracts within a customer's organization typically will not impact our net revenue retention rate unless one of those customers was not a customer at any point in the first month of the first year of the measurement period. We expect our net revenue retention rate to decrease over the long-term as customers that have consumed our platform for an extended period of time become a larger portion of both our overall customer base and our product revenue that we use to calculate net revenue retention rate, and as their consumption growth primarily relates to existing use cases rather than new use cases.

Customers with Trailing 12-Month Product Revenue Greater than $1 Million

Large customer relationships lead to scale and operating leverage in our business model. Compared with smaller customers, large customers present a greater opportunity for us to sell additional capacity because they have larger budgets, a wider range of potential use cases, and greater potential for migrating new workloads to our platform over time. As a measure of our ability to scale with our customers and attract large enterprises to our platform, we count the number of customers under capacity arrangements that contributed more than $1 million in product revenue in the trailing 12 months. Our customer count is subject to adjustments for acquisitions, consolidations, spin-offs, and other market activity, and we present our customer count for historical periods reflecting these adjustments.

Free Cash Flow

We define free cash flow, a non-GAAP financial measure, as GAAP net cash provided by (used in) operating activities reduced by purchases of property and equipment and capitalized internal-use software development costs. Cash outflows for employee payroll tax items related to the net share settlement of equity awards are included in cash flow for financing activities and, as a result, do not have an effect on the calculation of free cash flow. We believe information regarding free cash flow provides useful supplemental information to investors because it is an indicator of the strength and performance of our core business operations.

The following table presents a reconciliation of free cash flow to net cash provided by operating activities, the most directly comparable financial measure calculated in accordance with GAAP, for the periods presented (in thousands):

	Three Months Ended				
	October 31, 2022	July 31, 2022	April 30, 2022	January 31, 2022	October 31, 2021
Net cash provided by operating activities	$ 79,277	$ 64,433	$ 184,613	$ 78,898	$ 15,538
Less: purchases of property and equipment	(8,505)	(3,848)	(7,413)	(4,012)	(2,282)
Less: capitalized internal-use software development costs	(5,779)	(6,736)	(4,804)	(4,160)	(3,788)
Free cash flow (non-GAAP)[(1)(2)]	$ 64,993	$ 53,849	$ 172,396	$ 70,726	$ 9,468

(1) Includes net cash paid on payroll tax-related items on employee stock transactions as follows (in thousands):

	Three Months Ended				
	October 31, 2022	July 31, 2022	April 30, 2022	January 31, 2022	October 31, 2021
Net cash paid on payroll tax-related items on employee stock transactions	$ 52	$ 4,796	$ 9,045	$ 31,378	$ 12,058

(2) Cash outflows for employee payroll tax items related to the net share settlement of equity awards, which were $51.7 million and $135.8 million for the three and nine months ended October 31, 2022, respectively, are included in cash flow for financing activities and, as a result, do not have an effect on the calculation of free cash flow. No equity awards were net settled prior to the nine months ended October 31, 2022.

Historically, we have received a higher volume of orders from new and existing customers in the fourth fiscal quarter of each year. As a result, we have historically seen higher free cash flow in the first and fourth fiscal quarters of each year.

Components of Results of Operations

Revenue

We deliver our platform over the internet as a service. Customers choose to consume our platform under either capacity arrangements, in which they commit to a certain amount of consumption at specified prices, or under on-demand arrangements, in which we charge for use of our platform monthly in arrears. Under capacity arrangements, from which a majority of our revenue is derived, we typically bill our customers annually in advance of their consumption. However, in future periods, we expect to see an increase in capacity contracts providing for quarterly upfront billings and monthly in arrears billings as our customers increasingly want to align consumption and timing of payments. Revenue from on-demand arrangements typically relates to initial consumption as part of customer onboarding and, to a lesser extent, overage consumption beyond a customer's contracted usage amount or following the expiration of a customer's contract. Revenue from on-demand arrangements represented less than 3% of our revenue for each of the three and nine months ended October 31, 2022 and 2021.

We recognize revenue as customers consume compute, storage, and data transfer resources under either of these arrangements. In limited instances, customers pay an annual deployment fee to gain access to a dedicated instance of a virtual private deployment. We recognize the deployment fee ratably over the contract term. Such deployment revenue represented less than 1% of our revenue for each of the three and nine months ended October 31, 2022 and 2021.

Our customer contracts for capacity typically have a term of one to four years. The weighted-average term of capacity contracts entered into during the three and nine months ended October 31, 2022 is 2.5 years and 2.2 years, respectively. To the extent our customers enter into such contracts and either consume our platform in excess of their capacity commitments or continue to use our platform after expiration of the contract term, they are charged for their incremental consumption. In many cases, our customer contracts permit customers to roll over any unused capacity to a subsequent order, generally upon the purchase of additional capacity. For those customers who do not have a capacity arrangement, our on-demand arrangements generally have a monthly stated contract term and can be terminated at any time by either the customer or us.

We generate the substantial majority of our revenue from fees charged to our customers based on the storage, compute, and data transfer resources consumed on our platform as a single, integrated offering. We do not make any one of these resources available for consumption without the others. Instead, each of compute, storage, and data transfer work together to drive consumption on our platform. For storage resources, consumption for a given customer is based on the average terabytes per month of all of such customer's data stored in our platform. For compute resources, consumption is based on the type of compute resource used and the duration of use or, for some features, the volume of data processed. For data transfer resources, consumption is based on terabytes of data transferred, the public cloud provider used, and the region to and from which the transfer is executed.

Because customers have flexibility in their consumption, and we generally recognize revenue on consumption and not ratably over the term of the contract, we do not have the visibility into the timing of revenue recognition from any particular customer contract that typical subscription-based software companies may have. As our customer base grows, we expect our ability to forecast customer consumption in the aggregate to improve. However, in any given period, there is a risk that customers will consume our platform more slowly than we expect, including in response to macroeconomic conditions, which may cause fluctuations in our revenue and results of operations. In addition, new software releases or hardware improvements, like better storage compression and cloud infrastructure processor improvements, may make our platform more efficient, enabling customers to consume fewer compute, storage, and data transfer resources to accomplish the same workloads. To the extent these improvements do not result in an offsetting increase in new workloads, we may experience lower revenue.

Our revenue also includes professional services and other revenue, which consists primarily of consulting, on-site technical solution services, and training related to our platform. Our professional services revenue is recognized over time based on input measures, including time and materials costs incurred relative to total costs, with consideration given to output measures, such as contract deliverables, when applicable. Other revenue consists primarily of fees from customer training delivered on-site or through publicly available classes.

Allocation of Overhead Costs

Overhead costs that are not substantially dedicated for use by a specific functional group are allocated based on headcount. Such costs include costs associated with office facilities, depreciation of property and equipment, and information technology (IT) related personnel and other expenses, such as software and subscription services.

Cost of Revenue

Cost of revenue consists of cost of product revenue and cost of professional services and other revenue. Cost of revenue also includes allocated overhead costs.

Cost of product revenue. Cost of product revenue consists primarily of (i) third-party cloud infrastructure expenses incurred in connection with our customers' use of our platform and the deployment and maintenance of our platform on public clouds, including different regional deployments, and (ii) personnel-related costs associated with customer support and maintaining service availability and security of our platform, including salaries, benefits, bonuses, and stock-based compensation. We periodically receive credits from third-party cloud providers that are recorded as a reduction to the third-party cloud infrastructure expenses. Cost of product revenue also includes amortization of internal-use software development costs, amortization of acquired developed technology intangible assets, and expenses associated with software and subscription services dedicated for use by our customer support team and our engineering team responsible for maintaining our platform.

Cost of professional services and other revenue. Cost of professional services and other revenue consists primarily of personnel-related costs associated with our professional services and training departments, including salaries, benefits, bonuses, and stock-based compensation, and costs of contracted third-party partners and software tools.

We intend to continue to invest additional resources in our platform infrastructure and our customer support and professional services organizations to support the growth of our business. Some of these investments, including certain support costs and costs of expanding our business internationally, are incurred in advance of generating revenue, and either the failure to generate anticipated revenue or fluctuations in the timing of revenue could affect our gross margin from period to period.

Operating Expenses

Our operating expenses consist of sales and marketing, research and development, and general and administrative expenses. Personnel costs are the most significant component of operating expenses and consist of salaries, benefits, bonuses, stock-based compensation, and sales commissions. Operating expenses also include allocated overhead costs.

Sales and Marketing

Sales and marketing expenses consist primarily of personnel-related expenses associated with our sales and marketing staff, including salaries, benefits, bonuses, and stock-based compensation. Sales and marketing expenses also include sales commissions and draws paid to our sales force and certain referral fees paid to third parties, including amortization of deferred commissions. A portion of the sales commissions paid to the sales force is earned based on the rate of the customers' consumption of our platform, and a portion of the commissions paid to the sales force is earned upon the origination of the customer contracts. Sales commissions tied to customers' consumption are expensed in the same period as they are earned. Sales commissions and referral fees earned upon the origination of the new customer or customer expansion contracts are deferred and then amortized over a period of benefit that we determined to be five years. Sales and marketing expenses also include advertising costs and other expenses associated with our marketing and business development programs, including Summit, our annual user conference, offset by proceeds from such conferences and programs. In addition, sales and marketing expenses are comprised of travel-related expenses, software and subscription services dedicated for use by our sales and marketing organizations, amortization of acquired developer community intangible asset, and outside services contracted for sales and marketing purposes. We expect that our sales and marketing expenses will increase in absolute dollars and continue to be our largest operating expense for the foreseeable future as we grow our business. However, we expect that our sales and marketing expenses will decrease as a percentage of our revenue over time.

Research and Development

Research and development expenses consist primarily of personnel-related expenses associated with our research and development staff, including salaries, benefits, bonuses, and stock-based compensation. Research and development expenses also include contractor or professional services fees, third-party cloud infrastructure expenses incurred in developing our platform, and expenses associated with computer equipment, software and subscription services dedicated for use by our research and development organization. We expect that our research and development expenses will increase in absolute dollars as our business grows, particularly as we incur additional costs related to continued investments in our platform. However, we expect that our research and development expenses will decrease as a percentage of our revenue over time. In addition, research and development expenses that qualify as internal-use software development costs are capitalized, the amount of which may fluctuate significantly from period to period.

General and Administrative

General and administrative expenses consist primarily of personnel-related expenses for our finance, legal, human resources, facilities, and administrative personnel, including salaries, benefits, bonuses, and stock-based compensation. General and administrative expenses also include external legal, accounting, and other professional services fees, software and subscription services dedicated for use by our general and administrative functions, insurance, unallocated lease costs associated with unused office facilities to accommodate planned headcount growth, and other corporate expenses. We expect that our general and administrative expenses will increase in absolute dollars as our business grows but will decrease as a percentage of our revenue over time.

Interest Income

Interest income consists primarily of interest income earned on our cash equivalents and short-term and long-term investments, including amortization of premiums and accretion of discounts related to our available-for-sale marketable debt securities, net of associated fees.

Other Income (Expense), Net

Other income (expense), net consists primarily of (i) unrealized gains (losses) on our strategic investments in equity securities, and (ii) the effect of exchange rates on our foreign currency-denominated asset and liability balances.

Provision for (Benefit from) Income Taxes

Provision for (benefit from) income taxes consists primarily of income taxes in certain foreign and U.S. state jurisdictions in which we conduct business. We maintain a full valuation allowance against our U.S. and U.K. deferred tax assets because we have concluded that it is more likely than not that the deferred tax assets will not be realized.

Net Income (Loss) Attributable to Noncontrolling Interest

Our condensed consolidated financial statements include the accounts of Snowflake Inc., our wholly-owned subsidiaries, and a majority-owned subsidiary in which we have a controlling financial interest. Net income (loss) attributable to noncontrolling interest represents the net income (loss) of our majority-owned subsidiary attributed to noncontrolling interest using the hypothetical liquidation at book value method. See Note 2, "Basis of Presentation and Summary of Significant Accounting Policies," to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for further details.

Results of Operations

The following table sets forth our condensed consolidated statements of operations data for the periods indicated (in thousands):

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2022	2021	2022	2021
Revenue	$ 557,028	$ 334,441	$ 1,476,647	$ 835,553
Cost of revenue(1)	190,721	120,786	511,883	324,253
Gross profit	366,307	213,655	964,764	511,300
Operating expenses(1):				
Sales and marketing	284,477	190,971	803,034	540,678
Research and development	211,387	115,900	545,933	343,783
General and administrative	76,462	64,055	218,314	189,846
Total operating expenses	572,326	370,926	1,567,281	1,074,307
Operating loss	(206,019)	(157,271)	(602,517)	(563,007)
Interest income	21,857	1,985	38,308	6,787
Other income (expense), net	(13,271)	1,609	(44,672)	9,867
Loss before income taxes	(197,433)	(153,677)	(608,881)	(546,353)
Provision for (benefit from) income taxes	4,009	1,179	(18,839)	1,442
Net loss	(201,442)	(154,856)	(590,042)	(547,795)
Less: net loss attributable to noncontrolling interest	(506)	—	(506)	—
Net loss attributable to Snowflake Inc.	$ (200,936)	$ (154,856)	$ (589,536)	$ (547,795)

(1) Includes stock-based compensation as follows (in thousands):

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2022	2021	2022	2021
Cost of revenue	$ 27,794	$ 21,163	$ 76,499	$ 66,380
Sales and marketing	65,010	43,074	177,641	141,463
Research and development	110,231	56,142	280,721	174,788
General and administrative	26,128	24,008	75,976	76,761
Total stock-based compensation	$ 229,163	$ 144,387	$ 610,837	$ 459,392

The overall increase in stock-based compensation for the three and nine months ended October 31, 2022, compared to the three and nine months ended October 31, 2021, was primarily attributable to additional equity awards granted to current and new employees, partially offset by a decrease in stock-based compensation associated with restricted stock unit awards (RSUs) granted prior to our Initial Public Offering (IPO). RSUs granted prior to our IPO have both a service-based and a performance-based vesting condition and, as a result, we recognized stock-based compensation associated with such RSUs using an accelerated attribution method.

As of October 31, 2022, total compensation cost related to unvested stock-based awards not yet recognized was $2.5 billion, which will be recognized over a weighted-average period of 3.0 years. See Note 10, “Equity,” to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for further details.

