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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 001-38675

Elastic N.V.

(Exact name of registrant as specified in its Charter)

The Netherlands	**Not Applicable**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

800 West El Camino Real, Suite 350
Mountain View, California 94040
(Address of principal executive offices, including zip code)
Registrant's telephone number, including area code: (650) 458-2620

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Ordinary shares, Par Value €0.01 Per Share	**ESTC**	**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, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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

As of November 30, 2022, the registrant had 95,605,341 ordinary shares, €0.01 par value per share, outstanding.

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Note Regarding 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 (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which statements involve substantial risk and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as "may," "might," "will," "should," "expects," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential," or "continue" or the negative of these words or other similar terms or expressions that concern our expectations, strategy, plans, or intentions. Forward-looking statements contained in this Quarterly Report on Form 10-Q include, but are not limited to, statements about:

- the impact of macroeconomic conditions, including declining rates of economic growth, supply chain disruptions, inflationary pressures, increased interest rates, and other conditions discussed in this report, on information technology spending, sales cycles, and other factors affecting the demand for our offerings and our results of operations;
- our future financial performance, including our expectations regarding our revenue, cost of revenue, gross profit or gross margin, operating expenses (which include changes in sales and marketing, research and development and general and administrative expenses), and our ability to achieve and maintain future profitability;
- our ability to continue to deliver and improve our offerings and successfully develop new offerings;
- customer acceptance and purchase of our existing offerings and new offerings, including the expansion and adoption of our cloud-based offerings;
- the impact of Russia's invasion of Ukraine on our business and on the businesses of our customers and partners, including their spending priorities;
- the impact of the 2019 coronavirus disease, including any current and future variants thereof ("COVID-19"), on our business, operations, hiring and financial results, and on the businesses of our customers and partners, including their spending priorities, the effect of governmental lockdowns, restrictions, new regulations and vaccine distribution and efficacy;
- the impact that increased adoption of consumption-based arrangements could have on our revenue or operating results;
- the impact of changes to our licensing of our products, specifically Elasticsearch and Kibana;
- our assessments of the strength of our solutions and products;
- our service performance and security, including the resources and costs required to prevent, detect and remediate potential security breaches or incidents, including by bad actors;
- our ability to maintain and expand our user and customer base;
- the market for our products continuing to develop;
- competition from other products and companies with more resources, recognition and presence in our industry;
- the impact of foreign currency exchange rate and interest rate fluctuations on our results;
- the pace of change and innovation in the markets in which we operate and the competitive nature of those markets;
- our business strategy and our plan to build our business;
- our ability to effectively manage our growth, including any changes to our pace of hiring;
- our international expansion strategy;
- our operating results and cash flows;
- our strategy of acquiring complementary businesses and our ability to successfully integrate acquired businesses and technologies;
- the impact of acquisitions on our future product offerings;
- our beliefs and objectives for future operations;
- our relationships with and reliance on third parties, including partners;
- our ability to protect our intellectual property rights;
- our ability to develop our brands;

- the impact of expensing stock options and other equity awards;
- the sufficiency of our capital resources;
- our ability to successfully defend litigation brought against us;
- our ability to successfully execute our go-to-market strategy, including the positioning of our solutions and products, and expand in our existing markets and into new markets;
- sufficiency of cash to meet cash needs for at least the next 12 months;
- our ability to comply with laws and regulations that currently apply or become applicable to our business both in the United States and internationally;
- our ability to attract and retain qualified employees and key personnel;
- our ability to onboard, provide training to and integrate new employees;
- the effect of the loss of key personnel;
- our expectations about the impact of natural disasters and public health epidemics and pandemics, on our business, results of operations and financial condition;
- expectations about seasonality;
- the future trading prices of our ordinary shares;
- inflation;
- our ability to service our debt obligations; and
- general market, political, geopolitical, economic and business conditions (including developments and volatility arising from the ongoing COVID-19 pandemic and Russia's invasion of Ukraine).

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Quarterly Report on Form 10-Q, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

You should not rely upon forward-looking statements as predictions of future events. We have based the forward-looking statements contained in this Quarterly Report on Form 10-Q primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition, results of operations, and prospects. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties, and other factors described in the section titled "Risk Factors" in Part II, Item 1A and elsewhere in this Quarterly Report on Form 10-Q. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained herein. We cannot assure you that the results, events, and circumstances reflected in the forward-looking statements will be achieved or occur, and actual results, events, or circumstances could differ materially from those described in the forward-looking statements.

The forward-looking statements made in this Quarterly Report on Form 10-Q relate only to events as of the date on which such statements are made. We undertake no obligation to update any forward-looking statements after the date of this Quarterly Report on Form 10-Q or to conform such statements to actual results or revised expectations, except as required by law. We may not actually achieve the plans, intentions, or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, or investments we may make.

PART I—FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

Elastic N.V.
Condensed Consolidated Balance Sheets
(in thousands, except share and per share data)
(unaudited)

	As of October 31, 2022	As of April 30, 2022
Assets		
Current assets:		
Cash and cash equivalents	$ 856,237	$ 860,949
Restricted cash	2,385	2,688
Accounts receivable, net of allowance for credit losses of $1,801 and $2,700 as of October 31, 2022 and April 30, 2022, respectively	185,906	215,228
Deferred contract acquisition costs	45,418	43,628
Prepaid expenses and other current assets	33,030	41,215
Total current assets	1,122,976	1,163,708
Property and equipment, net	5,696	7,207
Goodwill	303,742	303,906
Operating lease right-of-use assets	29,840	25,437
Intangible assets, net	37,384	45,800
Deferred contract acquisition costs, non-current	77,544	74,419
Deferred tax assets	5,395	5,811
Other assets	11,655	16,643
Total assets	$ 1,594,232	$ 1,642,931
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	$ 41,055	$ 28,403
Accrued expenses and other liabilities	62,350	53,930
Accrued compensation and benefits	60,501	68,002
Operating lease liabilities	12,348	11,219
Deferred revenue	410,718	431,776
Total current liabilities	586,972	593,330
Deferred revenue, non-current	22,867	33,518
Long-term debt, net	567,026	566,520
Operating lease liabilities, non-current	19,127	16,482
Other liabilities, non-current	6,675	17,648
Total liabilities	1,202,667	1,227,498
Commitments and contingencies (Notes 8 and 9)		
Shareholders' equity:		
Convertible preference shares, €0.01 par value; 165,000,000 shares authorized, 0 shares issued and outstanding as of October 31, 2022 and April 30, 2022	—	—
Ordinary shares, par value €0.01 per share: 165,000,000 shares authorized; 95,575,775 shares issued and outstanding as of October 31, 2022 and 94,174,914 shares issued and outstanding as of April 30, 2022	1,005	990
Treasury stock	(369)	(369)
Additional paid-in capital	1,351,987	1,250,108
Accumulated other comprehensive loss	(27,036)	(18,130)
Accumulated deficit	(934,022)	(817,166)
Total shareholders' equity	391,565	415,433
Total liabilities and shareholders' equity	$ 1,594,232	$ 1,642,931

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

Elastic N.V.
Condensed Consolidated Statements of Operations
(in thousands, except share and per share data)
(unaudited)

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
Revenue				
Subscription	$ 241,211	$ 190,257	$ 473,025	$ 367,442
Services	23,190	15,723	41,457	31,633
Total revenue	264,401	205,980	514,482	399,075
Cost of revenue				
Subscription	55,101	42,242	108,652	79,762
Services	19,656	11,642	39,084	23,784
Total cost of revenue	74,757	53,884	147,736	103,546
Gross profit	189,644	152,096	366,746	295,529
Operating expenses				
Research and development	75,568	63,763	154,217	123,145
Sales and marketing	128,179	94,953	253,185	182,986
General and administrative	34,925	30,555	69,013	57,607
Total operating expenses	238,672	189,271	476,415	363,738
Operating loss	(49,028)	(37,175)	(109,669)	(68,209)
Other income (expense), net				
Interest expense	(6,209)	(6,332)	(12,610)	(8,152)
Other income (expense), net	14,975	(666)	15,314	352
Loss before income taxes	(40,262)	(44,173)	(106,965)	(76,009)
Provision for income taxes	7,043	2,850	9,891	5,503
Net loss	$ (47,305)	$ (47,023)	$ (116,856)	$ (81,512)
Net loss per share attributable to ordinary shareholders, basic and diluted	$ (0.50)	$ (0.51)	$ (1.23)	$ (0.89)
Weighted-average shares used to compute net loss per share attributable to ordinary shareholders, basic and diluted	95,307,146	92,206,199	94,964,423	91,703,786

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

Elastic N.V.
Condensed Consolidated Statements of Comprehensive Loss
(in thousands)
(unaudited)

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
Net loss	$ (47,305)	$ (47,023)	$ (116,856)	$ (81,512)
Other comprehensive income (loss):				
Foreign currency translation adjustments	(6,282)	588	(8,906)	(1,276)
Other comprehensive income (loss)	(6,282)	588	(8,906)	(1,276)
Total comprehensive loss	$ (53,587)	$ (46,435)	$ (125,762)	$ (82,788)

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

Elastic N.V.
Condensed Consolidated Statements of Shareholders' Equity
(in thousands, except share data)
(unaudited)

	Ordinary Shares		Treasury Shares Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Shareholders' Equity
	Shares	Amount					
Balances as of July 31, 2022	94,970,627	$ 999	$ (369)	$ 1,300,379	$ (20,754)	$ (886,717)	$ 393,538
Issuance of ordinary shares upon exercise of stock options	258,813	3	—	4,324	—	—	4,327
Issuance of ordinary shares upon release of restricted stock units	346,335	3	—	(3)	—	—	—
Stock-based compensation	—	—	—	47,287	—	—	47,287
Net loss	—	—	—	—	—	(47,305)	(47,305)
Foreign currency translation	—	—	—	—	(6,282)	—	(6,282)
Balances as of October 31, 2022	95,575,775	$ 1,005	$ (369)	$ 1,351,987	$ (27,036)	$ (934,022)	$ 391,565