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

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2022	2021	2022	2021
Revenue	100 %	100 %	100 %	100 %
Cost of revenue[1]	34	36	35	39
Gross profit	66	64	65	61
Operating expenses[1]:				
Sales and marketing	51	57	54	65
Research and development	38	35	37	40
General and administrative	14	19	15	23
Total operating expenses	103	111	106	128
Operating loss	(37)	(47)	(41)	(67)
Interest income	4	1	3	1
Other income (expense), net	(2)	—	(3)	1
Loss before income taxes	(35)	(46)	(41)	(65)
Provision for (benefit from) income taxes	1	—	(1)	1
Net loss	(36)	(46)	(40)	(66)
Less: net loss attributable to noncontrolling interest	—	—	—	—
Net loss attributable to Snowflake Inc.	(36%)	(46%)	(40%)	(66%)

(1) Stock-based compensation included in the table above as a percentage of revenue as follows:

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2022	2021	2022	2021
Cost of revenue	5 %	6 %	5 %	8 %
Sales and marketing	12	13	12	17
Research and development	19	17	19	21
General and administrative	5	7	5	9
Total stock-based compensation	41 %	43 %	41 %	55 %

Comparison of the Three and Nine Months Ended October 31, 2022 and 2021

Revenue

	Three Months Ended October 31,			Nine Months Ended October 31,		
	2022	2021	% Change	2022	2021	% Change
	(dollars in thousands)			(dollars in thousands)		
Revenue:						
Product	$ 522,752	$ 312,458	67%	$ 1,383,454	$ 780,911	77%
Professional services and other	34,276	21,983	56%	93,193	54,642	71%
Total	$ 557,028	$ 334,441	67%	$ 1,476,647	$ 835,553	77%
Percentage of revenue:						
Product	94%	93%		94%	93%	
Professional services and other	6%	7%		6%	7%	
Total	100%	100%		100%	100%	

Product revenue increased $210.3 million and $602.5 million for the three and nine months ended October 31, 2022, compared to the three and nine months ended October 31, 2021, respectively, primarily due to increased consumption of our platform by existing customers, as evidenced by our net revenue retention rate of 165% as of October 31, 2022.

We had 287 customers with product revenue of greater than $1 million for the trailing 12 months ended October 31, 2022, an increase from 148 customers as of October 31, 2021. Such customers represented approximately 61% and 53% of our product revenue for the trailing 12 months ended October 31, 2022 and 2021, respectively. Within these customers, we had 49 and 13 customers with product revenue of greater than $5 million and $10 million, respectively, for the trailing 12 months ended October 31, 2022. For each of the three months ended October 31, 2022 and 2021, approximately 97% of our revenue was derived from existing customers under capacity arrangements, and less than 1% of our revenue was derived from new customers under capacity arrangements. For the nine months ended October 31, 2022 and 2021, approximately 97% and 95% of our revenue was derived from existing customers under capacity arrangements, respectively, and approximately 1% and 3% of our revenue was derived from new customers under capacity arrangements, respectively. The remainder was driven by on-demand arrangements. The preceding historical metrics reflect any adjustments for acquisitions, consolidations, spin-offs, and other market activity. For purposes of determining revenue derived from (i) customers with trailing 12-month product revenue greater than $1 million, (ii) new customers, and (iii) existing customers, we treat each customer account, including accounts for end-customers under a reseller arrangement, that has at least one corresponding capacity contract as a unique customer, and a single organization with multiple divisions, segments, or subsidiaries may be counted as multiple customers.

Professional services and other revenue increased $12.3 million and $38.6 million for the three and nine months ended October 31, 2022, respectively, compared to the same periods in the prior year, as we continued to expand our professional services organization to help our customers further realize the benefits of our platform.

Cost of Revenue, Gross Profit (Loss), and Gross Margin

	Three Months Ended October 31, 2022	Three Months Ended October 31, 2021	% Change	Nine Months Ended October 31, 2022	Nine Months Ended October 31, 2021	% Change
	(dollars in thousands)			(dollars in thousands)		
Cost of revenue:						
Product	$ 145,929	$ 92,292	58%	$ 388,946	$ 245,420	58%
Professional services and other	44,792	28,494	57%	122,937	78,833	56%
Total cost of revenue	$ 190,721	$ 120,786	58%	$ 511,883	$ 324,253	58%
Gross profit (loss):						
Product	$ 376,823	$ 220,166	71%	$ 994,508	$ 535,491	86%
Professional services and other	(10,516)	(6,511)	62%	(29,744)	(24,191)	23%
Total gross profit	$ 366,307	$ 213,655	71%	$ 964,764	$ 511,300	89%
Gross margin:						
Product	72%	70%		72%	69%	
Professional services and other	(31%)	(30%)		(32%)	(44%)	
Total gross margin	66%	64%		65%	61%	
Headcount (at period end)						
Product	343	226		343	226	
Professional services and other	458	297		458	297	
Total headcount	801	523		801	523	

Cost of product revenue increased $53.6 million and $143.5 million for the three and nine months ended October 31, 2022, compared to the three and nine months ended October 31, 2021, respectively. The increase was primarily due to an increase of $41.7 million and $116.9 million in third-party cloud infrastructure expenses as a result of increased customer consumption for the three and nine months ended October 31, 2022, respectively, compared to the same periods in the prior year. Personnel-related costs and allocated overhead costs also increased $7.7 million and $18.4 million for the three and nine months ended October 31, 2022, respectively, compared to the same periods in the prior year, as a result of increased headcount and overall costs to support the growth in our business, and increased stock-based compensation primarily related to additional equity awards granted to current and new employees. The remaining increase of $2.4 million and $4.4 million for the three and nine months ended October 31, 2022, respectively, was primarily driven by increased amortization of internal-use software development costs.

Our product gross margin was 72% for each of the three and nine months ended October 31, 2022, compared to 70% and 69% for the three and nine months ended October 31, 2021, respectively, which increase was primarily due to (i) an increased percentage of revenue from consumption of higher-priced editions of our platform, (ii) increased scale across our cloud infrastructure regions, and (iii) higher volume-based discounts for our purchases of third-party cloud infrastructure. While we expect our product gross margin to remain relatively flat for the fiscal year ending January 31, 2023, a number of factors could negatively impact our product gross margin, including (i) fluctuations in the mix and timing of customers' consumption, which is inherently variable at our customers' discretion, (ii) whether or not a customer contracts with us through our marketplace listings, (iii) our discounting practices, including as a result of changes to the competitive environment, and (iv) the extent of our investments in our operations, including performance improvements that may make our platform or the underlying cloud infrastructure more efficient.

Cost of professional services and other revenue increased $16.3 million and $44.1 million for the three and nine months ended October 31, 2022, compared to the three and nine months ended October 31, 2021, respectively. The increase was primarily due to an increase of $13.1 million and $35.6 million in personnel-related costs and allocated overhead costs for the three and nine months ended October 31, 2022, respectively, compared to the same periods in the prior year, as a result of increased headcount and overall costs to support the growth in our business, and increased stock-based compensation primarily related to additional equity awards granted to current and new employees. Costs associated with contracted third-party partners also increased $2.9 million and $7.4 million for the three and nine months ended October 31, 2022, respectively, compared to the same periods in the prior year, as a result of growth in our business.

Professional services and other gross margin improved for the nine months ended October 31, 2022 compared to the same period in the prior year, primarily due to decreased stock-based compensation as a percentage of professional services and other revenue. We do not believe the year-over-year changes in professional services and other gross margins are meaningful given that we are continuing to scale our professional services organization and our professional services and other revenue represents a small percentage of our revenue.

Sales and Marketing

	Three Months Ended October 31,		% Change	Nine Months Ended October 31,		% Change
	2022	2021		2022	2021	
	(dollars in thousands)			(dollars in thousands)		
Sales and marketing	$ 284,477	$ 190,971	49%	$ 803,034	$ 540,678	49%
Percentage of revenue	51 %	57 %		54 %	65 %	
Headcount (at period end)	2,625	1,672		2,625	1,672	

Sales and marketing expenses increased $93.5 million and $262.4 million for the three and nine months ended October 31, 2022, compared to the three and nine months ended October 31, 2021, respectively. The increase was primarily due to an increase of $63.3 million and $161.2 million in personnel-related costs (excluding commission expenses) and allocated overhead costs for the three and nine months ended October 31, 2022, respectively, compared to the same periods in the prior year, as a result of increased headcount and overall costs to support the growth in our business, and increased stock-based compensation primarily related to additional equity awards granted to current and new employees, partially offset by a decrease in stock-based compensation related to RSUs granted prior to our IPO. Expenses associated with sales commissions and draws paid to our sales force and certain referral fees paid to third parties, including amortization of deferred commissions, also increased $6.9 million and $26.6 million for the three and nine months ended October 31, 2022, respectively, compared to the same periods in the prior year, primarily due to increases in customers' consumption of our platform and in the annualized contract value of our customer contracts.

Advertising costs and other expenses associated with our marketing and business development programs also increased $6.2 million and $30.6 million for the three and nine months ended October 31, 2022, respectively, compared to the same periods in the prior year, primarily driven by increased expenses related to in-person marketing events and user conferences, net of the associated proceeds. Expenses associated with Summit, our in-person annual user conference which was held virtually in the prior year due to the COVID-19 pandemic increased $10.5 million, net of the associated proceeds, for the nine months ended October 31, 2022, compared to the same period in the prior year. As a result of in-person marketing events and user conferences as well as the easing of COVID-19 travel restrictions, travel-related expenses also increased $6.4 million and $14.4 million for the three and nine months ended October 31, 2022, respectively, compared to the same periods in the prior year.

In addition, sales and marketing expenses for the three and nine months ended October 31, 2022 included $7.6 million and $17.7 million of amortization of acquired developer community intangible asset, respectively, as a result of the Streamlit business combination completed in March 2022. The remaining increase in sales and marketing expenses was attributable to increased software and subscription services dedicated for use by our sales and marketing organizations.

Research and Development

	Three Months Ended October 31,		% Change	Nine Months Ended October 31,		% Change
	2022	2021		2022	2021	
	(dollars in thousands)			(dollars in thousands)		
Research and development	$ 211,387	$ 115,900	82%	$ 545,933	$ 343,783	59%
Percentage of revenue	38 %	35 %		37 %	40 %	
Headcount (at period end)	1,235	705		1,235	705	

Research and development expenses increased $95.5 million and $202.2 million for the three and nine months ended October 31, 2022, compared to the three and nine months ended October 31, 2021, respectively. The increase was primarily due to an increase of $84.1 million and $173.9 million in personnel-related costs and allocated overhead costs for the three and nine months ended October 31, 2022, respectively, compared to the same periods in the prior year, as a result of increased stock-based compensation, headcount, and overall costs to support the growth in our business. The increase in personnel-related costs included a $54.1 million and $105.9 million increase in stock-based compensation for the three and nine months ended October 31, 2022, respectively, primarily related to additional equity awards granted to current and new employees and the post-combination stock-based compensation related to the Streamlit business combination, partially offset by a decrease in stock-based compensation related to RSUs granted prior to our IPO. See Note 10, "Equity," to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for further details.

The remaining increase in research and development expenses was primarily driven by an increase of $6.0 million and $16.0 million in third-party cloud infrastructure expenses incurred in developing our platform for the three and nine months ended October 31, 2022, respectively, compared to the same periods in the prior year.

General and Administrative

	Three Months Ended October 31,			Nine Months Ended October 31,		
	2022	2021	% Change	2022	2021	% Change
	(dollars in thousands)			(dollars in thousands)		
General and administrative	$ 76,462	$ 64,055	19%	$ 218,314	$ 189,846	15%
Percentage of revenue	14 %	19 %		15 %	23 %	
Headcount (at period end)	886	657		886	657	

General and administrative expenses increased $12.4 million and $28.5 million for the three and nine months ended October 31, 2022, compared to the three and nine months ended October 31, 2021, respectively. The increase was partially due to an increase of $3.1 million and $6.3 million in personnel-related costs and allocated overhead costs for the three and nine months ended October 31, 2022, respectively, compared to the same periods in the prior year, as a result of increased headcount and overall costs to support the growth in our business.

Outside services also increased $4.8 million and $7.7 million for the three and nine months ended October 31, 2022, respectively, compared to the same periods in the prior year, primarily due to increased legal fees related to acquisitions. In addition, unallocated lease costs, which are associated with unused office facilities to accommodate planned headcount growth, increased $1.1 million and $4.4 million for the three and nine months ended October 31, 2022, respectively, compared to the same periods in the prior year. The remaining increase in general and administrative expenses for the three and nine months ended October 31, 2022 was attributable to increased insurance expenses and other corporate expenses to support the normal course of operations and our continued growth.

Interest Income

	Three Months Ended October 31,		% Change	Nine Months Ended October 31,		% Change
	2022	2021		2022	2021	
	(dollars in thousands)			(dollars in thousands)		
Interest income	$ 21,857	$ 1,985	1,001%	$ 38,308	$ 6,787	464%

Interest income increased $19.9 million and $31.5 million for the three and nine months ended October 31, 2022, respectively, compared to the three and nine months ended October 31, 2021, primarily due to higher yields on our investments in available-for-sale marketable debt securities as a result of increased interest rates.

Other Income (Expense), Net

	Three Months Ended October 31,		% Change	Nine Months Ended October 31,		% Change
	2022	2021		2022	2021	
	(dollars in thousands)			(dollars in thousands)		
Net unrealized gains (losses) on strategic investments in non-marketable equity:						
Upward adjustments	$ 1,124	$ —	NM	$ 1,124	$ 8,060	(86%)
Impairments	(7,482)	—	NM	(34,037)	—	NM
Net unrealized gains (losses) on strategic investments in marketable equity securities	(6,706)	455	(1,574%)	(12,183)	455	(2,778%)
Other	(207)	1,154	(118%)	424	1,352	(69%)
Other income (expense), net	$ (13,271)	$ 1,609	(925%)	$ (44,672)	$ 9,867	(553%)

NM - Not meaningful.

Other income (expense), net decreased $14.9 million and $54.5 million for the three and nine months ended October 31, 2022, respectively, compared to the three and nine months ended October 31, 2021, primarily due to (i) the impairments recorded on our non-marketable equity securities and (ii) net unrealized losses recorded on our strategic investments in marketable equity securities. See Note 5, "Fair Value Measurements," to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for further details.

Provision for (Benefit from) Income Taxes

	Three Months Ended October 31,		% Change	Nine Months Ended October 31,		% Change
	2022	2021		2022	2021	
	(dollars in thousands)			(dollars in thousands)		
Loss before income taxes	$ (197,433)	$ (153,677)	28%	$ (608,881)	$ (546,353)	11%
Provision for (benefit from) income taxes	4,009	1,179	240%	(18,839)	1,442	(1,406%)
Effective tax rate	(2.0%)	(0.8%)		3.1 %	(0.3%)	

NM - Not meaningful.

Our provision for income taxes was $4.0 million for the three months ended October 31, 2022, compared to $1.2 million for the three months ended October 31, 2021, primarily due to higher pre-tax income in foreign jurisdictions.

Our benefit from income taxes was $18.8 million for the nine months ended October 31, 2022, compared to our provision for income taxes of $1.4 million for the nine months ended October 31, 2021, primarily due to the partial release of a valuation allowance of $26.7 million as a result of the Streamlit business combination.