	Ordinary Shares		Treasury Shares Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Shareholders' Equity
	Shares	Amount					
Balances as of July 31, 2021	91,770,228	$ 963	$ (369)	$ 1,112,845	$ (9,969)	$ (647,807)	$ 455,663
Fair value of replacement equity awards attributable to pre-acquisition service	—	—	—	1,266	—	—	1,266
Issuance of ordinary shares upon exercise of stock options	690,538	8	—	9,844	—	—	9,852
Issuance of ordinary shares upon release of restricted stock units	105,259	1	—	(1)	—	—	—
Stock-based compensation	—	—	—	29,454	—	—	29,454
Net loss	—	—	—	—	—	(47,023)	(47,023)
Foreign currency translation	—	—	—	—	588	—	588
Balances as of October 31, 2021	92,566,025	$ 972	$ (369)	$ 1,153,408	$ (9,381)	$ (694,830)	$ 449,800

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

Elastic N.V.
Condensed Consolidated Statements of Shareholders' Equity
(in thousands, except share data)
(unaudited)

	Ordinary Shares		Treasury Shares	Additional Paid-in	Accumulated Other Comprehensive	Accumulated	Total Shareholders'
	Shares	Amount	Amount	Capital	Loss	Deficit	Equity
Balances as of April 30, 2022	94,174,914	$ 990	$ (369)	$ 1,250,108	$ (18,130)	$ (817,166)	$ 415,433
Issuance of ordinary shares upon exercise of stock options	484,076	6	—	7,718	—	—	7,724
Issuance of ordinary shares upon release of restricted stock units	916,785	9	—	(9)	—	—	—
Stock-based compensation	—	—	—	94,170	—	—	94,170
Net loss	—	—	—	—	—	(116,856)	(116,856)
Foreign currency translation	—	—	—	—	(8,906)	—	(8,906)
Balances as of October 31, 2022	95,575,775	$ 1,005	$ (369)	$ 1,351,987	$ (27,036)	$ (934,022)	$ 391,565

	Ordinary Shares		Treasury Shares	Additional Paid-in	Accumulated Other Comprehensive	Accumulated	Total Shareholders'
	Shares	Amount	Amount	Capital	Loss	Deficit	Equity
Balances as of April 30, 2021	90,533,985	$ 948	$ (369)	$ 1,071,675	$ (8,105)	$ (613,318)	$ 450,831
Fair value of replacement equity awards attributable to pre-acquisition service	—	—	—	1,266	—	—	1,266
Issuance of ordinary shares upon exercise of stock options	1,530,746	18	—	20,813	—	—	20,831
Issuance of ordinary shares upon release of restricted stock units	501,294	6	—	(6)	—	—	—
Stock-based compensation	—	—	—	59,660	—	—	59,660
Net loss	—	—	—	—	—	(81,512)	(81,512)
Foreign currency translation	—	—	—	—	(1,276)	—	(1,276)
Balances as of October 31, 2021	92,566,025	$ 972	$ (369)	$ 1,153,408	$ (9,381)	$ (694,830)	$ 449,800

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

Elastic N.V.
Condensed Consolidated Statements of Cash Flows
(in thousands)
(unaudited)

	Six Months Ended October 31,	
	2022	**2021**
Cash flows from operating activities		
Net loss	$ (116,856)	$ (81,512)
Adjustments to reconcile net loss to cash provided by operating activities:		
Depreciation and amortization	10,430	9,325
Amortization of deferred contract acquisition costs	35,674	28,570
Amortization of debt issuance costs	506	307
Non-cash operating lease cost	5,649	3,842
Stock-based compensation expense, net of amounts capitalized	94,170	59,578
Deferred income taxes	(80)	(249)
Foreign currency transaction loss	48	4
Other	67	98
Changes in operating assets and liabilities:		
Accounts receivable, net	25,193	519
Deferred contract acquisition costs	(43,569)	(39,277)
Prepaid expenses and other current assets	7,909	2,218
Other assets	4,809	(3,337)
Accounts payable	12,320	10,485
Accrued expenses and other liabilities	(1,645)	16,719
Accrued compensation and benefits	(5,947)	3,823
Operating lease liabilities	(5,573)	(3,983)
Deferred revenue	(22,168)	(3,462)
Net cash provided by operating activities	937	3,668
Cash flows from investing activities		
Purchases of property and equipment	(822)	(751)
Business acquisitions, net of cash acquired	—	(108,104)
Capitalization of internal-use software	—	(2,713)
Net cash used in investing activities	(822)	(111,568)
Cash flows from financing activities		
Proceeds from the issuance of debt	—	575,000
Proceeds from issuance of ordinary shares upon exercise of stock options	7,724	20,831
Payments of debt issuance costs	—	(9,234)
Net cash provided by financing activities	7,724	586,597
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	(12,854)	(3,407)
Net increase (decrease) in cash, cash equivalents, and restricted cash	(5,015)	475,290
Cash, cash equivalents, and restricted cash, beginning of period	863,637	403,708
Cash, cash equivalents, and restricted cash, end of period	$ 858,622	$ 878,998
Supplemental disclosures of cash flow information		
Cash paid for interest	$ 12,104	$ —
Cash paid for income taxes, net	$ 3,861	$ 1,905
Cash paid for operating lease liabilities	$ 6,605	$ 4,829
Supplemental disclosures of non-cash investing and financing information		
Property and equipment included in accounts payable	$ 64	$ 39
Operating lease right-of-use assets for new lease obligations	$ 10,770	$ 2,330
Debt issuance costs accrued, unpaid	$ —	$ 28

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

Elastic N.V.
Notes to Condensed Consolidated Financial Statements
(unaudited)

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1. Organization and Description of Business

Elastic N.V. (“Elastic” or the “Company”) was incorporated under the laws of the Netherlands in 2012. The Company created the Elastic Stack, a powerful set of software products that ingest and store data from any source and in any format, and perform search, analysis, and visualization on that data. Developers build on top of the Elastic Stack to apply the power of search to their data and solve business problems. The Company offers three software solutions built into the Elastic Stack: Enterprise Search, Observability, and Security. The Elastic Stack and the Company’s solutions are designed to run in public or private clouds, in hybrid environments, or in multi-cloud environments.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying interim condensed consolidated balance sheet as of October 31, 2022; interim condensed consolidated statements of operations, comprehensive loss, and shareholders’ equity for the three and six months ended October 31, 2022 and 2021; and interim condensed consolidated statements of cash flows for the six months ended October 31, 2022 and 2021; are unaudited. These interim condensed consolidated financial statements have been prepared on a basis consistent with the annual consolidated financial statements and, in the opinion of management, include all normal recurring adjustments necessary to fairly state the Company’s financial position as of October 31, 2022; results of the Company’s operations for the three and six months ended October 31, 2022 and 2021; statements of shareholders’ equity for the three and six months ended October 31, 2022 and 2021; and statements of cash flows for the six months ended October 31, 2022 and 2021. The financial data and other financial information disclosed in the notes to these interim condensed consolidated financial statements related to the three and six month periods are also unaudited. The results for the three and six months ended October 31, 2022 are not necessarily indicative of the operating results expected for the fiscal year ending April 30, 2023, or any future period.

The unaudited interim condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”) and include the financial statements of the Company and its wholly-owned subsidiaries. All intercompany transactions and accounts have been eliminated in consolidation.

Certain information and note disclosures normally included in the financial statements prepared in accordance with U.S. GAAP have been condensed or omitted pursuant to the applicable rules and regulations of the Securities and Exchange Commission (“SEC”). The condensed balance sheet data as of April 30, 2022 was derived from the Company’s audited financial statements, but does not include all disclosures required by U.S. GAAP. Therefore, these unaudited interim condensed consolidated financial statements and accompanying footnotes should be read in conjunction with the Company’s annual consolidated financial statements and related footnotes included in the Company's Annual Report on Form 10-K for the fiscal year ended April 30, 2022 filed with the SEC on June 21, 2022 (“the Company's Annual Report on Form 10-K”).

Fiscal Year

The Company’s fiscal year ends on April 30. References to fiscal 2023, for example, refer to the fiscal year ending April 30, 2023.

Use of Estimates and Judgments

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting period. Such estimates include, but are not limited to, allocation of revenue between recognized and deferred amounts, deferred contract acquisition costs, allowance for credit losses, valuation of stock-based compensation, fair value of ordinary shares in periods prior to the Company’s initial public offering, fair value of acquired intangible assets and goodwill, useful lives of acquired intangible assets and property and equipment, whether an arrangement is or contains a lease, the discount rate used for operating leases and valuation allowance for deferred income taxes. The Company bases these estimates on historical and anticipated results, trends and various other assumptions that it believes are reasonable under the circumstances, including assumptions as to future events.

Estimates and assumptions about future events and their effects cannot be determined with certainty and therefore require the exercise of judgment. As of the date of issuance of these financial statements, the Company is not aware of any specific event or circumstance that would require the Company to update its estimates, judgments or revise the carrying value of the Company’s assets or liabilities. These estimates may change, as new events occur and additional information is obtained, and are recognized in the consolidated financial statements as soon as they become known. Actual results could differ from those estimates and any such differences may be material to the Company’s financial statements.

Significant Accounting Policies

There have been no changes to the Company's significant accounting policies described in the Company's Annual Report on Form 10-K that have had a material impact on its consolidated financial statements and related notes.

Recently Adopted Accounting Pronouncements

Equity Awards: In May 2021, the Financial Accounting Standards Board ("FASB") issued ASU No. 2021-04, *Earnings Per Share (Topic 260), Debt—Modifications and Extinguishments (Subtopic 470-50), Compensation—Stock Compensation (Topic 718), and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options ("ASU No. 2021-04")*, which clarifies the accounting for modifications or exchanges of a freestanding equity-classified written call option that is not within the scope of another topic. It addresses how an entity should treat, measure the effect of, and recognize the effect of a modification of the terms or conditions or an exchange of a freestanding equity-classified written call option that remains equity classified after modification or exchange. The Company adopted ASU No. 2021-04 on May 1, 2022. The Company's adoption of this ASU did not have a material impact on its consolidated financial statements.

New Accounting Pronouncements Not Yet Adopted

Acquisitions: In October 2021, the FASB issued ASU No. 2021-08, *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*, improving consistency in accounting for acquired revenue contracts with customers in a business combination by requiring that acquirers apply ASC Topic 606 to recognize contract assets and contract liabilities as if they had originated the contracts. If the acquiree prepared its financial statements in accordance with U.S. GAAP, the resulting acquired contract assets and liabilities should generally be consistent with the acquiree's financial statements. The new guidance becomes effective for the Company for the fiscal year ending April 30, 2024. Early adoption is permitted. The Company does not expect the adoption of the new accounting standard to have a material impact on its consolidated financial statements.

3. Revenue and Remaining Performance Obligations

Disaggregation of Revenue

The following table presents revenue by category (in thousands):

	Three Months Ended October 31,				Six Months Ended October 31,			
	2022		2021		2022		2021	
	Amount	% of Total Revenue	Amount	% of Total Revenue	Amount	% of Total Revenue	Amount	% of Total Revenue
Elastic Cloud	$ 103,237	39 %	$ 69,031	34 %	$ 200,966	39 %	$ 130,561	33 %
Other subscription	137,974	52 %	121,226	58 %	272,059	53 %	236,881	59 %
Total subscription	241,211	91 %	190,257	92 %	473,025	92 %	367,442	92 %
Services	23,190	9 %	15,723	8 %	41,457	8 %	31,633	8 %
Total revenue	$ 264,401	100 %	$ 205,980	100 %	$ 514,482	100 %	$ 399,075	100 %

Remaining Performance Obligations

As of October 31, 2022, the Company had $901.2 million of remaining performance obligations. As of October 31, 2022, the Company expects to recognize approximately 89% of its remaining performance obligations as revenue over the next 24 months and the remainder thereafter.

4. Fair Value Measurements

Financial Assets

The Company measures financial assets and liabilities that are measured at fair value on a recurring basis at each reporting period using a fair value hierarchy that prioritizes the use of observable inputs and minimizes the use of unobservable inputs when measuring fair value. A financial instrument's classification within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

The following table summarizes assets that are measured at fair value on a recurring basis as of October 31, 2022 (in thousands):

	Level 1	Level 2	Level 3	Total
Financial Assets:				
Cash and cash equivalents:				
Money market funds	$ 566,258	$ —	$ —	$ 566,258

The following table summarizes assets that are measured at fair value on a recurring basis as of April 30, 2022 (in thousands):

	Level 1	Level 2	Level 3	Total
Financial Assets:				
Cash and cash equivalents:				
Money market funds	$ 559,462	$ —	$ —	$ 559,462

The Company considers all highly liquid investments, including money market funds with an original maturity of three months or less at the date of purchase, to be cash equivalents. The Company uses quoted prices in active markets for identical assets to determine the fair value of its Level 1 investments in money market funds.

Financial Liabilities

In July 2021, the Company issued $575.0 million aggregate principal amount of 4.125% Senior Notes due July 15, 2029 (the "Senior Notes") in a private placement. Based on the trading prices of the Senior Notes, the fair value of the Senior Notes as of October 31, 2022 was approximately $480.7 million. While the Senior Notes are recorded at cost, the fair value of the Senior Notes was determined based on quoted prices in markets that are not active; accordingly, the Senior Notes are categorized as Level 2 for purposes of the fair value measurement hierarchy.

5. Acquisitions

Fiscal 2022 Acquisitions

cmdWatch Security Inc.

On September 17, 2021, the Company acquired 100% of the share capital of cmdWatch Security Inc. ("Cmd") for a total purchase consideration of $77.8 million. The purchase consideration includes an amount of $13.4 million which is being held in an indemnity escrow fund for 18 months after the acquisition close date. Pursuant to the merger agreement, Cmd's vested stock options were paid in cash and unvested stock options held by Cmd employees were assumed by the Company. The fair value of the replacement equity awards associated with pre-acquisition service period of $4.3 million, consisting of $3.0 million paid in cash to vested option holders and $1.3 million of non-cash consideration, was included in the total purchase consideration. Approximately $6.6 million of the fair value of replacement equity awards was allocated to post-acquisition services that will be recognized as stock-based compensation expense over the remaining service period and was excluded from the total purchase consideration. Additionally, an amount of $6.5 million for post-combination services, which is payable at future dates upon completion of the underlying required service period, has been excluded from the purchase consideration. This amount will be recorded as a post-combination expense over the requisite service period.

The acquisition was accounted for as a business combination in accordance with ASC 805, *Business Combinations*, and accordingly, the total purchase consideration was allocated to the tangible and intangible assets acquired and liabilities assumed based on their estimated fair values on the acquisition date. The total purchase price allocated to developed technology and goodwill was $15.5 million and $58.7 million, respectively. The fair value assigned to developed technology was determined using the cost to recreate approach. The developed technology asset is being amortized on a straight-line basis over the useful life of 5 years, which approximates the pattern in which the developed technology is utilized. Goodwill resulted primarily from the expectation of enhancing the Company's current security solutions and is not deductible for income tax purposes.

Cmd has been included in the Company's condensed consolidated results of operations since the acquisition date. Pro forma and historical results of operations for this acquisition have not been presented because they were not material to the condensed consolidated results of operations.

Other Acquisitions

On September 2, 2021 and November 1, 2021, the Company acquired 100% of the share capital of Build Security Ltd. (“build.security”) and Optimyze.cloud Inc. (“Optimyze”), respectively, for a combined total purchase consideration of $57.2 million. The purchase consideration includes an amount of $5.4 million held in an indemnity escrow for the build.security acquisition, which was released on the 12-month anniversary of such acquisition, and $6.0 million held back by the Company for indemnity for the Optimyze acquisition, which will be released upon the 18-month anniversary of such acquisition. These acquisitions were accounted for as business combinations. The total purchase price allocated to developed technology and goodwill was $9.8 million and $46.7 million, respectively. The developed technology intangible assets from these acquisitions are being amortized on a straight-line basis over a useful life of 5 years which approximates the pattern in which the respective developed technologies are utilized. Goodwill resulted primarily from the expectation of enhancing the Company's current security solutions and the value of the acquired workforce. This goodwill is not deductible for income tax purposes. Build.security and Optimyze have been included in the Company’s condensed consolidated results of operations since their respective acquisition dates. Pro forma and historical results of operations for these acquisitions have not been presented because they were not material to the condensed consolidated results of operations.

Excluded from the combined purchase consideration from these two acquisitions is an amount of $6.3 million, payable in equal installments at the first and the second anniversary of each of the acquisitions, to certain employees of build.security and Optimyze. These amounts are for post-combination services and will be recorded as a post-combination expense over the requisite service periods.

6. Balance Sheet Components

Property and Equipment, Net

The cost and accumulated depreciation of property and equipment were as follows (in thousands):

	Useful Life (in years)	As of October 31, 2022	As of April 30, 2022
Leasehold improvements	Lesser of estimated useful life or remaining lease term	$ 11,017	$ 10,863
Computer hardware and software	3	2,186	1,473
Furniture and fixtures	3-5	5,979	5,753
Assets under construction		21	1,119
Total property and equipment		19,203	19,208
Less: accumulated depreciation		(13,507)	(12,001)
Property and equipment, net		$ 5,696	$ 7,207

Depreciation expense related to property and equipment was $1.0 million and $2.0 million for the three and six months ended October 31, 2022, respectively, and $1.0 million and $2.0 million for the three and six months ended October 31, 2021, respectively.

Intangible Assets, Net

Intangible assets consisted of the following as of October 31, 2022 (in thousands):

	Gross Fair Value	Accumulated Amortization	Net Book Value	Weighted Average Remaining Useful Life (in years)
Developed technology	$ 70,130	$ 37,279	$ 32,851	3.1
Customer relationships	19,598	15,428	4,170	0.9
Trade names	2,872	2,476	396	0.9
Total	$ 92,600	$ 55,183	$ 37,417	3.0
Foreign currency translation adjustment			(33)	
Total			$ 37,384	

Intangible assets consisted of the following as of April 30, 2022 (in thousands):

	Gross Fair Value	Accumulated Amortization	Net Book Value	Weighted Average Remaining Useful Life (in years)
Developed technology	$ 70,130	$ 31,355	$ 38,775	3.6
Customer relationships	19,598	13,177	6,421	1.4
Trade names	2,872	2,263	609	1.4
Total	$ 92,600	$ 46,795	$ 45,805	3.2
Foreign currency translation adjustment			(5)	
Total			$ 45,800	

Amortization expense for the intangible assets for the three and six months ended October 31, 2022 and 2021 was as follows (in thousands):

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
Cost of revenue - subscription	$ 2,961	$ 2,498	$ 5,925	$ 4,510
Sales and marketing	1,232	1,428	2,463	2,857
Total amortization of acquired intangible assets	$ 4,193	$ 3,926	$ 8,388	$ 7,367

The expected future amortization expense related to the intangible assets as of October 31, 2022 was as follows (in thousands, by fiscal year):

Remainder of 2023	$ 8,280
2024	13,985
2025	8,018
2026	5,057
2027	2,044
Total	$ 37,384

Goodwill

The following table represents the changes to goodwill (in thousands):

	Carrying Amount
Balance as of April 30, 2022	$ 303,906
Foreign currency translation adjustment	(164)
Balance as of October 31, 2022	$ 303,742

There was no impairment of goodwill during the six months ended October 31, 2022 and 2021.