We maintain a full valuation allowance on our U.S. and U.K. deferred tax assets, and the significant components of our recorded tax expense are current cash taxes in various jurisdictions. The cash tax expenses are impacted by each jurisdiction's individual tax rates, laws on the timing of recognition of income and deductions, and availability of net operating losses and tax credits. Our effective tax rate might fluctuate significantly and could be adversely affected to the extent earnings are lower than forecasted in countries that have lower statutory rates and higher than forecasted in countries that have higher statutory rates.

Liquidity and Capital Resources

As of October 31, 2022, our principal sources of liquidity were cash, cash equivalents, and short-term and long-term investments totaling $4.9 billion. Our investments primarily consist of corporate notes and bonds, commercial paper, U.S. government and agency securities, money market funds, and certificates of deposit.

As of October 31, 2022, our RPO was $3.0 billion. Our RPO represents the amount of contracted future revenue that has not yet been recognized, including (i) deferred revenue and (ii) non-cancelable contracted amounts that will be invoiced and recognized as revenue in future periods, which are not recorded on the balance sheet. Portions of RPO that are not yet invoiced and are denominated in foreign currencies are revalued into U.S. dollars each period based on the applicable period-end exchange rates.

Our primary source of cash is payments received from our customers. Our primary uses of cash include personnel-related expenses, sales and marketing expenses, third-party cloud infrastructure expenses, overhead costs, capital expenditures, and acquisitions and strategic investments we may make from time to time. As of October 31, 2022, our material cash requirements from known contractual obligations and commitments relate primarily to (i) third-party cloud infrastructure agreements, (ii) operating leases for office facilities, and (iii) subscription arrangements used to facilitate our operations at the enterprise level. For the nine months ended October 31, 2022, there were no material changes outside of the ordinary course of business in our commitments and contractual obligations disclosed in our Annual Report on Form 10-K for the fiscal year ended January 31, 2022, which was filed with the SEC on March 30, 2022. See Note 9, "Commitments and Contingencies," to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for additional details.

On March 31, 2022, we acquired all outstanding stock of Streamlit. A portion of the purchase consideration was paid in cash, which amounted to $177.9 million, net of $33.9 million cash and cash equivalents acquired.

In May 2022, we entered into an agreement related to the expansion and lease term extension of an existing office facility located in the United States, which is considered a lease modification not accounted for as a separate contract. The modified lease commenced during the nine months ended October 31, 2022, with an expiration date in fiscal 2035. Total commitment, net of tenant incentives expected to be received, under the modified lease is $68.0 million.

On September 23, 2022, we acquired all outstanding stock of Applica for $174.6 million in cash, net of cash acquired.

During the nine months ended October 31, 2022, we began funding withholding taxes due upon the vesting of employee RSUs in certain jurisdictions by net share settlement, rather than our previous approach of selling shares of our common stock to cover taxes upon vesting of such awards. The amount of withholding taxes paid related to net share settlement of employee RSUs was $51.7 million and $135.8 million for the three and nine months ended October 31, 2022, respectively.

On November 25, 2022 (the Agreement Date), we entered into an agreement to acquire all outstanding stock of a privately-held company for approximately $75 million in cash, subject to customary purchase price adjustments. The acquisition is expected to close within six months of the Agreement Date, subject to certain closing conditions.

We believe that our existing cash, cash equivalents, and short-term and long-term investments will be sufficient to support our working capital and capital expenditure requirements for at least the next 12 months. For the period beyond the next 12 months, we believe we will be able to meet our working capital and capital expenditure needs from our existing cash, cash equivalents, and short-term and long-term investments and cash flows from our operating activities. Our future capital requirements will depend on many factors, including our revenue growth rate, expenditures related to our headcount growth, the timing and the amount of cash received from customers, the expansion of sales and marketing activities, the timing and extent of spending to support development efforts, the price at which we are able to purchase public cloud capacity, expenses associated with our international expansion, the introduction of platform enhancements, and the continuing market adoption of our platform. We may continue to enter into arrangements to acquire or invest in complementary businesses, products, and technologies. We may, as a result of those arrangements or the general expansion of our business, be required to seek additional equity or debt financing. In the event that we require additional financing, we may not be able to raise such financing on terms acceptable to us or at all. If we are unable to raise additional capital or generate cash flows necessary to expand our operations and invest in continued innovation, we may not be able to compete successfully, which would harm our business, results of operations, and financial condition.

The following table shows a summary of our cash flows for the periods presented (in thousands):

	Nine Months Ended October 31,	
	2022	2021
Net cash provided by operating activities	$ 328,323	$ 31,281
Net cash used in investing activities	$ (533,101)	$ (56,967)
Net cash provided by (used in) financing activities	$ (52,540)	$ 142,671

Operating Activities

Net cash provided by operating activities mainly consists of our net loss adjusted for certain non-cash items, primarily consisting of (i) stock-based compensation, net of amounts capitalized, (ii) net unrealized gains or losses on strategic investments in equity securities, (iii) depreciation and amortization of property and equipment and amortization of acquired intangible assets, (iv) amortization of deferred commissions, (v) amortization of operating lease right-of-use assets, (vi) net amortization of premiums or accretion of discounts on investments, and (vii) deferred income tax benefit or expense, and changes in operating assets and liabilities during each period.

For the nine months ended October 31, 2022, net cash provided by operating activities was $328.3 million, primarily consisting of our net loss of $590.0 million, adjusted for non-cash charges of $762.6 million, and net cash inflows of $155.8 million provided by changes in our operating assets and liabilities, net of the effects of business combinations. The main drivers of the changes in operating assets and liabilities during the nine months ended October 31, 2022 were (i) a $150.7 million decrease in accounts receivable due to timing of billings and collections as we have historically received a higher volume of customer orders in the fourth fiscal quarter of each year, (ii) a $46.7 million increase in deferred revenue mainly due to invoicing for prepaid capacity agreements outpacing revenue recognition, (iii) a $27.7 million increase in accrued expenses and other liabilities primarily due to the timing of accruals and payments, and (iv) a $13.2 million decrease in prepaid expenses and other assets primarily due to the timing of prepayments for software and subscriptions services and third-party cloud infrastructure expenses, partially offset by (a) a $63.6 million increase in deferred commissions earned upon the origination of customer contracts, and (b) a $29.2 million decrease in operating lease liabilities due to payments related to our operating lease obligations.

For the nine months ended October 31, 2021, net cash provided by operating activities was $31.3 million, primarily consisting of our net loss of $547.8 million, adjusted for non-cash charges of $558.7 million, and net cash inflows of $20.4 million provided by changes in our operating assets and liabilities.

Net cash provided by operating activities increased $297.0 million for the nine months ended October 31, 2022, compared to the nine months ended October 31, 2021, primarily due to an increase of $787.8 million in cash collected from customers resulting from increased sales. This was partially offset by increased expenditures due to an increase in headcount and growth in our business. We expect to continue to generate positive net cash flows from operating activities for the fiscal year ending January 31, 2023.

Investing Activities

Net cash used in investing activities for the nine months ended October 31, 2022 was $533.1 million, primarily as a result of cash paid for business combinations, net of cash and cash equivalents acquired, net purchases of investments, and, to a lesser extent, purchases of property and equipment to support our office facilities, and capitalized internal-use software development costs.

Net cash used in investing activities for the nine months ended October 31, 2021 was $57.0 million, primarily as a result of net purchases of investments and, to a lesser extent, purchases of property and equipment to support our office facilities, purchases of intangible assets, and capitalized internal-use software development costs.

Financing Activities

Net cash used in financing activities for the nine months ended October 31, 2022 was $52.5 million, primarily as a result of taxes paid related to net share settlement of equity awards, partially offset by proceeds from the issuance of equity securities under our equity incentive plans and capital contributions from noncontrolling interest holders.

Net cash provided by financing activities for the nine months ended October 31, 2021 was $142.7 million, primarily as a result of proceeds from the issuance of equity securities under our equity incentive plans.

Critical Accounting Estimates

Our management's discussion and analysis of financial condition and results of operations is based on our condensed consolidated financial statements, which are prepared in accordance with GAAP. The preparation of these condensed consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses, and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. By their nature, these estimates and assumptions are subject to an inherent degree of uncertainty and actual results could differ significantly from the estimates made by management. To the extent that there are differences between our estimates and actual results, our future financial statement presentation, financial condition, results of operations, and cash flows will be affected.

Except for the following, there have been no material changes to our critical accounting estimates as compared to those described in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" set forth in our Annual Report on Form 10-K for the fiscal year ended January 31, 2022, which was filed with the SEC on March 30, 2022.

Business Combinations

See Note 2, "Basis of Presentation and Summary of Significant Accounting Policies," to our consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended January 31, 2022, which was filed with the SEC on March 30, 2022, for information regarding our significant accounting policies over business combinations.

When we acquire a business, we allocate the purchase consideration to the tangible assets acquired, liabilities assumed, and intangible assets acquired based on their estimated respective fair values. The excess of the fair value of purchase consideration over the fair values of these identifiable assets and liabilities is recorded as goodwill. Critical estimates used in valuing certain intangible assets include, but are not limited to, time and resources required to recreate the assets acquired. These estimates are based on information obtained from the management of the acquired companies, our assessment of the information, and historical experience. Our estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates. The amounts and estimated useful lives assigned to intangible assets acquired in business combinations impact the amount and timing of future amortization expense.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

As of October 31, 2022, we had $4.9 billion of cash, cash equivalents, and short-term and long-term investments in a variety of securities, including corporate notes and bonds, commercial paper, U.S. government and agency securities, money market funds, and certificates of deposit. In addition, we had $16.8 million of restricted cash primarily due to outstanding letters of credit established in connection with lease agreements for our facilities. Our cash, cash equivalents, and short-term and long-term investments are held for working capital purposes and for general corporate purposes, including acquisitions and strategic investments we may make from time to time. We do not enter into investments for trading or speculative purposes. A hypothetical 100 basis point increase or decrease in interest rates would have resulted in a decrease or an increase of $22.6 million in the market value of our cash equivalents, and short-term and long-term investments as of October 31, 2022.

As of January 31, 2022, we had $5.1 billion of cash, cash equivalents, and short-term and long-term investments, and a hypothetical 100 basis point increase or decrease in interest rates would have resulted in a decrease of $27.3 million or an increase of $23.5 million, respectively, in the market value.

Foreign Currency Exchange Risk

Our reporting currency is the U.S. dollar. The functional currency of our foreign subsidiaries is the U.S. dollar or the Euro. The majority of our sales are currently denominated in U.S. dollars, although we also have sales in Euros. Therefore, our revenue is not currently subject to significant foreign currency risk, but that will likely change in the future as we enable sales in additional currencies. Our operating expenses are denominated in the currencies of the countries in which our operations are located, which is primarily in the United States and to a lesser extent in Europe, Canada, and the Asia-Pacific region. Monetary assets and liabilities denominated in currencies other than the functional currency are remeasured to the functional currency at period-end exchange rates. Our condensed consolidated results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates and may be adversely affected in the future due to changes in foreign exchange rates.

In order to manage our exposure to certain foreign currency exchange risks, during the nine months ended October 31, 2022, we entered into deliverable foreign currency forward contracts with maturities of one month or less to hedge a portion of certain intercompany balances denominated in currencies other than the U.S. dollar. These forward contracts reduced, but did not entirely eliminate, the impact of adverse currency exchange rate movements. We did not enter into these forward contracts for trading or speculative purposes. See Note 2, “Basis of Presentation and Summary of Significant Accounting Policies,” to our condensed consolidated financial statements included elsewhere in Quarterly Report on Form 10-Q for more information.

We do not believe a 10% increase or decrease in the relative value of the U.S. dollar would have had a material impact on our operating results for the three and nine months ended October 31, 2022 and 2021, respectively. However, a strengthening of the U.S. dollar makes our platform more expensive for international customers, which may slow down consumption.

Other Market Risk

Our strategic investments consist primarily of (i) non-marketable equity securities recorded at cost minus impairment, if any, and adjusted for observable transactions for the same or similar investments of the same issuer (referred to as the Measurement Alternative), and (ii) marketable equity securities. These strategic investments are subject to a wide variety of market-related risks, including volatility in the public and private markets, that could substantially reduce or increase the carrying value of our investments and, as a result, our financial results may fluctuate. Strategic investments are subject to periodic impairment analysis, which involves an assessment of both qualitative and quantitative factors, including the investee's financial metrics, market acceptance of the investee's product or technology, and the rate at which the investee is using its cash.

The following table presents the Company's strategic investments by type (in thousands):

	October 31, 2022	January 31, 2022
Equity securities:		
Non-marketable equity securities under Measurement Alternative	$ 170,446	$ 170,860
Non-marketable equity securities under equity method	5,000	—
Marketable equity securities	22,462	34,646
Debt securities:		
Non-marketable debt securities	1,500	2,250
Total strategic investments—included in other assets	$ 199,408	$ 207,756

See Note 5, "Fair Value Measurements," to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for further details.

We plan to continue these types of strategic investments as part of our corporate development program. We anticipate additional volatility to our condensed consolidated statements of operations as a result of changes in market prices, changes resulting from observable transactions for the same or similar investments of the same issuer, and impairments to our strategic investments.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15(d)-15(e) under the Exchange Act) as of October 31, 2022. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of October 31, 2022, our disclosure controls and procedures were effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the Commission's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rules 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the quarter ended October 31, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, believes that our disclosure controls and procedures and internal control over financial reporting are designed to provide reasonable assurance of achieving their objectives. However, our management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the company have been detected. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we have been and will continue to be subject to legal proceedings and claims. We are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, results of operations, financial condition, or cash flows. We have received, and may in the future continue to receive, claims from third parties asserting, among other things, infringement of their intellectual property rights. Future litigation may be necessary to defend ourselves, our partners, and our customers by determining the scope, enforceability, and validity of third-party proprietary rights, or to establish our proprietary rights. The results of any current or future litigation cannot be predicted with certainty, and regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources, and other factors.

ITEM 1A. RISK FACTORS

Our operations and financial results are subject to various risks and uncertainties, including those described below. You should consider and read carefully all of the risks and uncertainties described below, together with all of the other information contained in this Quarterly Report on Form 10-Q, including the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our unaudited condensed consolidated financial statements and related notes, before making an investment decision. The risks described below are not the only ones we face. The occurrence of any of the following risks or additional risks and uncertainties not presently known to us or that we currently believe to be immaterial could materially and adversely affect our business, financial condition, or results of operations. In such case, the trading price of our common stock could decline. You should not interpret our disclosure of any of the following risks to imply that such risks have not already materialized.

Risks Related to Our Business and Operations

We have experienced rapid revenue growth, which may not be indicative of our future performance, and we have a limited operating history, both of which make it difficult to forecast our future results of operations.