Accrued Expenses and Other Liabilities

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

	As of October 31, 2022	As of April 30, 2022
Accrued expenses	$ 24,787	$ 24,066
Income taxes payable	11,352	4,286
Accrued interest	6,918	6,918
Value added taxes payable	5,329	8,926
Other	13,964	9,734
Total accrued expenses and other liabilities	$ 62,350	$ 53,930

Accrued Compensation and Benefits

Accrued compensation and benefits consisted of the following (in thousands):

	As of October 31, 2022	As of April 30, 2022
Accrued vacation	$ 28,628	$ 27,280
Accrued commissions	15,654	23,806
Accrued payroll and withholding taxes	7,302	9,030
Other	8,917	7,886
Total accrued compensation and benefits	$ 60,501	$ 68,002

Contract Balances

The following table provides information about unbilled accounts receivable, deferred contract acquisition costs, and deferred revenue from contracts with customers (in thousands):

	As of October 31, 2022	As of April 30, 2022
Unbilled accounts receivable, included in accounts receivable, net	$ 3,236	$ 9,244
Deferred contract acquisition costs	$ 122,962	$ 118,047
Deferred revenue	$ 433,585	$ 465,294

Deferred Contract Acquisition Costs

The following table summarizes the activity of the deferred contract acquisition costs (in thousands):

	Six Months Ended October 31,	
	2022	2021
Beginning balance	$ 118,047	$ 86,352
Capitalization of contract acquisition costs	40,589	38,255
Amortization of deferred contract acquisition costs	(35,674)	(28,570)
Ending balance	$ 122,962	$ 96,037

The Company did not recognize any impairment of deferred contract acquisition costs during the six months ended October 31, 2022 and 2021.

Deferred Revenue

The following table summarizes the deferred revenue activity (in thousands):

	Six Months Ended October 31,	
	2022	2021
Beginning balance	$ 465,294	$ 397,700
Increases due to invoices issued, excluding amounts recognized as revenue during the period	269,645	238,822
Increase from acquisitions, net of revenue recognized	—	1,001
Revenue recognized that was included in deferred revenue balance at beginning of period	(301,354)	(247,210)
Ending balance	$ 433,585	$ 390,313

Allowance for Credit Losses

The following is a summary of the changes in the Company's allowance for credit losses (in thousands):

	Six Months Ended October 31,	
	2022	2021
Beginning balance	$ 2,700	$ 2,344
Bad debt expense	785	2,221
Accounts written off	(1,684)	(1,669)
Ending balance	$ 1,801	$ 2,896

7. Senior Notes

In July 2021, the Company issued $575.0 million aggregate principal amount of 4.125% Senior Notes due July 15, 2029 in a private placement.

Interest on the Senior Notes is payable semi-annually in arrears on January 15 and July 15 of each year, commencing on January 15, 2022. The Company received net proceeds from the offering of the Senior Notes of $565.7 million after deducting underwriting commissions of $7.2 million and incurred additional issuance costs of $2.1 million. Total debt issuance costs of $9.3 million are being amortized to interest expense using the effective interest method over the term of the Senior Notes. The Company may redeem the Senior Notes, in whole or in part, at any time prior to July 15, 2024 at a price equal to 100% of the principal amount thereof plus a "make-whole" premium and accrued and unpaid interest, if any. The Company may at its election redeem all or a part of the Senior Notes on or after July 15, 2024, on any one or more occasions, at the redemption prices set forth in the indenture governing the Senior Notes (the "Indenture"), plus, in each case, accrued and unpaid interest thereon, if any, to, but excluding, the applicable redemption date. In addition, at any time prior to July 15, 2024, the Company may on any one or more occasions redeem up to 40% of the aggregate principal amount of the Senior Notes outstanding under the Indenture with the net cash proceeds of one or more equity offerings at a redemption price equal to 104.125% of the principal amount of the Senior Notes then outstanding, plus accrued and unpaid interest thereon, if any, to, but excluding, the applicable redemption date. The Company may also at its election redeem the Senior Notes in whole, but not in part, at a price equal to 100% of the principal amount thereof plus accrued and unpaid interest, if any, if certain changes in tax law occur as set forth in the Indenture.

If the Company experiences a change of control triggering event (as defined in the Indenture), the Company must offer to repurchase the Senior Notes at a repurchase price equal to 101% of the principal amount of the Senior Notes to be repurchased, plus accrued and unpaid interest, if any, to the repurchase date.

The indenture governing the Senior Notes contain covenants limiting the Company's ability and the ability of certain subsidiaries to create liens on certain assets to secure debt; grant a subsidiary guarantee of certain debt without also providing a guarantee of the Senior Notes; and consolidate or merge with or into, or sell or otherwise dispose of all or substantially all of its assets to, another person. These covenants are subject to a number of limitations and exceptions. Certain of these covenants will not apply during any period in which the notes are rated investment grade by Moody's Investors Service, Inc. and Standard & Poor's Ratings Services. As of October 31, 2022, the Company was in compliance with all of its covenants under the Indenture associated with the Senior Notes.

The net carrying amount of the Senior Notes was as follows (in thousands):

	As of October 31, 2022
Principal	$ 575,000
Unamortized debt issuance costs	(7,974)
Net carrying amount	$ 567,026

The following table sets forth the interest expense recognized related to the Senior Notes (in thousands):

	Six Months Ended October 31, 2022
Contractual interest expense	$ 11,859
Amortization of debt issuance costs	506
Total interest expense related to the Senior Notes	$ 12,365

8. Commitments and Contingencies

Cloud Hosting Commitments

During the six months ended October 31, 2022, there were no material changes, outside the ordinary course of business, to the Company's contractual obligations and commitments reported in the Company's Annual Report on Form 10-K.

Letters of Credit

The Company had a total of $2.3 million in letters of credit outstanding in favor of certain landlords for office space as of October 31, 2022.

Legal Matters

From time to time, the Company has become involved in claims and other legal matters arising in the ordinary course of business. The Company investigates these claims as they arise. Although claims are inherently unpredictable, the Company is currently not aware of any matters that, if determined adversely to the Company, would individually or taken together have a material adverse effect on its business, results of operations, financial position or cash flows.

The Company accrues estimates for resolution of legal and other contingencies when losses are probable and reasonably estimable.

Although the results of litigation and claims are inherently unpredictable, the Company does not believe that there were any matters under litigation or claims with a reasonable possibility of the Company incurring a material loss as of October 31, 2022.

Indemnification

The Company enters into indemnification provisions under its agreements with other companies in the ordinary course of business, including business partners, landlords, contractors and parties performing its research and development. Pursuant to these arrangements, the Company agrees to indemnify, hold harmless, and reimburse the indemnified party for certain losses suffered or incurred by the indemnified party as a result of the Company's activities. The maximum potential amount of future payments the Company could be required to make under these agreements is not determinable. The Company has never incurred costs to defend lawsuits or settle claims related to these indemnification agreements. As a result, the Company believes the fair value of these agreements is not material. The Company maintains commercial general liability insurance and product liability insurance to offset certain of the Company's potential liabilities under these indemnification provisions.

In addition, the Company indemnifies its officers, directors and certain key employees against certain liabilities that may arise as a result of their affiliation with the Company. To date, there have been no claims under any indemnification provisions.

Gain Contingencies

From time to time the Company may realize a gain contingency, although recognition will not occur until cash is received or the gain is deemed as realizable. During the three months ended October 31, 2022, the Company received a favorable settlement from a legal claim and recognized a gain of $10.2 million included in other income in the accompanying condensed consolidated statements of operations.

9. Leases

The Company's leases are composed of corporate office spaces under non-cancelable operating lease agreements that expire at various dates through fiscal 2029. The Company does not have any finance leases.

Lease Costs

Components of lease costs included in the condensed consolidated statement of operations were as follows (in thousands):

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
Operating lease cost	$ 3,318	$ 2,486	$ 6,451	$ 4,771
Short-term lease cost	565	449	1,348	990
Variable lease cost	(3)	302	227	507
Total lease cost	$ 3,880	$ 3,237	$ 8,026	$ 6,268

Lease term and discount rate information are summarized as follows:

	As of October 31, 2022
Weighted average remaining lease term (years)	3.00
Weighted average discount rate	4.74 %

Future minimum lease payments under non-cancelable operating leases on an undiscounted cash flow basis as of October 31, 2022 were as follows (in thousands):

Years Ending April 30,	
Remainder of 2023	$ 6,345
2024	12,688
2025	8,397
2026	4,379
2027	918
Thereafter	1,250
Total minimum lease payments	33,977
Less imputed interest	(2,502)
Present value of future minimum lease payments	31,475
Less current lease liabilities	(12,348)
Operating lease liabilities, non-current	$ 19,127

10. Ordinary Shares

The Company's articles of association designated and authorized the Company to issue 165 million ordinary shares at a par value per ordinary share of €0.01 per share.

Each holder of ordinary shares has the right to one vote per ordinary share. The holders of ordinary shares are also entitled to receive dividends whenever funds are legally available and when declared by the board of directors, subject to the prior rights of holders of all classes of shares outstanding having priority rights to dividends. No dividends have been declared by the Company's board of directors from inception through October 31, 2022.