Our revenue was $557.0 million and $334.4 million for the three months ended October 31, 2022 and 2021, respectively, and $1,476.6 million and $835.6 million for the nine months ended October 31, 2022 and 2021, respectively. You should not rely on the revenue growth of any prior quarterly or annual period as an indication of our future performance. As a result of our historical rapid growth and limited operating history, our ability to accurately forecast our future results of operations, including revenue, remaining performance obligations (RPO), and the percentage of RPO we expect to recognize as revenue in future periods, is limited and subject to a number of uncertainties, including our ability to plan for and model future growth and platform consumption. Our historical revenue growth should not be considered indicative of our future performance.

Further, in future periods, our revenue growth could slow or our revenue could decline for a number of reasons, including slowing demand for our platform, increased competition, changes to technology (including changes in software or underlying cloud infrastructure), general macroeconomic and capital market conditions, volatility, or disruptions (including the effect of those events on our customers or partners), a decrease in the growth of our overall market, or our failure, for any reason, to continue to take advantage of growth opportunities. As a result of our rapid revenue growth in prior periods, we expect our revenue growth rate to decline in future periods, and a decline in our revenue growth rate could adversely affect investors' perceptions of our business, and negatively impact the trading price of our common stock. We have also encountered, and will continue to encounter, risks and uncertainties frequently experienced by growing companies in rapidly changing industries, such as the risks and uncertainties described below. If our assumptions regarding these risks and uncertainties and our future revenue growth are incorrect or change, or if we do not address these risks successfully, our operating and financial results could differ materially from our expectations, and our business could suffer.

We may not have visibility into our future financial position and results of operations.

Customers generally consume our platform by using compute, storage, and data transfer resources. Unlike a subscription-based business model, in which revenue is recognized ratably over the term of the subscription, we generally recognize revenue on consumption. Because our customers have flexibility in the timing of their consumption, we do not have the visibility into the timing of revenue recognition that a typical subscription-based software company has. There is a risk that customers will consume our platform more slowly than we expect, including in response to macroeconomic conditions, and our actual results may differ from our forecasts. Further, investors and securities analysts may not understand how our consumption-based business model differs from a subscription-based business model, and our business model may be compared to subscription-based business models. If our results of operations fall below the expectations of investors and securities analysts who follow our stock, the price of our common stock could decline substantially, and we could face costly lawsuits, including securities class actions.

We have a history of operating losses and may not achieve or sustain profitability in the future.

We have experienced net losses in each period since inception. We generated net losses of $201.4 million and $154.9 million for the three months ended October 31, 2022 and 2021, respectively, and $590.0 million and $547.8 million for the nine months ended October 31, 2022 and 2021, respectively. As of October 31, 2022 and January 31, 2022, we had an accumulated deficit of $2.5 billion and $1.9 billion, respectively. We expect our costs and expenses to increase in future periods. In particular, we intend to continue to invest significant resources to further develop our platform, expand our sales, marketing, and professional services teams, and retain our employees. In addition, our platform currently operates on public cloud infrastructure provided by Amazon Web Services (AWS), Microsoft Azure (Azure), and Google Cloud Platform (GCP), and our costs and gross margins are significantly influenced by the prices we are able to negotiate with these public cloud providers, which in certain cases are also our competitors. If we fail to meet any minimum commitments under these third-party cloud infrastructure agreements, we may be required to pay the difference, and our results of operations could be negatively impacted. We will also incur increased general and administrative expenses associated with our growth, including costs related to internal systems and operating as a public company. Our efforts to grow our business may be costlier than we expect, or our revenue growth rate may be slower than we expect, and we may not be able to increase our revenue enough to offset the increase in operating expenses resulting from these investments. If we are unable to achieve and sustain profitability, or if we are unable to achieve the revenue growth that we expect from these investments, the value of our business and common stock may significantly decrease.

The markets in which we operate are highly competitive, and if we do not compete effectively, our business, financial condition, and results of operations could be harmed.

The markets in which we operate are rapidly evolving and highly competitive. As these markets continue to mature and new technologies and competitors enter such markets, we expect competition to intensify. Our current competitors include:

- large, well-established, public cloud providers that generally compete in all of our markets, including AWS, Azure, and GCP;
- less-established public and private cloud companies with products that compete in some of our markets;
- other established vendors of legacy database solutions or big data offerings; and
- new or emerging entrants seeking to develop competing technologies.

We compete based on various factors, including price, performance, breadth of use cases, multi-cloud availability, brand recognition and reputation, customer support, and differentiated capabilities, including ease of implementation and data migration, ease of administration and use, scalability and reliability, data governance, security, and compatibility with existing standards, programming languages, and third-party products. Many of our competitors have substantially greater brand recognition, customer relationships, and financial, technical, and other resources than we do, and may be able to respond more effectively than us to new or changing opportunities, technologies, standards, customer requirements, and buying practices.

We currently only offer our platform on the public clouds provided by AWS, Azure, and GCP, which are also some of our primary competitors. Currently, a substantial majority of our business is run on the AWS public cloud. There is risk that one or more of these public cloud providers could use its respective control of its public clouds to embed innovations or privileged interoperating capabilities in competing products, bundle competing products, provide us unfavorable pricing, leverage its public cloud customer relationships to exclude us from opportunities, and treat us and our customers differently with respect to terms and conditions or regulatory requirements than it would treat its similarly situated customers. Further, they have the resources to acquire, invest in, or partner with existing and emerging providers of competing technology and thereby accelerate adoption of those competing technologies. All of the foregoing could make it difficult or impossible for us to provide products and services that compete favorably with those of the public cloud providers.

For all of these reasons, competition may negatively impact our ability to maintain and grow consumption of our platform or put downward pressure on our prices and gross margins, any of which could materially harm our reputation, business, results of operations, and financial condition.

If we fail to innovate in response to changing customer needs, new technologies, or other market requirements, our business, financial condition, and results of operations could be harmed.

We compete in markets that evolve rapidly. We believe that the pace of innovation will continue to accelerate as customers increasingly base their purchases of cloud data platforms on a broad range of factors, including performance and scale, markets addressed, types of data processed, ease of data ingestion, user experience, and data governance and regulatory compliance. We introduced data warehousing on our platform in 2014 as our core use case, and our customers subsequently began using our platform for additional workloads, including data lake, data engineering, data science and machine learning, applications, and collaboration. Our future success depends on our ability to continue to innovate and increase customer adoption of our platform and the Data Cloud, including Snowflake Marketplace. Further, the value of our platform to customers is increased to the extent they are able to use it to process and access all types of data. We need to continue to invest in technologies, services, and partnerships that increase the types of data available and processed on our platform and the ease with which customers can ingest data into our platform. We must also continue to enhance our data sharing and marketplace capabilities so customers can share their data with internal business units, customers, and other third parties, acquire additional third-party data to combine with their own data in order to gain additional business insights, and develop and monetize applications on our platform. As we develop and introduce new services and technologies, including those that may incorporate artificial intelligence and machine learning, we may be subject to new or heightened legal, ethical, and other challenges. In addition, our platform requires third-party public cloud infrastructure to operate. Currently, we use public cloud offerings provided by AWS, Azure, and GCP. We will need to continue to innovate to optimize our offerings for these and other public clouds that our customers require, particularly as we expand internationally. Further, the markets in which we compete are subject to evolving industry standards and regulations, resulting in increasing data governance and compliance requirements for us and our customers and partners. To the extent we expand further into the public sector and highly regulated countries and industries, our platform and operations may need to address additional requirements specific to those markets.

If we are unable to enhance our platform or operations to keep pace with these rapidly evolving customer requirements, or if new technologies emerge that are able to deliver competitive products at lower prices, more efficiently, more conveniently, or more securely than our platform, our business, financial condition, and results of operations could be adversely affected.

If we or our third-party service providers experience an actual or perceived security breach or unauthorized parties otherwise obtain access to our customers' data, our data, or our platform, our platform may be perceived as not being secure, our reputation may be harmed, demand for our platform may be reduced, and we may incur significant liabilities.

Our platform processes, stores, and transmits our customers' and partners' proprietary, confidential, and sensitive data, such as personal information, protected health information, and financial data. Our platform is built to be available on the infrastructure of third-party public cloud providers, such as AWS, Azure, and GCP. We also use third-party service providers and sub-processors to help us deliver services to our customers and their end-users, as well as for our internal business operations. These vendors may process, store, or transmit data of our employees, partners, customers, and customers' end-users. Even though we may not control the security measures of these vendors, we may be responsible for any breach of such measures.

Threats to information systems and data come from a variety of sources, including traditional computer “hackers,” internal and external personnel (such as through theft or misuse), sophisticated nation-states, and nation-state-supported actors. We are subject to a variety of evolving cyber threats, including unauthorized intrusions, denial-of-service attacks, ransomware attacks, business email compromises, computer malware, social engineering attacks (including phishing), internal and external personnel misconduct or error, supply-chain attacks, software vulnerabilities, and software or hardware disruptions or failures, all of which are prevalent in our industry and our customers’ and partners’ industries. Furthermore, future business expansions or acquisitions could expose us to additional cybersecurity risks and vulnerabilities. The techniques used to sabotage or to obtain unauthorized access to our platform, systems, networks, or physical facilities in which data is stored or processed, or through which data is transmitted change frequently, and are becoming increasingly difficult to detect. In addition, ransomware attacks are becoming increasingly frequent and severe. In general, cybersecurity breaches or efforts to mitigate security vulnerabilities could lead to significant interruptions in our operations, loss of data and income, reputational harm, diversion of funds, unexpected service interruptions, increased insurance costs, and other harm to our business, reputation, and competitive position.

While we continue to implement security measures designed to protect against and remediate security incidents, there can be no assurances that these measures will be effective. We have previously been, and may in the future become, the target of threat actors seeking unauthorized access to our or our customers’ or partners’ systems or data or to disrupt our operations or ability to provide our services. Threat actors may also exploit vulnerabilities in, or obtain unauthorized access to, platforms, systems, networks, or physical facilities utilized by our third-party service providers. Any security breach of our platform, our operational systems, our software (including open source software), our physical facilities, or the systems of our third-party service providers or sub-processors, or the perception that one has occurred, could result in litigation, indemnity obligations, regulatory enforcement actions, investigations, fines, penalties, mitigation and remediation costs, disputes, reputational harm, diversion of management’s attention, and other liabilities and damage to our business.

We have contractual and other legal obligations to notify relevant stakeholders of security breaches. Such mandatory disclosures are costly and could lead to negative publicity, loss of customer or partner confidence in the effectiveness of our security measures, diversion of management’s attention, governmental investigations, and the expenditure of significant capital and other resources to respond to or alleviate problems caused by the actual or perceived security breach.

A security incident may also cause us to breach, or lead to claims that we have breached, customer contracts. As a result, we could be subject to legal action (including the imposition of fines or penalties) and our customers could end their relationships with us. Furthermore, there can be no assurance that any limitations of liability in our contracts would be enforceable or adequate or would otherwise protect us from liabilities or damages.

Litigation resulting from security breaches may adversely affect our business. Unauthorized access to our platform, systems, networks, or physical facilities could result in litigation with our customers, our customers’ end-users, or other relevant stakeholders. These proceedings could force us to spend money in defense or settlement, divert management’s time and attention, increase our costs of doing business, or adversely affect our reputation. We could be required to fundamentally change our business activities and practices or modify our platform capabilities in response to such litigation, which could have an adverse effect on our business.

Our insurance coverage may not be adequate for data security, indemnification obligations, or other liabilities. The successful assertion of one or more large claims against us that exceeds our available insurance coverage or results in changes to our insurance policies (including premium increases or the imposition of large deductible or co-insurance requirements) could have an adverse effect on our business. In addition, we cannot be sure that our existing insurance coverage and coverage for errors and omissions will continue to be available on acceptable terms or that our insurers will not deny coverage as to any future claim. Risks related to our systems and security breaches are likely to increase as we continue to expand our platform and geographic footprint, grow our customer and partner base, and process, store, and transmit increasingly large amounts of data.

In addition, some of our employees are still working remotely following the COVID-19 pandemic, which increases our cyber security risk, creates data accessibility concerns, and makes us more susceptible to security breaches or business disruptions. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations, or prospects.

We could suffer disruptions, outages, defects, and other performance and quality problems with our platform or with the public cloud and internet infrastructure on which it relies.

Our business depends on our platform to be available without disruption. We have experienced, and may in the future experience, disruptions, outages, defects, and other performance and quality problems with our platform. We have also experienced, and may in the future experience, disruptions, outages, defects, and other performance and quality problems with the public cloud and internet infrastructure on which our platform relies. These problems can be caused by a variety of factors, including introductions of new functionality, vulnerabilities, and defects in proprietary and open source software, human error or misconduct, natural disasters (such as tornadoes, earthquakes, or fires), capacity constraints, design limitations, denial of service attacks, or other security-related incidents.

Further, if our contractual and other business relationships with our public cloud providers are terminated, suspended, or suffer a material change to which we are unable to adapt, such as the elimination of services or features on which we depend, we could be unable to provide our platform and could experience significant delays and incur additional expense in transitioning customers to a different public cloud provider.

Any disruptions, outages, defects, and other performance and quality problems with our platform or with the public cloud and internet infrastructure on which it relies, or any material change in our contractual and other business relationships with our public cloud providers, could result in reduced use of our platform, increased expenses, including service credit obligations, and harm to our brand and reputation, any of which could have a material adverse effect on our business, financial condition, and results of operations.

We expect fluctuations in our financial results, making it difficult to project future results, and if we fail to meet the expectations of securities analysts or investors with respect to our results of operations, our stock price could decline.

Our results of operations have fluctuated in the past and are expected to fluctuate in the future due to a variety of factors, many of which are outside of our control. As a result, our past results may not be indicative of our future performance. In addition to the other risks described herein, factors that may affect our results of operations include the following:

- fluctuations in demand for our platform or changes in our pricing model;
- fluctuations in usage of our platform, including as a result of customer optimization efforts that result in reduced consumption to execute workloads;
- our ability to attract new customers;
- our ability to retain existing customers;
- customer expansion rates;
- timing, amount, and cost of our investments to expand the capacity of our public cloud providers;
- seasonality;
- investments in new features and functionality, including investments in making our platform available to store and process highly regulated data;
- fluctuations in consumption resulting from the introduction of new features, technologies, or capabilities to our software, systems, or to underlying cloud infrastructure, including features or capabilities that may increase or decrease the consumption required to execute existing or future workloads, like better storage compression and cloud infrastructure processor improvements;
- the timing of purchases;
- the speed with which customers are able to migrate data onto our platform;
- fluctuations or delays in purchasing decisions in anticipation of new products or enhancements by us or our competitors;
- changes in customers’ budgets and in the timing of their budget cycles and purchasing decisions;

- our ability to control costs, including our operating expenses;
- the amount and timing of operating expenses, particularly research and development and sales and marketing expenses, including commissions;
- the amount and timing of non-cash expenses, including stock-based compensation, goodwill impairments, and other non-cash charges;
- the amount and timing of costs associated with recruiting, training, and integrating new employees and retaining and motivating existing employees;
- the effects and timing of acquisitions and their integration;
- general political, social, and economic conditions, uncertainty, or volatility, both domestically and internationally, as well as political, social, and economic conditions specifically affecting industries in which our customers and partners participate;
- health epidemics or pandemics, such as the COVID-19 pandemic;
- the impact, or timing of our adoption, of new accounting pronouncements;
- changes in regulatory or legal environments that may cause us to incur, among other things, expenses associated with compliance;
- the overall tax rate for our business, which may be affected by the mix of income we earn in the United States and in jurisdictions with different tax rates, the effects of stock-based compensation, and the effects of changes in our business;
- the impact of changes in tax laws or judicial or regulatory interpretations of tax laws, which are recorded in the period in which such laws are enacted or interpretations are issued and may significantly affect the effective tax rate of that period;
- rising inflation and our ability to control costs, including our operating expenses;
- fluctuations in currency exchange rates and changes in the proportion of our revenue and expenses denominated or measured in foreign currencies;
- fluctuations or impairments in the market values of our portfolio or strategic investments, or in interest rates;
- changes in the competitive dynamics of our market, including consolidation among competitors or customers; and
- significant security breaches of, technical difficulties with, or interruptions to, the delivery and use of our platform.

Any of these and other factors, or the cumulative effect of some of these factors, may cause our results of operations to vary significantly or be adversely affected. If our results of operations fall below the expectations of investors and securities analysts who follow our stock, the price of our common stock could decline substantially, and we could face costly lawsuits, including securities class actions.

Failure to effectively develop and expand our sales and marketing capabilities could harm our ability to increase our customer base and achieve broader market acceptance of our products and platform.

We must expand our sales and marketing organization to increase our sales to new and existing customers. We plan to continue expanding our direct sales force, both domestically and internationally, particularly our direct enterprise sales organization focused on sales to the world's largest organizations. It may require significant time and resources to effectively onboard new sales and marketing personnel, and continued or increased remote working conditions could result in less effective, more operationally complicated, or lengthier onboarding processes. We also plan to continue to dedicate significant resources to sales and marketing programs that are industry-specific and focused on large organizations. Once a new customer begins using our platform, our sales team will need to continue to focus on expanding consumption with that customer. All of these efforts will require us to invest significant financial and other resources, including in industries and sales channels in which we have limited experience to date. Our business and results of operations will be harmed if our sales and marketing efforts generate increases in revenue that are smaller than anticipated. We may not achieve anticipated revenue growth from expanding our sales force if we are unable to hire, develop, integrate, and retain talented and effective sales personnel, if our new and existing sales personnel are unable to achieve desired productivity levels in a reasonable period of time, or if our sales and marketing programs are not effective.

Sales efforts to large customers involve risks that may not be present or that are present to a lesser extent with respect to sales to smaller organizations.

Sales to large customers involve risks that may not be present or that are present to a lesser extent with sales to smaller organizations, such as longer sales cycles, more complex customer requirements, including our ability to partner with third-parties that advise such customers or help them integrate their IT solutions, substantial upfront sales costs, and less predictability in completing some of our sales. For example, large customers may require considerable time to evaluate and test our platform prior to making a purchase decision and placing an order. In addition, large customers may be switching from legacy on-premises solutions when purchasing our products, and may rely on third-parties with whom we do not have relationships when making purchasing decisions. A number of factors also influence the length and variability of our sales cycle, including the need to educate potential customers about the uses and benefits of our platform, the discretionary nature of purchasing and budget cycles, and the competitive nature of evaluation and purchasing approval processes. As a result, the length of our sales cycle, from identification of the opportunity to deal closure, may vary significantly from customer to customer, with sales to large enterprises typically taking longer to complete. Moreover, large customers often begin to deploy our products on a limited basis but nevertheless demand implementation services and negotiate pricing discounts, which increase our upfront investment in the sales effort with no guarantee that sales to these customers will justify our substantial upfront investment. If we fail to effectively manage these risks associated with sales cycles and sales to large customers, our business, financial condition, and results of operations may be affected.

Unfavorable conditions in our industry or the global economy, or reductions in cloud spending, could limit our ability to grow our business and negatively affect our results of operations.

Our results of operations may vary based on the impact of changes in our industry or the global economy on us or our customers and potential customers. Negative conditions or volatility in the general economy both in the United States and abroad, including conditions resulting from changes in gross domestic product growth, financial and credit market fluctuations, international trade relations, inflation, and interest rate fluctuations, or the existence of pandemics (such as the COVID-19 pandemic), political turmoil, natural catastrophes, warfare, or terrorist attacks on the United States, Europe, the Asia-Pacific region, Japan, or elsewhere, could cause a decrease in business investments, including spending on cloud technologies, and negatively affect the growth of our business. For example, the ongoing military conflict between Russia and Ukraine has created volatility in the global capital markets and could have further global economic consequences, including disruptions of the global supply chain. In addition, unfavorable conditions in the general economy may negatively impact our customers' budgets or cash flow, which could impact the contract terms, including payment terms, our customers demand from us. Competitors, many of whom are larger and have greater financial resources than we do, may respond to challenging market conditions by lowering prices in an attempt to attract our customers. We cannot predict the timing, strength, or duration of any economic slowdown, instability, or recovery, generally or within any particular industry.

Our growth depends on the development, expansion, and success of our partner relationships.

As part of our vision for the Data Cloud, we will need to grow and maintain a network of data providers, data consumers, and data application developers. The relationships we have with these partners, and that our partners have with our customers, provide our customers with enhanced value from our platform and the Data Cloud, including Snowflake Marketplace. Our future growth will be increasingly dependent on the success of these relationships, and if we are unsuccessful in growing and maintaining these relationships or the types and quality of data supported by or available for consumption on our platform, our business, financial condition, and results of operations could be adversely affected.

Additionally, a small but increasing portion of our revenue is generated as a result of our relationships with global system integrators, managed service providers, and resellers. Increasingly, we and our customers rely on these partners to provide professional services, including customer implementations and migrations from legacy solutions, and there may not be enough qualified partners available, or we may not be able to develop or maintain relationships with enough partners, to meet customer demand. While we provide our partners with training and other enablement programs, these programs may not be effective or utilized consistently, and our return on these investments may be lower than expected. In addition, new partners may require extensive training or significant time and resources to achieve productivity. If we fail to effectively manage and grow our network of these partners, or properly monitor the quality and efficacy of their interactions with our customers, our ability to attract and retain new customers and expand customer consumption of our platform may be impacted, and our operating results and growth rate may be harmed.

If we are unable to successfully manage the growth of our professional services business and improve our profit margin from these services, our operating results will be harmed.

Our professional services business, which performs implementation services for our customers, has grown as our product revenue has grown. We believe our future success depends in part on investment in professional services to facilitate customer migration from legacy solutions and adoption of our platform, especially with large enterprises. As a result, our sales efforts have and will continue to be focused on helping our customers more quickly realize the value of our platform and the Data Cloud rather than on the profitability of our professional services business. In the future, we intend to price our professional services based on the anticipated cost of those services and, as a result, expect to improve the gross profit percentage of our professional services business. If we are unable to manage the growth of our professional services business and improve our profit margin from these services, our operating results, including our profit margins, will be harmed.

If we lose key members of our management team or are unable to attract and retain the executives and employees we need to support our operations and growth, our business and future growth prospects may be harmed.

Our success depends in part on the continued services of Frank Slootman, our Chairman and Chief Executive Officer, Michael P. Scarpelli, our Chief Financial Officer, and our other executive officers, as well as our other key employees in the areas of research and development and sales and marketing.

From time to time, there may be changes in our executive management team or other key employees resulting from the hiring or departure of these personnel. Our executive officers and other key employees are employed on an at-will basis, which means that these personnel could terminate their employment with us at any time. The loss of one or more of our executive officers, or the failure by our executive team to effectively work with our employees and lead our company could harm our business.

In addition, to execute our growth plan, we must attract and retain highly qualified personnel. Competition for these personnel is intense, especially for engineers experienced in designing and developing cloud-based data platform products, experienced sales professionals, and expert customer support personnel. We also are dependent on the continued service of our existing software engineers because of the sophistication of our platform.

In order to continue to hire and retain highly qualified personnel, we will need to continue to hire in new locations around the world and manage return to work and remote working policies, which may add to the complexity and costs of our business operations. From time to time, we have experienced, and we expect to continue to experience, difficulty in hiring and retaining employees with appropriate qualifications. Many of the companies with which we compete for experienced personnel have greater resources than we have, and the acceptance by these companies of remote or hybrid work environments may increase the competition for talent. In addition, prospective and existing employees often consider the value of the equity awards they receive in connection with their employment. If the actual or perceived value of our equity awards declines or continues to experience significant volatility, or if our existing employees receive significant proceeds from liquidating their previously vested equity awards, it may adversely affect our ability to recruit and retain key employees. Furthermore, current and prospective employees may believe that their equity award offers have limited upside, and our competitors may be able to offer more appealing compensation packages. In order to retain our existing employees and manage potential attrition, including as a result of recent stock price decreases and continued market volatility that impact the actual or perceived value of our equity awards, we may issue additional equity awards or provide our employees with increased cash compensation, which could negatively impact our results of operations and be dilutive to stockholders. Finally, if we hire employees from competitors or other companies, their former employers may attempt to assert that we or these employees have breached our or their legal obligations, resulting in a diversion of our time and resources.

We also believe our culture has been a key contributor to our success to date and that the critical nature of the platform that we provide promotes a sense of greater purpose and fulfillment in our employees. As our workforce becomes larger and more distributed around the world, we may not be able to maintain important aspects of our culture. Any failure to preserve our culture could negatively affect our ability to retain and recruit personnel. If we fail to attract new personnel or fail to retain and motivate our current personnel, our business and future growth prospects would be harmed.

If the availability of our platform does not meet our service-level commitments to our customers, our current and future revenue may be negatively impacted.

We typically commit to our customers that our platform will maintain a minimum service-level of availability. If we are unable to meet these commitments, we may be obligated to provide customers with additional capacity, which could significantly affect our revenue. We rely on public cloud providers, such as AWS, Azure, and GCP, and any availability interruption in the public cloud could result in us not meeting our service-level commitments to our customers. In some cases, we may not have a contractual right with our public cloud providers that compensates us for any losses due to availability interruptions in the public cloud. Further, any failure to meet our service-level commitments could damage our reputation and adoption of our platform, and we could face loss of revenue from reduced future consumption of our platform. Any service-level failures could adversely affect our business, financial condition, and results of operations.

We agree to indemnify customers and other third parties, which exposes us to substantial potential liability.

Our contracts with customers, investors, and other third parties may include indemnification provisions under which we agree to defend and indemnify them against claims and losses arising from alleged infringement, misappropriation, or other violation of intellectual property rights, data protection violations, breaches of representations and warranties, damage to property or persons, or other liabilities arising from our products or such contracts. Although we attempt to limit our indemnity obligations and negotiate indemnification rights with vendors that would require them to contribute to our indemnity obligations, we may not be successful in doing so, and an event triggering our indemnity obligations could give rise to multiple claims involving multiple customers or other third parties. There is no assurance that our applicable insurance coverage, if any, would cover, in whole or in part, any such indemnity obligations. We may be liable for up to the full amount of the indemnified claims, which could result in substantial liability or material disruption to our business or could negatively impact our relationships with customers or other third parties, reduce demand for our products, and adversely affect our business, financial condition, and results of operations.

Acquisitions, strategic investments, partnerships, or alliances could be difficult to identify, pose integration challenges, divert the attention of management, disrupt our business, dilute stockholder value, and adversely affect our business, financial condition, and results of operations.

We have in the past and may in the future seek to acquire or invest in businesses, joint ventures, and platform technologies that we believe could complement or expand our platform, enhance our technology, or otherwise offer growth opportunities. Further, the proceeds we received from our initial public offering (IPO) in September 2020 increased the likelihood that we will devote resources to exploring larger and more complex acquisitions and investments than we have previously attempted. For example, in March 2022 we acquired Streamlit, Inc., a privately-held company which provides an open-source framework built to simplify and accelerate the creation of data applications, representing a larger and more complex acquisition than our prior endeavors. Any such acquisitions or investments may divert the attention of management and cause us to incur various expenses in identifying, investigating, and pursuing suitable opportunities, whether or not the transactions are completed, and may result in unforeseen operating difficulties and expenditures. In particular, we may encounter difficulties or unexpected costs assimilating or integrating the businesses, technologies, products, personnel, or operations of any acquired companies, particularly if the key personnel of an acquired company choose not to work for us, their software is not easily adapted to work with our platform, or we have difficulty retaining the customers of any acquired business due to changes in ownership, management, or otherwise. Any such transactions that we are able to complete may not result in the synergies or other benefits we expect to achieve, which could result in substantial impairment charges. These transactions could also result in dilutive issuances of equity securities or the incurrence of debt, which could adversely affect our results of operations.

As part of our corporate development program, we invest in companies to support our key business initiatives. These companies range from early, growth stage companies still defining their strategic direction to mature companies with established revenue streams. Our strategic investments are subject to risk of inability to achieve the desired strategic synergies and partial or total loss of investment capital. Furthermore, our competitors may invest in these companies alongside us, and may obtain information about our corporate development program or other business plans. The financial success of our investment is typically dependent on an exit in favorable market conditions. To the extent any of the companies in which we invest are not successful, which can include failure to achieve strategic business objectives as well as failure to achieve a favorable exit, we could recognize an impairment or loss on all or part of our investment. In addition, in certain cases we may be required to consolidate one or more of our strategic investee's financial results into ours. Fluctuations in any such investee's financial results could negatively affect our consolidated financial condition, results of operations, cash flows, or the price of our common stock. If one or more of such investees fails to timely provide us with information necessary for the preparation of our consolidated financial statements and disclosures, we may be unable to report our financial results in a timely manner, which would negatively affect our business and the price of our common stock.

Seasonality may cause fluctuations in our remaining performance obligations.

Historically, we have received a higher volume of orders from new and existing customers in the fourth fiscal quarter of each year. As a result, we have historically seen higher non-GAAP free cash flow in the first and fourth fiscal quarters of each year, and our sequential growth in remaining performance obligations has historically been highest in the fourth fiscal quarter of each year. We expect this seasonality to become more pronounced as we continue to target large enterprise customers based on their procurement, budgeting, and deployment cycles. For more information, including a definition of non-GAAP free cash flow and a reconciliation of free cash flow to the most directly comparable financial measure calculated in accordance with GAAP, see the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations."

We do business with federal, state, local, and foreign governments and agencies, and heavily regulated organizations; as a result, we face risks related to the procurement process, budget, and product decisions driven by statutory and regulatory determinations, termination of contracts, and compliance with government contracting requirements.