Ordinary Shares Reserved for Issuance

The Company had reserved ordinary shares for issuance as follows:

	As of October 31, 2022	As of April 30, 2022
Stock options issued and outstanding	4,714,431	5,219,124
RSUs issued and outstanding	4,536,920	4,717,548
Remaining shares available for future issuance under the 2012 Plan	21,640,240	17,647,684
Total ordinary shares reserved	30,891,591	27,584,356

Convertible Preference Shares

The Company's board of directors has the authority, for a period of five years from October 10, 2018, without further action by the Company's shareholders, to issue up to 165 million shares of undesignated convertible preference shares with rights and preferences, including voting rights, designated from time to time by the board of directors. As of October 31, 2022, there were no convertible preference shares issued or outstanding.

11. Equity Incentive Plans

In September 2012, the Company's board of directors adopted and the Company's shareholders approved the 2012 Stock Option Plan, which was amended and restated in September 2018 and further amended in December 2021 (as amended and restated, the "2012 Plan"). Under the 2012 Plan, the board of directors, the compensation committee, as administrator of the 2012 Plan, and a duly authorized committee may grant stock options and other equity-based awards, such as Restricted Stock Awards ("RSAs") or Restricted Stock Units ("RSUs"), to eligible employees, directors, and consultants to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to employees, directors and consultants, and to promote the success of the Company's business. The Company's board of directors, compensation committee or a duly authorized committee determines the vesting schedule for all equity-based awards. Stock options and RSUs granted to employees generally vest over four years, subject to the employees' continued service to the Company. The Company's compensation committee may explicitly deviate from the general vesting schedules in its approval of an equity-based award, as it may deem appropriate. Stock options expire ten years after the date of grant. Stock options, RSAs and RSUs that are canceled under certain conditions become available for future grant or sale under the 2012 Plan unless the 2012 Plan is terminated.

The equity awards available for grant were as follows:

	Six Months Ended October 31, 2022
Available at beginning of fiscal year	17,647,684
Awards authorized	4,708,746
Options granted	(94,105)
Options cancelled	114,072
RSUs granted	(1,230,913)
RSUs cancelled	494,235
Shares withheld for taxes	521
Available at end of period	21,640,240

Stock Incentive Plans Assumed in Acquisitions

In connection with acquisitions completed in prior years, the Company assumed certain unvested stock options that were outstanding on the date of the respective acquisitions.

The assumed stock options will continue to be outstanding and will be governed by the provisions of their respective plans and are included in the stock option activity table below.

Stock Options

The following table summarizes stock option activity (in thousands, except share and per share data):

	Stock Options Outstanding			
	Number of Stock Options Outstanding	Weighted-Average Exercise Price	Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Balance as of April 30, 2022	5,219,124	$ 29.41	6.22	$ 266,021
Stock options granted	94,105	$ 82.24		
Stock options exercised	(484,076)	$ 16.04		
Stock options cancelled	(113,359)	$ 79.85		
Stock options assumed in acquisition cancelled	(1,363)	$ 54.63		
Balance as of October 31, 2022	4,714,431	$ 30.62	5.80	$ 187,821
Exercisable as of October 31, 2022	3,818,238	$ 21.19	5.52	$ 173,361

Aggregate intrinsic value represents the difference between the exercise price of the stock options to purchase ordinary shares and the fair value of the Company's ordinary shares. The weighted-average grant-date fair value per share of stock options granted was $49.97 and $48.56 for the three and six months ended October 31, 2022, respectively. The weighted-average grant-date fair value per share of stock options assumed related to the Cmd and build.security acquisitions was $122.13 for the three and six months ended October 31, 2021.

As of October 31, 2022, the Company had unrecognized stock-based compensation expense of $37.2 million related to unvested stock options that the Company expects to recognize over a weighted-average period of 2.22 years.

RSUs

The following table summarizes RSU activity under the 2012 Plan:

	Number of Awards	Weighted-Average Grant Date Fair Value
Outstanding and unvested at April 30, 2022	4,717,548	$ 108.44
RSUs granted	1,230,913	$ 81.65
RSUs released	(917,306)	$ 102.56
RSUs cancelled	(494,235)	$ 109.97
Outstanding and unvested at October 31, 2022	4,536,920	$ 102.20

As of October 31, 2022, the Company had unrecognized stock-based compensation expense of $421.0 million related to RSUs that the Company expects to recognize over a weighted-average period of 2.69 years.

Stock-Based Compensation Expense

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

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
Cost of revenue				
Subscription	$ 2,029	$ 2,064	$ 4,189	$ 4,198
Services	2,313	1,292	4,538	2,867
Research and development	18,763	13,658	37,473	25,755
Sales and marketing	16,013	8,403	31,660	18,253
General and administrative	8,169	4,565	16,310	9,087
Stock-based compensation expense, net of amounts capitalized	47,287	29,982	94,170	60,160
Capitalized stock-based compensation expense	—	54	—	82
Total stock-based compensation expense	$ 47,287	$ 30,036	$ 94,170	$ 60,242

12. Net Loss Per Share Attributable to Ordinary Shareholders

The following table sets forth the computation of basic and diluted net loss per share attributable to ordinary shareholders (in thousands, except share and per share data):

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
Numerator:				
Net loss	$ (47,305)	$ (47,023)	$ (116,856)	$ (81,512)
Denominator:				
Weighted-average shares used in computing net loss per share attributable to ordinary shareholders, basic and diluted	95,307,146	92,206,199	94,964,423	91,703,786
Net loss per share attributable to ordinary shareholders, basic and diluted	$ (0.50)	$ (0.51)	$ (1.23)	$ (0.89)

Since the Company is in a net loss position for all periods presented, basic net loss per share is the same as diluted net loss per share for all periods. The following outstanding potentially dilutive ordinary shares were excluded from the computation of diluted net loss per share attributable to ordinary shareholders for the periods presented because the impact of including them would have been antidilutive:

	Six Months Ended October 31,	
	2022	2021
Stock options	4,714,431	5,913,745
RSUs	4,536,920	3,074,014
Total	9,251,351	8,987,759

13. Income Taxes

The Company is incorporated in the Netherlands but operates in various countries with differing tax laws and rates. The Company recorded a provision for income taxes of $7.0 million and $2.9 million for the three months ended October 31, 2022 and 2021, respectively, and $9.9 million and $5.5 million for the six months ended October 31, 2022 and 2021, respectively. The provision for income taxes in the three and six months ended October 31, 2022 includes a one-time charge of $3.7 million related to completion of acquisition related integration. The remaining increase was primarily due to foreign taxes. The calculation of income taxes is based upon the estimated annual effective tax rates for the year applied to the current period loss before tax plus the tax effect of any significant unusual items, discrete events, or changes in tax law.

The Company assesses uncertain tax positions in accordance with ASC 740-10, *Accounting for Uncertainties in Tax*. The Company anticipates that the amount of reasonably possible unrecognized tax benefits that could decrease over the next twelve months due to the expiration of certain statutes of limitations and settlement of tax audits is not material to the Company's interim unaudited condensed consolidated financial statements.

14. Employee Benefit Plans

The Company has a defined-contribution plan in the U.S. intended to qualify under Section 401 of the Internal Revenue Code (the "401(k) Plan"). The Company has contracted with a third-party provider to act as a custodian and trustee, and to process and maintain the records of participant data. Substantially all the expenses incurred for administering the 401(k) Plan are paid by the Company. The 401(k) Plan covers substantially all employees who meet minimum age and service requirements and allows participants to defer a portion of their annual compensation on a pre-tax basis. The Company makes contributions to the 401(k) Plan up to 6% of the participating employee's W-2 earnings and wages. The Company recorded $4.4 million and $3.5 million of expense related to the 401(k) Plan for the three months ended October 31, 2022 and 2021, respectively, and $9.1 million and $7.0 million for the six months ended October 31, 2022 and 2021, respectively.

The Company also has defined-contribution plans in certain other countries for which the Company recorded $2.1 million and $1.6 million of expense for the three months ended October 31, 2022 and 2021, respectively, and $4.5 million and $3.2 million for the six months ended October 31, 2022 and 2021, respectively.

15. Segment Information

The following table summarizes the Company's total revenue by geographic area based on the billing address of the customers (in thousands):

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
United States	$ 159,694	$ 115,509	$ 305,061	$ 218,649
Rest of world	104,707	90,471	209,421	180,426
Total revenue	$ 264,401	$ 205,980	$ 514,482	$ 399,075

Other than the United States, no other individual country exceeded 10% or more of total revenue during the periods presented.