We provide our platform to the U.S. government, state and local governments, foreign governments, and heavily regulated organizations directly and through our partners. We have made, and may continue to make, significant investments to support future sales opportunities in the government sector, including obtaining government certifications. However, government certification requirements may change, we may be unable to achieve or sustain one or more required government certifications, or we may be required to make unexpected changes to our business or products in order to sustain such certifications. As a result, our ability to sell into the government sector could be restricted until we satisfy the requirements of such certifications.

A substantial majority of our sales to date to government entities have been made indirectly through our distribution and reseller partners. Doing business with government entities, whether directly or indirectly, presents a variety of risks. The procurement process for governments and their agencies is highly competitive and time-consuming, and government decisions about their procurement needs may, in certain circumstances, be subject to political influence. To pursue these opportunities, we incur significant up-front time and expense, which subjects us to additional compliance risks and costs, without any assurance that we (or a third-party distributor or reseller) will win a contract. Beyond this, demand for our platform may be adversely impacted by public sector budgetary cycles, and funding availability that in any given fiscal cycle may be reduced or delayed, including in connection with an extended federal government shutdown. Further, if we or our partners are successful in receiving a competitive contract award, that award could be challenged by one or more competitive bidders in a legal action known as a “bid protest.” Bid protests may result in an increase in expenses related to obtaining or preserving contract awards or an unfavorable modification or loss of an award. In the event a bid protest is unsuccessful, the resulting delay in the startup and funding of the work under these contracts may cause our actual results to differ materially and adversely from those anticipated. As a result of these lengthy and uncertain sales cycles, it is difficult for us to predict the timing of entering into customer agreements with government entities or with our distribution and reseller partners in the government market.

In addition, public sector customers may have contractual, statutory, or regulatory rights to terminate current contracts with us or our third-party distributors or resellers for convenience or default. If a contract is terminated for convenience, we may only be able to collect fees for platform consumption prior to termination and settlement expenses. If a contract is terminated due to a default, we may be liable for excess costs incurred by the customer for procuring alternative products or services or be precluded from doing further business with government entities. Further, entities providing products or services to governments, whether directly or indirectly, are required to comply with a variety of complex laws, regulations, and contractual provisions relating to the formation, administration, and performance of government contracts. Such laws, regulations, and contractual provisions impose compliance obligations that are more burdensome than those typically encountered in commercial contracts, and they often give customers in the government market substantial rights and remedies, many of which are not typically found in commercial contracts. These rights and remedies may relate to intellectual property, price protection, the accuracy of information provided to the government, and termination rights. These rules may apply to us or third-party resellers or distributors whose practices we may not control. Such parties’ non-compliance could result in repercussions for us with respect to contractual and customer satisfaction issues.

In addition, federal, state, and local governments routinely investigate and audit contractors for compliance with applicable laws, regulations, and contractual provisions. If, as a result of an audit or investigation, it is determined that we have failed to comply with applicable requirements, we may be subject to civil and criminal penalties and administrative sanctions, including termination of contracts, forfeiture of profits or payments we have received, costs associated with the triggering of price reduction clauses, fines, and suspensions or debarment from future government business, and we may suffer reputational harm.

Further, we are increasingly investing in doing business with customers and partners in heavily regulated industries, such as the financial services and health care industries. Existing and prospective customers, such as those in these industries, may be required to comply with more stringent regulations in connection with subscribing to and implementing our services or particular regulations regarding third-party vendors that may be interpreted differently by different customers. In addition, regulatory agencies may impose requirements toward third-party vendors generally, or our company in particular, that we may not be able to, or may not choose to, meet. In addition, customers in these heavily regulated areas often have a right to conduct audits of our systems, products, and practices. In the event that one or more customers determine that some aspect of our business does not meet regulatory requirements, we may be limited in our ability to continue or expand our business.

Our customers also include a number of non-U.S. governments, to which similar procurement, budgetary, contract, and audit risks of U.S. government contracting also apply, particularly in certain emerging markets where our customer base is less established. Such sales may also heighten our exposure to liabilities under anti-corruption laws. In addition, compliance with complex regulations and contracting provisions in a variety of jurisdictions can be expensive and consume significant financial and 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. Further, our business and results of operations will be harmed if our efforts to do business with governments and heavily regulated organizations do not generate the anticipated increases in revenue. Each of these difficulties could materially adversely affect our business and results of operations.

Any litigation against us could be costly and time-consuming to defend.

From time to time, we may become subject to legal proceedings and claims, such as claims brought by our customers in connection with commercial disputes, employment claims, including claims related to the loss of employee equity grants upon termination, intellectual property claims, or securities class actions or other claims related to volatility in the trading price of our common stock. Litigation might result in substantial costs and may divert management's attention and resources, which might seriously harm our business, financial condition, and results of operations. Insurance might not cover such claims, provide sufficient payments to cover all the costs to resolve one or more such claims, or continue to be available on terms acceptable to us (including premium increases or the imposition of large deductible or co-insurance requirements). A claim brought against us that is uninsured or underinsured could result in unanticipated costs, potentially harming our business, financial position, and results of operations. In addition, we cannot be sure that our existing insurance coverage and coverage for errors and omissions will continue to be available on acceptable terms or that our insurers will not deny coverage as to any future claim.

A pandemic, including the COVID-19 pandemic or its resurgence, could have an adverse impact on our business, operations, and the markets and communities in which we, our partners, and customers operate.

The potential long-term impact of the COVID-19 pandemic, its resurgence, or a new pandemic on the global economy and our business continue to be difficult to assess or predict. Potential impacts include:

- Our prospective and existing customers may experience, or may continue to experience, slowdowns in their businesses, which in turn may result in reduced demand for our platform, lengthening of sales cycles, loss of customers, and difficulties in collections.
- Our vendors and suppliers may experience, or may continue to experience, disruptions in their supply chains, which may result in service interruptions or additional operating expenses, and may increase the price at which our vendors and suppliers are willing to sell their products to us.
- Our return to work and remote working policies, which continue to evolve, may decrease employee productivity, collaboration, and morale, and may increase unwanted employee attrition.
- We continue to incur fixed costs, particularly for real estate, and may derive reduced benefit from those costs.
- We may continue to experience disruptions to our growth planning, such as for facilities and international expansion.
- We are incurring costs in returning to work from our facilities around the world, including changes to the workplace, such as space planning, food service, and amenities, as well as costs associated with complying with new or evolving regulatory requirements, which may vary significantly depending on the jurisdiction.
- We are subject to an uncertain regulatory environment, and are required to comply with cumbersome and conflicting federal, state, and local laws regarding COVID-19, which may pose significant disruption to our business operations, require significant management attention to respond to and enforce, and result in an increased risk of non-compliance and claims.
- Our operating lease right-of-use assets may be impaired due to potential loss of sublease income.
- We may be subject to legal liability for safe workplace claims.
- Our critical vendors or partners could go out of business.
- Certain of our in-person marketing events have been canceled and we may experience or continue to experience (i) prolonged delays in our ability to reschedule or conduct in-person marketing events and other sales and marketing activities, or (ii) additional costs related to hosting in-person events that will be subject to uncertain and changing regulations and restrictions.
- Our marketing, sales, professional services, and support organizations are accustomed to extensive face-to-face customer and partner interactions, and conducting business virtually continues to pose challenges.

While many states and countries have reopened, the status of the global recovery remains uncertain and unpredictable. Business activity may not recover as quickly as anticipated, and widespread recovery will be impacted by future developments, including future pandemics or new variant strains, government and private sector requirements, and the emergence and effectiveness of medical and other measures. Any of the foregoing could adversely affect our business, financial condition, and results of operations.

Our current operations are international in scope, and we plan further geographic expansion, creating a variety of operational challenges.

A component of our growth strategy involves the further expansion of our operations and customer base internationally. Customer accounts outside the United States generated 21% of our revenue for each of the three and nine months ended October 31, 2022, respectively. We are continuing to adapt to and develop strategies to address international markets, but there is no guarantee that such efforts will have the desired effect. For example, we anticipate that we will need to establish relationships with new partners in order to expand into certain countries, and if we fail to identify, establish, and maintain such relationships, we may be unable to execute on our expansion plans. We expect that our international activities will continue to grow for the foreseeable future as we continue to pursue opportunities in existing and new international markets, which will require significant dedication of management attention and financial resources.

Our current and future international business and operations involve a variety of risks, including:

- slower than anticipated public cloud adoption by international businesses;
- changes in a specific country's or region's political, economic, or legal and regulatory environment, including the effects of Brexit, pandemics, tariffs, trade wars, sanctions, or long-term environmental risks;
- the need to adapt and localize our platform for specific countries and the engineering and related costs that we may incur when making those changes;
- greater difficulty collecting accounts receivable and longer payment cycles;
- unexpected changes in, or the selective application of, trade relations, regulations, or laws;
- new, evolving, and more stringent regulations relating to privacy and data security and the unauthorized use of, or access to, commercial and personal information;
- differing and potentially more onerous labor regulations where labor laws are generally more advantageous to employees as compared to the United States, including regulations governing terminations in locations that do not permit at-will employment and deemed hourly wage and overtime regulations;
- challenges inherent in efficiently managing, and the increased costs associated with, an increased number of employees over large geographic distances, including the need to implement appropriate systems, policies, benefits, and compliance programs that are specific to each jurisdiction;
- difficulties in managing a business in new markets with diverse cultures, languages, customs, legal systems, alternative dispute systems, and regulatory systems;
- increased travel, real estate, infrastructure, and legal compliance costs associated with international operations, including increased costs associated with changing and potentially conflicting environmental regulations and requirements;
- currency exchange rate fluctuations and the resulting effect on our revenue, RPO, and expenses, and the cost and risk of utilizing mitigating derivative transactions and entering into hedging transactions to the extent we do so in the future;
- limitations on, or charges or taxes associated with, our ability to reinvest earnings from operations in one country to fund the capital needs of our operations in other countries;
- laws and business practices favoring local competitors or general market preferences for local vendors;
- limited or insufficient intellectual property protection or difficulties obtaining, maintaining, protecting, or enforcing our intellectual property rights, including our trademarks and patents;

- political instability, military conflict or war, or terrorist activities;
- COVID-19 or any other pandemics or epidemics that could result in decreased economic activity in certain markets; additional costs associated with travel, return to work, or other restrictions that are specific to certain markets; decreased use of our products and services; or decreased ability to import, export, or sell our products and services to existing or new customers in international markets;
- exposure to liabilities under anti-corruption and anti-money laundering laws, including the U.S. Foreign Corrupt Practices Act of 1977, as amended (FCPA), U.S. bribery laws, the U.K. Bribery Act, and similar laws and regulations in other jurisdictions;
- burdens of complying with laws and regulations related to taxation; and
- regulations, adverse tax burdens, and foreign exchange controls that could make it difficult or costly to repatriate earnings and cash.

We expect to invest substantial time and resources to further expand our international operations and, if we are unable to do so successfully and in a timely manner, our business and results of operations will suffer.

We may require additional capital to support the growth of our business, and this capital might not be available on acceptable terms, if at all.

We have funded our operations since inception primarily through equity financings, payments received from our customers, and more recently, proceeds from our IPO. We cannot be certain if our operations will generate sufficient cash to fully fund our ongoing operations or the growth of our business. We intend to continue to make investments to support our business, which may require us to engage in equity or debt financings to secure additional funds. Additional financing may not be available on terms favorable to us, if at all, particularly during times of market volatility and general economic instability. If adequate funds are not available on acceptable terms, we may be unable to invest in future growth opportunities, which could harm our business, operating results, and financial condition. If we incur debt, the debt holders would have rights senior to holders of common stock to make claims on our assets, and the terms of any debt could restrict our operations, including our ability to pay dividends on our common stock. Furthermore, if we issue additional equity securities, stockholders will experience dilution, and the new equity securities could have rights senior to those of our common stock. Because our decision to issue securities in the future will depend on numerous considerations, including factors beyond our control, we cannot predict or estimate the amount, timing, or nature of any future issuances of debt or equity securities. As a result, our stockholders bear the risk of future issuances of debt or equity securities reducing the value of our common stock and diluting their interests.

We are exposed to fluctuations in currency exchange rates and interest rates, which could negatively affect our results of operations and our ability to invest and hold our cash.

Our sales are currently denominated in U.S. dollars and in Euros, and will likely be denominated in other currencies in the future. Because we report our results of operations and revenue in U.S. dollars, we currently face exposure to foreign currency translation risk and may in the future face other foreign currency risks. If we are not able to successfully hedge against the risks associated with currency fluctuations, our results of operations could be adversely affected. For example, for international customers with sales denominated in U.S. dollars, a strengthening of the U.S. dollar could increase the real cost of our platform to such customers, which could adversely affect our results of operations. In addition, an increasing portion of our operating expenses is incurred outside the United States. These operating expenses are denominated in foreign currencies and are subject to fluctuations due to changes in foreign currency exchange rates. In addition, we are exposed to fluctuations in interest rates, which may result in a negative interest rate environment, in which interest rates drop below zero. In such an environment, any cash that we may hold with financial institutions will yield a storage charge instead of earning interest income, which may encourage us to spend our cash or make high-risk investments, all of which could adversely affect our financial position, results of operations, and cash flows.

If our estimates or judgments relating to our critical accounting estimates prove to be incorrect, our results of operations could be adversely affected.

The preparation of financial statements in conformity with U.S. generally accepted accounting principles (GAAP) requires management to make estimates and assumptions that affect the amounts reported in our condensed consolidated financial statements and accompanying notes appearing elsewhere herein. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, as provided in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Estimates." The results of these estimates form the basis for making judgments about the carrying values of assets, liabilities, revenue, costs and expenses, and related disclosures. Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

Our business could be disrupted by catastrophic occurrences and similar events.

Our platform and the public cloud infrastructure on which our platform relies are vulnerable to damage or interruption from catastrophic occurrences, such as earthquakes, floods, fires, power loss, telecommunication failures, military conflict or war, terrorist attacks, criminal acts, sabotage, other intentional acts of vandalism and misconduct, geopolitical events, disease, such as the COVID-19 pandemic, and similar events. Some of our United States corporate offices in which we operate and certain of the public cloud data centers on which our platform runs are located in the San Francisco Bay Area and Pacific Northwest, regions known for seismic activity. Despite any precautions we may take, the occurrence of a natural disaster or other unanticipated problems at our facilities or the facilities of our public cloud providers could result in disruptions, outages, and other performance and quality problems. If we are unable to develop adequate plans to ensure that our business functions continue to operate during and after a disaster and to execute successfully on those plans in the event of a disaster or emergency, our business would be seriously harmed. In addition, the impacts of climate change on the global economy and our industry are rapidly evolving. As a result, we may be subject to increased or conflicting regulations, reporting requirements, standards, or expectations.

Risks Related to Our Intellectual Property

Our intellectual property rights may not protect our business or provide us with a competitive advantage.