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

	As of October 31, 2022	As of April 30, 2022
United States	$ 21,862	$ 22,112
The Netherlands	4,777	1,728
United Kingdom	3,188	4,478
India	2,649	3,407
Rest of world	3,060	919
Total long-lived assets	$ 35,536	$ 32,644

16. Subsequent Events

On November 30, 2022, the Company committed to a plan to align its investments more closely with its strategic priorities by reducing the Company's workforce by approximately 13% and implementing certain facilities-related cost optimization actions. Pursuant to this plan, Elastic intends to rebalance investments across all functions and to strategically reinvest some savings in key priority areas to drive growth. The Company expects to incur total pre-tax non-recurring charges of approximately $32 million to $36 million under the plan of which estimated charges in the range of $25 million to $28 million will consist of employee-related costs, including severance and other termination benefits, with the remaining costs related to the optimization of office space. The substantial majority of these charges will result in cash expenditures. The Company expects to incur the substantial majority of these charges during the third quarter of fiscal 2023 and expects to incur the remaining amount of these charges in future periods. The Company expects that the implementation of the workforce reductions and facilities cost optimization will be substantially completed by the end of the first quarter of fiscal 2024, although the timing of workforce reductions may vary by country based on local legal requirements. The foregoing estimates of the charges the Company expects to incur under the plan are subject to assumptions, including application of local legal requirements in various jurisdictions, and actual charges may differ from such estimates.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our condensed consolidated financial statements and related notes included elsewhere in this Quarterly Report on Form 10-Q and with our Management's Discussion and Analysis of Financial Condition and Results of Operations and audited consolidated financial statements included in our Annual Report on Form 10-K for the year ended April 30, 2022. As discussed in the section titled "Note Regarding Forward-Looking Statements," the following discussion and analysis contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed below. Factors that could cause or contribute to such difference include, but are not limited to, those identified below and those discussed in the section titled "Risk Factors" under Part II, Item 1A in this Quarterly Report on Form 10-Q. Our fiscal year end is April 30, and our fiscal quarters end on July 31, October 31, January 31, and April 30. Our fiscal year ended April 30, 2022 is referred to as fiscal 2022, and our fiscal year ending April 30, 2023 is referred to as fiscal 2023.

Overview

Elastic is a data analytics company built on the power of search. Our platform, which is available as both a hosted, managed service across public clouds as well as self-managed software, allows our customers to almost instantly find insights from large amounts of data and take action. We offer three search-powered solutions – Enterprise Search, Observability, and Security – that are built into the platform. We help organizations, their employees, and their customers find what they need faster, while keeping mission-critical applications running smoothly, and protecting against cyber threats.

Our platform is built on the Elastic Stack, a powerful set of software products that ingest data from any source, in any format, and perform search, analysis, and visualization of that data. At the core of the Elastic Stack is Elasticsearch – a highly scalable document store and search engine, and the only data store for all of our solutions and use cases. The Elastic Stack can be used by developers to power a variety of use cases. It is a distributed, real-time search and analytics engine and data store for all types of data including textual, numerical, geospatial, structured, and unstructured.

We make our platform available as a hosted, managed service. Customers can also deploy our platform across hybrid clouds, public or private clouds, and multi-cloud environments. As digital transformation and cloud adoption drive mission critical business functions online and to the cloud, we believe that every company will need to build around a search-based data analytics platform, one which brings speed, scale, and relevance to the vast volumes of data being generated.

Our business model is based primarily on a combination of a paid Elastic-managed hosted service offering and paid and free proprietary self-managed software. Our paid offerings for our platform are sold via subscription through resource-based pricing, and all customers and users have access to all solutions. In Elastic Cloud, our family of cloud-based offerings under which we offer our software as a hosted, managed service, we offer various subscription tiers tied to different features. For users who download our software, we make some of the features of our software available for free, allowing us to engage with a broad community of developers and practitioners and introduce them to the value of the Elastic Stack. We believe in the importance of an open software development model, and we develop the majority of our software in public repositories as open code under a proprietary license. Unlike some companies, we do not build an enterprise version that is separate from our free distribution. We offer a single code base across both our self-managed software and Elastic-hosted services. All of these actions help us build a powerful commercial business model that we believe is optimized for product-led growth.

We generate revenue primarily from sales of subscriptions to our platform. We offer various paid subscription tiers that provide different levels of rights to use proprietary features and access to support. We do not sell support separately. Our subscription agreements range from one to three years and are usually billed annually in advance. Our subscription agreements are both term-based and consumption-based, with the vast majority of Elastic Cloud subscriptions being consumption-based. We sell subscriptions in various currencies, with the majority of our subscriptions contracted in US dollars, and a smaller portion contracted in Euro, British Pound Sterling, and other currencies. Elastic Cloud customers may also purchase subscriptions on a month-to-month basis without a commitment, with usage billed at the end of each month. Subscriptions accounted for 92% of total revenue for both the six months ended October 31, 2022 and 2021. We also generate revenue from consulting and training services.

We make it easy for users to begin using our products in order to drive rapid adoption. Users can either sign up for a free trial on Elastic Cloud or download our software directly from our website without any sales interaction, and immediately begin using the full set of features. Users can also sign up for Elastic Cloud through public cloud marketplaces. We conduct low-touch campaigns to keep users and customers engaged once they have begun using Elastic Cloud or have downloaded our software. As of October 31, 2022, we had approximately 19,700 customers compared to over 17,000 customers as of October 31, 2021. The majority of our new customers use Elastic Cloud. We define a customer as an entity that generated revenue in the quarter ending on the measurement date from an annual or month-to-month subscription. Affiliated entities are typically counted as a single customer.

Many of these customers start with limited initial spending, but can significantly grow their spending. We drive high-touch engagement with qualified prospects and customers to drive further awareness, adoption, and expansion of our products with paid subscriptions. Expansion includes increasing the number of developers and practitioners using our products, increasing the utilization of our products for a particular use case, and applying our products to new use cases. The number of customers who represented greater than $100,000 in annual contract value ("ACV") was over 1,050 and over 830 as of October 31, 2022 and 2021, respectively. The ACV of a customer's commitments is calculated based on the terms of that customer's subscriptions, and represents the total committed annual subscription amount as of the measurement date. Month-to-month subscriptions are not included in the calculation of ACV.

Our sales teams are organized primarily by geography and secondarily by customer segments. They focus on both initial conversion of users into customers and additional sales to existing customers. In addition to our direct sales efforts, we also maintain partnerships to further extend our reach and awareness of our products around the world.

We continue to make substantial investments in developing the Elastic Stack and our solutions and expanding our global sales and marketing footprint. With a distributed team spanning over 40 countries, we are able to recruit, hire, and retain high-quality, experienced technical and sales personnel and operate at a rapid pace to drive product releases, fix bugs, and create and market new products. We had 3,233 employees as of October 31, 2022.

COVID-19 and Current Economic Conditions

The ongoing effects of the COVID-19 pandemic continue to evolve and negatively impact worldwide economic activity, contributing to continued labor shortages, supply chain disruptions, and inflation. Additionally, governmental and corporate responses to these factors including rising interest rates, unpredictable and decreased spending, and layoffs have added to the highly volatile macroeconomic landscape. We have experienced and, if economic conditions continue to decline, we may continue to experience longer and more unpredictable sales cycles, increased scrutiny of deals, and slowing consumption and overall customer expenditures, as well as the impacts of changing foreign exchange rates and a strengthening U.S. dollar. We continue to closely monitor the macroeconomic environment and its effects on our business and on global economic activity, including customer spending behavior. Notwithstanding the potential and actual adverse impacts described above, as the pandemic has caused more of our customers to shift to a virtual workforce or accelerate their digital transformation efforts, we believe the value of our solutions has become even more evident.

To navigate the current economic environment, we are realigning resources internally to drive greater efficiencies and rebalance investments across all functions of the organization. We will adjust, monitor, and curtail spending when and where needed to adapt to the current macroeconomic landscape and will reinvest some of the savings selectively in areas that we believe best position us to drive profitable growth. See "Risk Factors" included in Part II, Item 1A of this Quarterly Report on Form 10-Q for a discussion of additional risks.

Key Factors Affecting Our Performance

We believe that the growth and future success of our business depends on many factors, including those described below. While each of these factors presents significant opportunities for our business, they also pose important challenges that we must successfully address in order to sustain our growth and improve our results of operations.

Increasing adoption of Elastic Cloud. Elastic Cloud, our family of cloud-based offerings, is an important growth opportunity for our business. Organizations are increasingly looking for hosted deployment alternatives with reduced administrative burdens. In some cases, users of our source available software that have been self-managing deployments of the Elastic Stack subsequently become paying subscribers of Elastic Cloud. For the six months ended October 31, 2022 and 2021, Elastic Cloud contributed 39% and 33% of our total revenue, respectively. We believe that offering Elastic Cloud is important for achieving our long-term growth potential, and we expect Elastic Cloud's contribution to our subscription revenue to increase over time. However, we expect that an increase in the relative contribution of Elastic Cloud to our business will have a modest adverse impact on our gross margin as a result of the associated third-party hosting costs.

Growing the Elastic community. Our strategy consists of providing access to source available software, on both a paid and free basis, and fostering a community of users and developers. Our strategy is designed to pursue what we believe to be significant untapped potential for the use of our technology. After developers begin to use our software and start to participate in our developer community, they become more likely to apply our technology to additional use cases and evangelize our technology within their organizations. This reduces the time required for our sales force to educate potential leads on our solutions. In order to capitalize on our opportunity, we intend to make further investments to keep the Elastic Stack accessible and well known to software developers around the world. We intend to continue to invest in our products and support and engage our user base and developer community through content, events, and conferences in the U.S. and internationally. Our results of operations may fluctuate as we make these investments.

Developing new features for the Elastic Stack. The Elastic Stack is applied to various use cases by customers, including through the solutions we offer. Our revenue is derived primarily from subscriptions of Enterprise Search, Observability and Security built into the Elastic Stack. We believe that releasing additional features of the Elastic Stack, including our solutions, drives usage of our products and ultimately drives our growth. To that end, we plan to continue to invest in building new features and solutions that expand the capabilities of the Elastic Stack. These investments may adversely affect our operating results prior to generating benefits, to the extent that they ultimately generate benefits at all.

Growing our customer base by converting users of our software to paid subscribers. Our financial performance depends on growing our paid customer base by converting free users of our software into paid subscribers. Our distribution model has resulted in rapid adoption by developers around the world. We have invested, and expect to continue to invest, heavily in sales and marketing efforts to convert additional free users to paid subscribers. Our investment in sales and marketing is significant given our large and diverse user base. The investments are likely to occur in advance of the anticipated benefits resulting from such investments, such that they may adversely affect our operating results in the near term.