To be successful, we must protect our technology and brand in the United States and other jurisdictions through trademarks, trade secrets, patents, copyrights, service marks, invention assignments, contractual restrictions, and other intellectual property rights and confidentiality procedures. Despite our efforts to implement these protections, they may not protect our business or provide us with a competitive advantage for a variety of reasons, including:

- the failure by us to obtain patents and other intellectual property rights for important innovations or maintain appropriate confidentiality and other protective measures to establish and maintain our trade secrets;
- to the extent a customer or partner owns any intellectual property created through a professional services engagement, our inability to use or monetize that intellectual property as part of our business;
- uncertainty in, and evolution of, legal standards relating to the validity, enforceability, and scope of protection of intellectual property rights;
- potential invalidation of our intellectual property rights through administrative processes or litigation;
- our inability to detect infringement or other misappropriation of our intellectual property rights by third parties; and
- other practical, resource, or business limitations on our ability to enforce our rights.

Further, the laws of certain foreign countries, particularly certain developing countries, do not provide the same level of protection of corporate proprietary information and assets, such as intellectual property, trademarks, trade secrets, know-how, and records, as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property or proprietary rights abroad. We may also be exposed to material risks of theft or unauthorized reverse engineering of our proprietary information and other intellectual property, including technical data, data sets, or other sensitive information. Our efforts to enforce our intellectual property rights in such foreign countries may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop, which could have a material adverse effect on our business, financial condition, and results of operations. Moreover, if we are unable to prevent the disclosure of our trade secrets to third parties, or if our competitors independently develop any of our trade secrets, we may not be able to establish or maintain a competitive advantage in our market, which could seriously harm our business.

Litigation may be necessary to enforce our intellectual property or proprietary rights, protect our trade secrets, or determine the validity and scope of proprietary rights claimed by others. Any litigation, whether or not resolved in our favor, could result in significant expense to us, divert the efforts of our technical and management personnel, and result in counterclaims with respect to infringement of intellectual property rights by us. If we are unable to prevent third parties from infringing upon or misappropriating our intellectual property or are required to incur substantial expenses defending our intellectual property rights, our business, financial condition, and results of operations may be materially adversely affected.

We may become subject to intellectual property disputes, which are costly and may subject us to significant liability and increased costs of doing business.

We compete in markets where there are a large number of patents, copyrights, trademarks, trade secrets, and other intellectual and proprietary rights, as well as disputes regarding infringement of these rights. In addition, many of the holders of patents, copyrights, trademarks, trade secrets, and other intellectual and proprietary rights have extensive intellectual property portfolios and greater resources than we do to enforce their rights. As compared to our large competitors, our patent portfolio is relatively undeveloped and may not provide a material deterrent to such assertions or provide us with a strong basis to counterclaim or negotiate settlements. Further, to the extent assertions are made against us by entities that hold patents but are not operating companies, our patent portfolio may not provide deterrence because such entities are not concerned with counterclaims.

Any intellectual property litigation to which we become a party may require us to do one or more of the following:

- cease selling, licensing, or using products or features that incorporate the intellectual property rights that we allegedly infringe, misappropriate, or violate;
- require us to change the name of our products or services;
- make substantial payments for legal fees, settlement payments, or other costs or damages, including indemnification of third parties;
- obtain a license or enter into a royalty agreement, either of which may not be available on reasonable terms or at all, in order to obtain the right to sell or use the relevant intellectual property; or
- redesign the allegedly infringing products to avoid infringement, misappropriation, or violation, which could be costly, time-consuming, or impossible.

Intellectual property litigation is typically complex, time consuming, and expensive to resolve and would divert the time and attention of our management and technical personnel. It may also result in adverse publicity, which could harm our reputation and ability to attract or retain employees, customers, or partners. As we grow, we may experience a heightened risk of allegations of intellectual property infringement. An adverse result in any litigation claims against us could have a material adverse effect on our business, financial condition, and results of operations.

If we use open source software inconsistent with our policies and procedures or the license terms applicable to such software, we could be subject to legal expenses, damages, or costly remediation or disruption to our business.

We use open source software in our platform. From time to time, companies that use third-party open source software have faced claims challenging the use of such open source software and their compliance with the terms of the applicable open source license. We may be subject to suits by parties claiming ownership of what we believe to be open source software or claiming non-compliance with the applicable open source licensing terms. Additionally, while we have policies and procedures in place designed to govern our use of open source software, there is a risk that we may incorporate open source software with onerous licensing terms, including the obligation to make our source code available for others to use or modify without compensation to us, or inadvertently use third-party open source software in a manner that exposes us to claims of non-compliance with the applicable terms of such license, including claims for infringement of intellectual property rights or for breach of contract. If we receive an allegation that we have violated an open source license, we may incur significant legal expenses, be subject to damages, be required to redesign our product to remove the open source software or publicly release certain portions of our proprietary source code, or be required to comply with onerous license restrictions, all of which could have a material impact on our business. Even in the absence of a claim, if we discover the use of open source software inconsistent with our policies, we could expend significant time and resources to replace the open source software or obtain a commercial license, if available. All of these risks are heightened by the fact that the ownership of open source software can be uncertain, leading to litigation, and many of the licenses applicable to open source software have not been interpreted by courts, and these licenses could be construed to impose unanticipated conditions or restrictions on our ability to commercialize our products. Any use of open source software inconsistent with our policies or licensing terms could harm our business and financial position.

Risks Related to Our Tax, Legal, and Regulatory Environment

We are subject to stringent and changing obligations related to data privacy and security, and the failure or perceived failure to comply with these obligations could result in significant fines and liability or otherwise result in substantial harm to our business and prospects.

We are subject to data privacy and protection laws, regulations, guidance, external and internal policies and other documentation, industry standards, certifications, and contractual and other obligations that apply to the collection, transmission, storage, use, and other processing of personal information. These obligations are rapidly evolving, extensive, complex, and include inconsistencies and uncertainties. Examples of recent and anticipated developments that have or could impact our business include the following:

- The European Union’s (EU) General Data Protection Regulation (GDPR) and the United Kingdom’s General Data Protection Regulation established strict requirements applicable to the handling of personal information.

- The EU has proposed the Regulation on Privacy and Electronic Communications, which, if adopted, would impose new obligations on using personal information in the context of electronic communications, particularly with respect to online tracking technologies and direct marketing.

- Certain other jurisdictions have enacted data localization laws and cross-border personal information transfer laws, which could make it more difficult for us to transfer personal information across jurisdictions (such as transferring or receiving personal information that originates in the EU), or to enable our customers to transfer or replicate their data across jurisdictions using our platform. Existing mechanisms that may facilitate cross-border personal information transfers may change or be invalidated.

- In the United States, federal, state, and local governments have enacted or proposed data privacy and security laws, including data breach notification laws, personal data privacy laws, and consumer protection laws. For example, the California Consumer Privacy Act (CCPA) provides increased privacy rights and protections, including the ability of individuals to opt out of specific disclosures of their personal information. Further, the California Privacy Rights Act of 2020 (CPRA) will expand the CCPA and establish the California Privacy Protection Agency for purposes of implementing and enforcing the CPRA, which could increase the risk of an enforcement action. Other U.S. states have adopted, or are considering adopting, similar laws.

- Other government bodies have implemented laws and are considering further regulating artificial intelligence and machine learning, which could negatively impact our ability to use these technologies.

- The certifications we may maintain and the standards that may apply to our business, such as the U.S. Federal Risk and Authorization Management Program, PCI-DSS, ISO/IEC 27001, HI-TRUST CSF, among others, are becoming more stringent.

These and other similar legal and regulatory developments could contribute to legal and economic uncertainty, increase our exposure to liability, affect how we design, market, and sell our platform, and how we operate our business, how our customers and partners process and share data, how we process and use data, and how we transfer personal data from one jurisdiction to another, any of which could require us to take on more onerous obligations in our contracts, impact our ability to operate in certain jurisdictions, and/or negatively impact the types of data available on or the demand for our platform. It is possible that new laws may be adopted or existing laws may be interpreted and applied in a manner that is inconsistent with our practices and our efforts to comply with the evolving data protection rules may be unsuccessful. We may incur substantial costs to comply with such laws and regulations, to meet the demands of our customers relating to their own compliance with applicable laws and regulations, and to establish and maintain internal policies, self-certifications, and third-party certifications supporting our compliance programs. Our customers may delegate certain of their GDPR compliance or other privacy law obligations to us, and we may otherwise be required to expend resources to assist our customers with such compliance obligations.

Although we endeavor to comply with applicable data privacy and security obligations, any actual or perceived non-compliance with such obligations by us or our third-party service providers and sub-processors could result in proceedings, investigations, or claims against us by regulatory authorities, customers, or others, leading to reputational harm, significant fines, litigation costs, additional reporting requirements or oversight, bans on processing personal information, orders to destroy or not use personal information, limitations in our ability to develop or commercialize our platform, inability to process personal information or operate in certain jurisdictions, and other damages. For example, if regulators assert that we have failed to comply with the GDPR, we may be subject to fines of up to EUR 20.0 million or 4% of our worldwide annual revenue, whichever is greater, as well as potential data processing restrictions and penalties. Even if we are not determined to have violated these laws and other obligations, investigations into these issues typically require the expenditure of significant resources and generate negative publicity. In addition, any failure by us or our third-party service providers to comply with applicable obligations could result in proceedings against us. Any of these events could have a material adverse effect on our business, financial condition, and results of operations.

We may publish privacy policies and other documentation regarding our collection, processing, use, and disclosure of personal information, or other confidential information. Although we endeavor to comply with our published policies, certifications, and documentation, we or our vendors may at times fail to do so or may be perceived to have failed to do so. Claims that we have violated individuals' privacy rights or failed to comply with data protection laws or applicable privacy notices even if we are not found liable, could be expensive and time-consuming to defend and could result in adverse publicity that could harm our business.

We are subject to anti-corruption, anti-bribery, anti-money laundering, and similar laws, and non-compliance with such laws can subject us to criminal or civil liability and harm our business, financial condition, and results of operations.

We are subject to the FCPA, U.S. domestic bribery laws, the U.K. Bribery Act 2010, and other anti-corruption and anti-money laundering laws in the countries in which we conduct business. Anti-corruption and anti-bribery laws have been enforced aggressively in recent years and are interpreted broadly to generally prohibit companies, their employees, and their third-party intermediaries from authorizing, offering, or providing, directly or indirectly, improper payments or benefits to recipients in the public or private sector. As we increase our international sales and business and sales to the public sector, we may engage with business partners and third-party intermediaries to market or resell our products and to obtain necessary permits, licenses, and other regulatory approvals. In addition, we or our third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities. We can be held liable for the corrupt or other illegal activities of these third-party intermediaries, our employees, representatives, contractors, partners, and agents, even if we do not explicitly authorize such activities.

While we have policies and procedures to address compliance with such laws, there is a risk that our employees, agents, and other third parties with which we do business, including reseller and system integrator partners, will take actions in violation of our policies and applicable law, for which we may be ultimately held responsible. As we expand internationally and into the public sector market, our risks under these laws may increase.

Detecting, investigating, and resolving actual or alleged violations of anti-corruption laws can require a significant diversion of time, resources, and attention from senior management. In addition, noncompliance with anti-corruption, anti-bribery, or anti-money laundering laws could subject us to whistleblower complaints, investigations, sanctions, settlements, prosecution, enforcement actions, fines, damages, other civil or criminal penalties or injunctions, suspension or debarment from contracting with certain persons, reputational harm, adverse media coverage, and other collateral consequences. If any subpoenas or investigations are launched, or governmental or other sanctions are imposed, or if we do not prevail in any possible civil or criminal proceeding, our business, financial condition, and results of operations could be harmed.

We are subject to governmental export and import controls that could impair our ability to compete in international markets or subject us to liability if we violate the controls.

Our platform is subject to U.S. export controls, including the U.S. Export Administration Regulations, and we incorporate encryption technology into our platform. This encryption technology may be exported outside of the United States only with the required export authorizations, including by license, a license exception, or other appropriate government authorizations, including the filing of an encryption classification request or self-classification report.

Obtaining the necessary export license or other authorization for a particular sale may be time-consuming and may result in the delay or loss of sales opportunities. Furthermore, our activities are subject to U.S. economic sanctions laws and regulations administered by various U.S. agencies, including the U.S. Treasury Department's Office of Foreign Assets Control, that prohibit the sale or supply of most products and services to embargoed jurisdictions or sanctioned parties. Violations of U.S. sanctions or export control regulations can result in significant fines or penalties and possible incarceration for responsible employees and managers.

If our channel partners fail to obtain appropriate import, export, or re-export licenses or permits, we may also be adversely affected through reputational harm, as well as other negative consequences, including government investigations and penalties.

Also, various countries, in addition to the United States, regulate the import and export of certain encryption and other technology, including import and export licensing requirements, and have enacted laws that could limit our ability to distribute our platform in those countries. Changes in our platform or future changes in export and import regulations may create delays in the introduction of our platform in international markets, prevent our customers with international operations from using our platform globally or, in some cases, prevent the export or import of our platform to certain countries, governments, or persons altogether. From time to time, various governmental agencies have proposed additional regulation of encryption technology. Any change in export or import regulations, economic sanctions, or related legislation, increased export and import controls, or change in the countries, governments, persons, or technologies targeted by such regulations, could result in decreased use of our platform by, or in our decreased ability to export or sell our platform to, existing or potential customers with international operations. Any decreased use of our platform or limitation on our ability to export or sell our platform would adversely affect our business, financial condition, and results of operations.

Our international operations may subject us to greater than anticipated tax liabilities.

We are expanding our international operations to better support our growth into international markets. Our corporate structure and associated transfer pricing policies contemplate future growth in international markets, and consider the functions, risks, and assets of the various entities involved in intercompany transactions. The amount of taxes we pay in different jurisdictions may depend on the application of the tax laws of various jurisdictions, including the United States, to our international business activities, changes in tax rates, new or revised tax laws or interpretations of existing tax laws and policies, and our ability to operate our business in a manner consistent with our corporate structure and intercompany arrangements. The taxing authorities of the jurisdictions in which we operate may challenge our methodologies for pricing intercompany transactions pursuant to our intercompany arrangements or disagree with our determinations as to the income and expenses attributable to specific jurisdictions. If such a challenge or disagreement were to occur, and our position was not sustained, we could be required to pay additional taxes, interest, and penalties, which could result in one-time tax charges, higher effective tax rates, reduced cash flows, and lower overall profitability of our operations. Our financial statements could fail to reflect adequate reserves to cover such a contingency.

Changes in tax laws or tax rulings could materially affect our financial position, results of operations, and cash flows.