Expanding within our current customer base. Our future growth and profitability depend on our ability to drive additional sales to existing customers. Customers often expand the use of our software within their organizations by increasing the number of developers using our products, increasing the utilization of our products for a particular use case, and expanding use of our products to additional use cases. We focus some of our direct sales efforts on encouraging these types of expansion within our customer base.

We believe that a useful indication of how our customer relationships have expanded over time is through our Net Expansion Rate, which is based upon trends in the rate at which customers increase their spend with us. To calculate an expansion rate as of the end of a given month, we start with the annualized spend from all such customers as of twelve months prior to that month end, or Prior Period Value. A customer's annualized spend is measured as their ACV, or in the case of customers charged on usage-based arrangements, by annualizing the usage for that month. We then calculate the annualized spend from these same customers as of the given month end, or Current Period Value, which includes any growth in the value of their subscriptions or usage and is net of contraction or attrition over the prior twelve months. We then divide the Current Period Value by the Prior Period Value to arrive at an expansion rate. The Net Expansion Rate at the end of any period is the weighted average of the expansion rates as of the end of each of the trailing twelve months. The Net Expansion Rate includes the dollar-weighted value of our subscriptions or usage that expand, renew, contract, or attrit. For instance, if each customer had a one-year subscription and renewed its subscription for the exact same amount, then the Net Expansion Rate would be 100%. Customers who reduced their annual subscription dollar value (contraction) or did not renew their annual subscription (attrition) would adversely affect the Net Expansion Rate. Our Net Expansion Rate was approximately 125% as of October 31, 2022.

As large organizations expand their use of the Elastic Stack across multiple use cases, projects, divisions and users, they often begin to require centralized provisioning, management and monitoring across multiple deployments. To satisfy these requirements, our Enterprise subscription tier provides access to key orchestration and deployment management capabilities. We will continue to focus some of our direct sales efforts on driving adoption of our paid offerings.

Components of Results of Operations

Revenue

Subscription. Our revenue is primarily generated through the sale of subscriptions to software, which is either self-managed by the user or hosted and managed by us in the cloud. Subscriptions provide the right to use paid proprietary software features and access to support for our paid and unpaid software.

A portion of the revenue from self-managed subscriptions is generally recognized up front at the point in time when the license is delivered and the remainder is recognized ratably over the subscription term. Revenue from subscriptions that require access to the cloud or that are hosted and managed by us is recognized ratably over the subscription term or on a usage basis for consumption-based arrangements; both are presented within Subscription revenue in our condensed consolidated statements of operations.

Services. Services is composed of consulting services as well as public and private training. Revenue for services is recognized as these services are delivered.

Cost of Revenue

Subscription. Cost of subscription consists primarily of personnel and related costs for employees associated with supporting our subscription arrangements, certain third-party expenses, and amortization of certain intangible and other assets. Personnel and related costs, or personnel costs, comprise cash compensation, benefits and stock-based compensation to employees, costs of third-party contractors, and allocated overhead costs. Third-party expenses consist of cloud hosting costs and other expenses directly associated with our customer support. We expect our cost of subscription to increase in absolute dollars as our subscription revenue increases.

Services. Cost of services revenue consists primarily of personnel costs directly associated with delivery of training, implementation and other services, costs of third-party contractors, facility rental charges and allocated overhead costs. We expect our cost of services to increase in absolute dollars as we invest in our business and as services revenue increases.

Gross profit and gross margin. Gross profit represents revenue less cost of revenue. Gross margin, or gross profit as a percentage of revenue, has been and will continue to be affected by a variety of factors, including the timing of our acquisition of new customers and our renewals with existing customers, the average sales price of our subscriptions and services, the amount of our revenue represented by hosted services, the mix of subscriptions sold, the mix of revenue between subscriptions and services, the mix of services between consulting and training, transaction volume growth and support case volume growth. We expect our gross margin to fluctuate over time depending on the factors described above. We expect our revenue from Elastic Cloud to continue to increase as a percentage of total revenue, which we expect will adversely impact our gross margin as a result of the associated hosting costs.

Operating Expenses

Research and development. Research and development expense mainly consists of personnel costs and allocated overhead costs for employees and contractors. We expect our research and development expense to increase in absolute dollars for the foreseeable future as we continue to develop new technology and invest further in our existing products.

Sales and marketing. Sales and marketing expense mainly consists of personnel costs, commissions, allocated overhead costs and costs related to marketing programs and user events. Marketing programs consist of advertising, events, brand-building and customer acquisition and retention activities. We expect our sales and marketing expense to increase in absolute dollars as we expand our salesforce and increase our investments in marketing resources. We capitalize sales commissions and associated payroll taxes paid to internal sales personnel that are related to the acquisition of customer contracts. Sales commissions costs are amortized over the expected benefit period.

General and administrative. General and administrative expense mainly consists of personnel costs for our management, finance, legal, human resources, and other administrative employees. Our general and administrative expense also includes professional fees, accounting fees, audit fees, tax services and legal fees, as well as insurance, allocated overhead costs, and other corporate expenses. We expect our general and administrative expense to increase in absolute dollars as we increase the size of our general and administrative functions to support the growth of our business.

Other Income (Expense), Net

Other income (expense), net primarily consists of interest income, interest expense, gains and losses from transactions denominated in a currency other than the functional currency, and miscellaneous other non-operating gains and losses.

Provision for Income Taxes

Provision for income taxes consists primarily of income taxes related to the Netherlands, U.S. federal, state and foreign jurisdictions in which we conduct business. Our effective tax rate is affected by recurring items, such as tax rates in jurisdictions outside the Netherlands and the relative amounts of income we earn in those jurisdictions, and non-deductible stock-based compensation.

Results of Operations

The following tables set forth our results of operations for the periods presented in dollars and as a percentage of our total revenue. The period to period comparison of results is not necessarily indicative of results for future periods.

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
	(in thousands)			
Revenue				
Subscription	$ 241,211	$ 190,257	$ 473,025	$ 367,442
Services	23,190	15,723	41,457	31,633
Total revenue	264,401	205,980	514,482	399,075
Cost of revenue [1][2][3]				
Subscription	55,101	42,242	108,652	79,762
Services	19,656	11,642	39,084	23,784
Total cost of revenue	74,757	53,884	147,736	103,546
Gross profit	189,644	152,096	366,746	295,529
Operating expenses [1][2][3][4]				
Research and development	75,568	63,763	154,217	123,145
Sales and marketing	128,179	94,953	253,185	182,986
General and administrative	34,925	30,555	69,013	57,607
Total operating expenses	238,672	189,271	476,415	363,738
Operating loss [1][2][3][4]	(49,028)	(37,175)	(109,669)	(68,209)
Other income (expense), net				
Interest expense	(6,209)	(6,332)	(12,610)	(8,152)
Other income (expense), net	14,975	(666)	15,314	352
Loss before income taxes	(40,262)	(44,173)	(106,965)	(76,009)
Provision for income taxes	7,043	2,850	9,891	5,503
Net loss	$ (47,305)	$ (47,023)	$ (116,856)	$ (81,512)

[1] Includes stock-based compensation expense as follows:

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
	(in thousands)			
Cost of revenue				
Subscription	$ 2,029	$ 2,064	$ 4,189	$ 4,198
Services	2,313	1,292	4,538	2,867
Research and development	18,763	13,658	37,473	25,755
Sales and marketing	16,013	8,403	31,660	18,253
General and administrative	8,169	4,565	16,310	9,087
Total stock-based compensation expense	$ 47,287	$ 29,982	$ 94,170	$ 60,160

(2) Includes employer payroll taxes on employee stock transactions as follows:

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
	(in thousands)			
Cost of Revenue				
Subscription	$ 30	$ 65	$ 253	$ 327
Services	53	114	197	478
Research and development	323	655	1,285	2,253
Sales and marketing	266	1,671	1,041	3,362
General and administrative	128	87	406	571
Total employer payroll tax on stock transactions	$ 800	$ 2,592	$ 3,182	$ 6,991

(3) Includes amortization of acquired intangible assets as follows:

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
	(in thousands)			
Cost of Revenue				
Subscription	$ 2,961	$ 2,498	$ 5,925	$ 4,510
Sales and marketing	1,232	1,428	2,463	2,857
Total amortization of acquired intangibles	$ 4,193	$ 3,926	$ 8,388	$ 7,367

(4) Includes acquisition-related expenses as follows:

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
	(in thousands)			
Research and development	$ 1,684	$ 982	$ 4,164	$ 982
General and administrative	—	1,060	37	1,286
Total acquisition-related expenses	$ 1,684	$ 2,042	$ 4,201	$ 2,268

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

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
Revenue				
Subscription	91 %	92 %	92 %	92 %
Services	9 %	8 %	8 %	8 %
Total revenue	100 %	100 %	100 %	100 %
Cost of revenue [1][2][3]				
Subscription	21 %	21 %	21 %	20 %
Services	7 %	5 %	8 %	6 %
Total cost of revenue	28 %	26 %	29 %	26 %
Gross profit	72 %	74 %	71 %	74 %
Operating expenses [1][2][3][4]				
Research and development	29 %	31 %	30 %	31 %
Sales and marketing	48 %	46 %	49 %	46 %
General and administrative	13 %	15 %	14 %	14 %
Total operating expenses	90 %	92 %	93 %	91 %
Operating loss [1][2][3][4]	(18)%	(18)%	(22)%	(17)%
Other income (expense), net				
Interest expense	(3)%	(3)%	(2)%	(2)%
Other income (expense), net	6 %	— %	3 %	— %
Loss before income taxes	(15)%	(21)%	(21)%	(19)%
Provision for income taxes	3 %	2 %	2 %	1 %
Net loss	(18)%	(23)%	(23)%	(20)%