The tax regimes we are subject to or operate under, including income and non-income taxes, are unsettled and may be subject to significant change. Changes in tax laws, regulations, or rulings, or changes in interpretations of existing laws and regulations, could materially affect our financial position and results of operations. Many countries in Europe, as well as a number of other countries and organizations, including the Organization for Economic Cooperation and Development and the European Commission, have recently proposed, recommended, or (in the case of countries) enacted or otherwise become subject to changes to existing tax laws or new tax laws that could significantly increase our tax obligations in the countries where we do business or require us to change the manner in which we operate our business. Recently, the United States passed the Inflation Reduction Act, which contains various tax law changes. These proposals, recommendations and enactments include changes to the existing framework in respect of income taxes, as well as new types of non-income taxes (such as taxes based on a percentage of revenue or taxes applicable to digital services), which could apply to our business.

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

Our ability to use our net operating loss carryforwards may be limited.

We have incurred substantial losses during our history, do not expect to become profitable in the near future, and may never achieve profitability. Unused U.S. federal net operating losses (NOLs) for taxable years beginning before January 1, 2018 may be carried forward to offset future taxable income, if any, until such unused NOLs expire. Under legislation enacted in 2017, informally titled the Tax Act, as modified by legislation enacted on March 27, 2020, entitled the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), U.S. federal NOLs incurred in taxable years beginning after December 31, 2017 can be carried forward indefinitely, but the deductibility of such U.S. federal NOLs in taxable years beginning after December 31, 2020 is limited to 80% of taxable income. At the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. For example, in 2020, California passed legislation suspending the use of NOLs and limiting the utilization of tax credits for tax years 2020 through 2022. However, Senate Bill No. 113, signed into law in February 2022, has shortened that suspension period and restored the use of NOLs and full business credit utilization for tax year 2022.

As of January 31, 2022, we had U.S. federal, state, and foreign NOL carryforwards of $5.8 billion, $4.5 billion, and $162.7 million, respectively. Of the $5.8 billion U.S. federal NOL carryforwards, $5.7 billion may be carried forward indefinitely with utilization limited to 80% of taxable income, and the remaining $0.1 billion will begin to expire in 2032. The state NOL carryforwards begin to expire in 2022. Of the $162.7 million foreign NOL carryforwards, $149.6 million may be carried forward indefinitely, and the remaining $13.1 million will begin to expire in 2027.

In addition, under Section 382 of the Internal Revenue Code of 1986, as amended, and corresponding provisions of state law, if a corporation undergoes an "ownership change," which is generally defined as one or more stockholders or groups of stockholders who own at least 5% of our stock increasing their ownership by more than 50 percentage points over their lowest ownership percentage within a rolling three-year period, the corporation's ability to use its pre-change NOL carryforwards to offset its post-change income or taxes may be limited. It is possible that we have experienced or may experience ownership changes as a result of shifts in our stock ownership, some of which may be outside of our control. This could limit the amount of NOLs that we can utilize annually to offset future taxable income or tax liabilities. Subsequent ownership changes and changes to the U.S. tax rules in respect of the utilization of NOLs may further affect the limitation in future years.

Changes in our effective tax rate or tax liability may have an adverse effect on our results of operations.

We are subject to income taxes in the United States and various foreign jurisdictions. The determination of our worldwide provision for income taxes and other tax liabilities requires significant judgment by management, and there are many transactions where the ultimate tax determination is uncertain. We believe that our provision for income taxes is reasonable, but the ultimate tax outcome may differ from the amounts recorded in our condensed consolidated financial statements and may materially affect our financial results in the period or periods in which such outcome is determined.

Our effective tax rate could increase due to several factors, including:

- changes in the relative amounts of income before taxes in the various jurisdictions in which we operate that have differing statutory tax rates;
- changes in tax laws, tax treaties, and regulations or the interpretation of them;
- changes to our assessment about our ability to realize our deferred tax assets that are based on estimates of our future results, the prudence and feasibility of possible tax planning strategies, and the economic and political environments in which we do business;
- the outcome of current and future tax audits, examinations, or administrative appeals; and
- the effects of acquisitions.

Any of these developments could adversely affect our results of operations.

Risks Related to the Ownership of Our Common Stock

Our stock price may be volatile, and the value of our common stock may decline.

The market price of our common stock has been and may continue to be highly volatile and may fluctuate or decline substantially as a result of a variety of factors, some of which are beyond our control, including:

- actual or anticipated fluctuations in our financial condition or results of operations;
- variance in our actual or projected financial performance from expectations of securities analysts;
- changes in the pricing or consumption of our platform;
- updates to our projected operating and financial results;
- changes in laws or regulations applicable to our business;
- announcements by us or our competitors of significant business developments, acquisitions, investments, or new offerings;
- significant data breaches, disruptions to, or other incidents involving our platform;
- our involvement in litigation;
- changes in senior management or key personnel;
- the trading volume of our common stock;
- changes in the anticipated future size and growth rate of our market; and
- general economic and market conditions.

Broad market and industry fluctuations, as well as general economic, political, regulatory, and market conditions, such as recessions, interest rate changes, or international currency fluctuations, may also negatively impact the market price of our common stock. In addition, technology stocks have historically experienced high levels of volatility. In the past, companies that have experienced volatility in the market price of their securities have been subject to securities class action litigation. We may be the target of this type of litigation in the future, which could result in substantial expenses and divert our management's attention.

Future sales of our common stock in the public market could cause the market price of our common stock to decline.

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. Many of our stockholders who held our capital stock prior to completion of our IPO have substantial unrecognized gains on the value of the equity they hold based upon the price at which shares were sold in our IPO, and therefore, they may take steps to sell their shares or otherwise secure the unrecognized gains on those shares. We are unable to predict the timing of or the effect that such sales may have on the prevailing market price of our common stock.

The shares of common stock subject to outstanding options and restricted stock unit awards under our equity incentive plans, and the shares reserved for future issuance under our equity incentive plans, will become eligible for sale in the public market upon issuance, subject to compliance with applicable securities laws.

Further, certain holders of our common stock have rights, subject to some conditions, to require us to file registration statements covering the sale of their shares or to include their shares in registration statements that we may file for ourselves or other stockholders.

Our issuance of additional capital stock in connection with financings, acquisitions, investments, our equity incentive plans, or otherwise will dilute all other stockholders.

We expect to issue additional capital stock in the future that will result in dilution to all other stockholders. We expect to grant equity awards to employees, directors, and consultants under our equity incentive plans. We may also raise capital through equity financings in the future. As part of our business strategy, we have and may continue to acquire or make investments in companies, products, or technologies and issue equity securities to pay for any such acquisition or investment. Any such issuances of additional capital stock may cause stockholders to experience significant dilution of their ownership interests and the per share value of our common stock to decline.

If securities or industry analysts publish unfavorable or inaccurate research about our business, the market price or trading volume of our common stock could decline.

The market price and trading volume of our common stock is heavily influenced by the way analysts interpret our financial information and other disclosures. We do not have control over these analysts. If securities analysts or industry analysts cease coverage of us, our stock price would be negatively affected. If securities or industry analysts downgrade our common stock or publish negative reports about our business, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, demand for our common stock could decrease, which might cause our stock price to decline and could decrease the trading volume of our common stock.

We do not intend to pay dividends for the foreseeable future and, as a result, the ability of the holders of our common stock to achieve a return on their investment will depend on appreciation in the price of our common stock.

We have never declared or paid any cash dividends on our capital stock, and we do not intend to pay any cash dividends in the foreseeable future. Any determination to pay dividends in the future will be at the discretion of our board of directors. Accordingly, holders of our common stock may need to rely on sales of our common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment.

We incur significant costs operating as a public company, and our management is required to devote substantial time to compliance with our public company responsibilities and corporate governance practices.

As a public company, we incur significant legal, accounting, compliance, and other expenses that we did not incur as a private company, which we expect to further increase now that we are no longer an "emerging growth company." Based on the market value of our common stock held by non-affiliates as of the last business day of our fiscal second quarter ended July 31, 2021, we ceased to be an "emerging growth company" on January 31, 2022. The Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of the New York Stock Exchange, and other applicable securities rules and regulations impose various requirements on public companies. Our management and other personnel devote a substantial amount of time to compliance with these requirements. Moreover, these rules and regulations have increased our legal and financial compliance costs and make some activities more time-consuming and costly. We cannot predict or estimate the amount of additional costs we will incur as a public company or the specific timing of such costs.

As a result of being a public company, we are obligated to develop and maintain proper and effective internal control over financial reporting, and any failure to maintain the adequacy of these internal controls may adversely affect investor confidence in our company and, as a result, the value of our common stock.

We are required, pursuant to Section 404, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting as of the end of each fiscal year. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting. In addition, our independent registered public accounting firm is required to attest to the effectiveness of our internal control over financial reporting. Our compliance with Section 404 requires that we incur substantial expenses and expend significant management efforts. We have established an internal audit group, and as we continue to grow, we will hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge and update the system and process documentation necessary to perform the evaluation needed to comply with Section 404.

During the evaluation and testing process of our internal controls, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to certify that our internal control over financial reporting is effective. We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition or results of operations. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of our company more difficult, limit attempts by our stockholders to replace or remove our current management, and limit the market price of our common stock.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws may have the effect of delaying or preventing a change of control or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that:

- authorize our board of directors to issue, without further action by the stockholders, shares of undesignated preferred stock with terms, rights, and preferences determined by our board of directors that may be senior to our common stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;
- specify that special meetings of our stockholders can be called only by our board of directors, the chairperson of our board of directors, or our Chief Executive Officer;
- establish an advance notice procedure for stockholder proposals to be brought before an annual meeting, including proposed nominations of persons for election to our board of directors;

- establish that our board of directors is divided into three classes, with each class serving three-year staggered terms;
- prohibit cumulative voting in the election of directors;
- provide that our directors may only be removed for cause;
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum; and
- require the approval of our board of directors or the holders of at least 66 2/3% of our outstanding shares of voting stock to amend our bylaws and certain provisions of our certificate of incorporation.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally, subject to certain exceptions, prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any "interested" stockholder for a period of three years following the date on which the stockholder became an "interested" stockholder. Any of the foregoing provisions could limit the price that investors might be willing to pay in the future for shares of our common stock, and they could deter potential acquirers of our company, thereby reducing the likelihood that holders of our common stock would receive a premium for their shares of our common stock in an acquisition.

Our amended and restated certificate of incorporation designates the Court of Chancery of the State of Delaware and, to the extent enforceable, the federal district courts of the United States of America as the exclusive forums for certain disputes between us and our stockholders, which will restrict our stockholders' ability to choose the judicial forum for disputes with us or our directors, officers, or employees.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: any derivative action or proceeding brought on our behalf, any action asserting a breach of a fiduciary duty, any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our amended and restated certificate of incorporation, or our amended and restated bylaws, or any action asserting a claim against us that is governed by the internal affairs doctrine. This choice of forum provision does not apply to suits brought to enforce a duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction.

Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated certificate of incorporation provides that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our amended and restated certificate of incorporation. This may require significant additional costs associated with resolving such action in other jurisdictions and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions.

These choice of forum provisions 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. If a court were to find either exclusive-forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could seriously harm our business.

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

(a) Recent Sales of Unregistered Equity Securities

In connection with our acquisition of the outstanding capital stock of Streamlit, Inc. in March 2022, we agreed to issue 2.3 million shares of our common stock as consideration (Equity Consideration), all of which have been issued. A portion of the Equity Consideration that was issued to Streamlit's founders (Founder Shares) are subject to vesting agreements pursuant to which the Founder Shares vest over three years, subject to each founder's continued employment with Snowflake or its affiliates.

These issuances were made in reliance on one or more of the following exemptions or exclusions from the registration requirements of the Securities Act of 1933, as amended (the Securities Act): Section 4(a)(2) of the Securities Act and Regulation D promulgated under the Securities Act.

(b) Use of Proceeds

On September 18, 2020, we closed our IPO of 32.2 million shares of our Class A common stock at an offering price of $120.00 per share, including 4.2 million shares pursuant to the exercise of the underwriters' option to purchase additional shares of our Class A common stock, resulting in gross proceeds to us of $3.7 billion, net of the underwriting discounts. All of the shares issued and sold in our IPO were registered under the Securities Act pursuant to a registration statement on Form S-1 (File No. 333-248280), which was declared effective by the SEC on September 15, 2020. There has been no material change in the planned use of proceeds from our IPO from those disclosed in our final prospectus for our IPO dated as of September 15, 2020 and filed with the SEC pursuant to Rule 424(b)(4) on September 16, 2020.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

None.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit Number	Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
3.1	Amended and Restated Certificate of Incorporation of Snowflake Inc.	8-K	001-39504	3.1	9/18/2020	
3.2	Amended and Restated Bylaws of Snowflake Inc.	S-1/A	333-248280	3.4	9/8/2020	
3.3	Certificate of Retirement.	8-K	001-39504	3.1	3/3/2021	
31.1	Certification of Principal Executive Officer pursuant to Exchange Act Rules 13a-14(a) or 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Principal Financial Officer pursuant to Exchange Act Rules 13a-14(a) or 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1*	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
32.2*	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.					X
101.SCH	XBRL Taxonomy Extension Schema Document.					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.					X
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibits 101).					X

* The certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Quarterly Report on Form 10-Q and are not deemed “filed” for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, nor shall they be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act, irrespective of any general incorporation language contained in such filing.

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.

Date: December 2, 2022

SNOWFLAKE INC.

By:	/s/ Frank Slootman
Name:	Frank Slootman
Title:	Chief Executive Officer and Chairman *(Principal Executive Officer)*

By:	/s/ Michael P. Scarpelli
Name:	Michael P. Scarpelli
Title:	Chief Financial Officer *(Principal Financial and Accounting Officer)*

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO EXCHANGE ACT RULES 13a-14(a) OR 15d-14(a)
AS ADOPTED PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, Frank Slootman, certify that:

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

Date: December 2, 2022

By:	/s/ Frank Slootman
Name:	Frank Slootman
Title:	Chief Executive Officer and Chairman *(Principal Executive Officer)*

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO EXCHANGE ACT RULES 13a-14(a) OR 15d-14(a)
AS ADOPTED PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, Michael P. Scarpelli, certify that:

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

Date: December 2, 2022

By:	/s/ Michael P. Scarpelli
Name:	Michael P. Scarpelli
Title:	Chief Financial Officer
	(Principal Financial and Accounting Officer)

Exhibit 32.1

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

I, Frank Slootman, do hereby certify, to the best of my knowledge and pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- the Quarterly Report on Form 10-Q of Snowflake Inc. for the period ended October 31, 2022 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Snowflake Inc.

Date: December 2, 2022

By:	/s/ Frank Slootman
Name:	Frank Slootman
Title:	Chief Executive Officer and Chairman *(Principal Executive Officer)*

Exhibit 32.2

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

I, Michael P. Scarpelli, do hereby certify, to the best of my knowledge and pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- the Quarterly Report on Form 10-Q of Snowflake Inc. for the period ended October 31, 2022 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Snowflake Inc.

Date: December 2, 2022

By:	/s/ Michael P. Scarpelli
Name:	Michael P. Scarpelli
Title:	Chief Financial Officer
	(Principal Financial and Accounting Officer)