[1] Includes stock-based compensation expense as follows:

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
Cost of revenue				
Subscription	1 %	1 %	1 %	1 %
Services	1 %	1 %	1 %	1 %
Research and development	7 %	7 %	7 %	6 %
Sales and marketing	6 %	4 %	6 %	5 %
General and administrative	3 %	2 %	3 %	2 %
Total stock-based compensation expense	18 %	15 %	18 %	15 %

[2] Includes employer payroll taxes on employee stock transactions as follows:

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
Cost of Revenue				
Subscription	— %	— %	— %	— %
Services	— %	— %	— %	— %
Research and development	— %	— %	1 %	1 %
Sales and marketing	— %	1 %	— %	1 %
General and administrative	— %	— %	— %	— %
Total employer payroll tax on stock transactions	— %	1 %	1 %	2 %

(3) Includes amortization of acquired intangible assets as follows:

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
Cost of Revenue				
Subscription	1 %	1 %	1 %	1 %
Sales and marketing	— %	1 %	1 %	1 %
Total amortization of acquired intangibles	1 %	2 %	2 %	2 %

(4) Includes acquisition-related expenses as follows:

	Three Months Ended October 31,		Six Months Ended October 31,	
	2022	2021	2022	2021
Research and development	1 %	— %	1 %	— %
General and administrative	— %	1 %	— %	— %
Total acquisition-related expenses	1 %	1 %	1 %	— %

Comparison of Three Months Ended October 31, 2022 and 2021

Revenue

	Three Months Ended October 31,		Change	
	2022	2021	$	%
	(in thousands)			
Revenue				
Subscription	$ 241,211	$ 190,257	$ 50,954	27 %
Services	23,190	15,723	7,467	47 %
Total revenue	$ 264,401	$ 205,980	$ 58,421	28 %

Subscription revenue increased by $51.0 million, or 27%, for the three months ended October 31, 2022 compared to the same period of the prior year. The increase in revenue was primarily caused by volume-driven increases from new business, as existing customers purchased additional subscriptions, and the growth of our subscription customer base to approximately 19,700 customers as of October 31, 2022 compared to over 17,000 customers as of October 31, 2021.

Services revenue increased by $7.5 million, or 47%, for the three months ended October 31, 2022 compared to the same period of the prior year. The increase in services revenue was attributable to increased adoption of our services offerings.

Cost of Revenue and Gross Margin

	Three Months Ended October 31,		Change	
	2022	2021	$	%
	(in thousands)			
Cost of revenue				
Subscription	$ 55,101	$ 42,242	$ 12,859	30 %
Services	19,656	11,642	8,014	69 %
Total cost of revenue	$ 74,757	$ 53,884	$ 20,873	39 %
Gross profit	$ 189,644	$ 152,096	$ 37,548	25 %
Gross margin:				
Subscription	77 %	78 %		
Services	15 %	26 %		
Total gross margin	72 %	74 %		

Cost of subscription revenue increased by $12.9 million, or 30%, for the three months ended October 31, 2022 compared to the same period of the prior year. This increase was primarily due to an increase of $11.9 million in cloud infrastructure costs and an increase of $0.5 million in intangible asset amortization. In addition, personnel and related costs increased by $0.5 million. The increase in personnel and related costs includes an increase of $0.4 million in salaries and related taxes and an increase of $0.1 million in employee benefit expense. Total subscription margin decreased to 77% for the three months ended October 31, 2022 compared to 78% for the same period of the prior year.

Cost of services revenue increased by $8.0 million, or 69%, for the three months ended October 31, 2022 compared to the same period of the prior year. This increase was primarily due to an increase of $5.7 million in personnel and related costs, including increases of $3.8 million in salaries and related taxes, $1.0 million in stock-based compensation, and $0.4 million in employee benefits expense driven by an increase in headcount in our services organization. In addition, subcontractor costs increased by $1.8 million and travel costs increased by $0.3 million.

Gross margin for services revenue was 15% for the three months ended October 31, 2022 compared to 26% for the same period of the prior year. The decrease in margin is primarily due to the cost of services, including personnel and related costs and subcontractor costs, growing at a higher rate than services revenue. We continue to invest in headcount for our services organization that we believe will be needed as we continue to grow and expect travel related costs will increase in the future as COVID-19 risks and travel restrictions abate. Our gross margin for services may fluctuate or decline in the near-term as we seek to expand our services business.

Operating Expenses

Research and development

	Three Months Ended October 31,		Change	
	2022	2021	$	%
	(in thousands)			
Research and development	$ 75,568	$ 63,763	$ 11,805	19 %

Research and development expense increased by $11.8 million, or 19%, for the three months ended October 31, 2022 compared to the same period of the prior year as we continued to invest in the development of new and existing offerings. Personnel and related costs increased by $9.1 million as a result of growth in headcount. In addition, travel costs increased by $1.0 million, cloud infrastructure costs related to our research and development activities increased by $0.9 million, and consulting costs increased by $0.4 million. The increase in personnel and related costs includes an increase of $5.1 million in stock-based compensation, an increase of $2.8 million in salaries and related taxes, and an increase of $0.8 million in employee benefits expense.

Sales and marketing

	Three Months Ended October 31,		Change	
	2022	2021	$	%
	(in thousands)			
Sales and marketing	$ 128,179	$ 94,953	$ 33,226	35 %

Sales and marketing expense increased by $33.2 million, or 35%, for the three months ended October 31, 2022 compared to the same period of the prior year. This increase was primarily due to an increase of $28.0 million in personnel related costs and a $1.1 million increase in software and equipment charges due to growth in headcount. In addition, travel expenses increased by $2.6 million and marketing expenses increased by $1.9 million. These increases were partially offset by a decrease in consulting costs of $0.3 million and a decrease in intangible asset amortization of $0.2 million The increase in personnel and related costs includes an increase of $12.8 million in salaries and related taxes, an increase of $7.6 million in stock-based compensation, an increase of $4.2 million in commission expense, and an increase of $2.5 million in employee benefits expense.

General and administrative

	Three Months Ended October 31,		Change	
	2022	2021	$	%
	(in thousands)			
General and administrative	$ 34,925	$ 30,555	$ 4,370	14 %

General and administrative expense increased by $4.4 million, or 14%, for the three months ended October 31, 2022 compared to the same period of the prior year. This increase was primarily due to an increase of $6.9 million in personnel related costs due to headcount growth. In addition, travel costs increased by $0.5 million and insurance and other taxes increased by $0.3 million. These increases were partially offset by a $2.2 million decrease in legal and professional fees and a $1.1 million decrease in bad debt expense. The increase in personnel and related costs includes an increase of $3.6 million in stock-based compensation expense, an increase of $2.4 million in salaries and related taxes, and an increase of $0.6 million in employee benefits expense.

Other Income (Expense), Net

	Three Months Ended October 31,		Change	
	2022	2021	$	%
	(in thousands)			
Other income (expense), net	$ 8,766	$ (6,998)	$ 15,764	(225)%

Other income, net was $8.8 million for the three months ended October 31, 2022 compared to Other expense, net of $7.0 million in the prior year. The increase of $15.8 million was primarily due to $10.2 million of other income from a favorable settlement of a legal claim during the three months ended October 31, 2022 and an increase in interest income by $3.4 million compared to the same period of the prior year.

Provision for Income Taxes

	Three Months Ended October 31,		Change	
	2022	2021	$	%
	(in thousands)			
Provision for income taxes	$ 7,043	$ 2,850	$ 4,193	147 %

The provision for income taxes increased $4.2 million, or 147%, for the three months ended October 31, 2022 compared to the same period of the prior year. Our effective tax rate was (17)% and (6)% of our net loss before taxes for the three months ended October 31, 2022 and 2021, respectively. Our effective tax rate is affected by recurring items, such as tax rates in jurisdictions outside the Netherlands and the relative amounts of income we earn in those jurisdictions. The increase in tax expense is driven primarily by growth in foreign jurisdictions for which we are not subject to valuation allowances or net operating losses and a one-time charge of $3.7 million related to the completion of acquisition related integration.

Comparison of Six Months Ended October 31, 2022 and 2021

Revenue

	Six Months Ended October 31,		Change	
	2022	2021	$	%
	(in thousands)			
Revenue				
Subscription	$ 473,025	$ 367,442	$ 105,583	29 %
Services	41,457	31,633	9,824	31 %
Total revenue	$ 514,482	$ 399,075	$ 115,407	29 %

Subscription revenue increased by $105.6 million, or 29%, for the six months ended October 31, 2022 compared to the same period of the prior year. The increase in revenue was primarily caused by volume-driven increases from new business, as existing customers purchased additional subscriptions, and we grew our subscription customer base to approximately 19,700 customers as of October 31, 2022 compared to over 17,000 customers as of October 31, 2021.

Services revenue increased by $9.8 million, or 31%, for the six months ended October 31, 2022 compared to the same period of the prior year. The increase in services revenue was attributable to increased adoption of our services offerings.

Cost of Revenue and Gross Margin

	Six Months Ended October 31,		Change	
	2022	2021	$	%
	(in thousands)			
Cost of revenue				
Subscription	$ 108,652	$ 79,762	$ 28,890	36 %
Services	39,084	23,784	15,300	64 %
Total cost of revenue	$ 147,736	$ 103,546	$ 44,190	43 %
Gross profit	$ 366,746	$ 295,529	$ 71,217	24 %
Gross margin:				
Subscription	77 %	78 %		
Services	6 %	25 %		
Total gross margin	71 %	74 %		

Cost of subscription revenue increased by $28.9 million, or 36%, for the six months ended October 31, 2022 compared to the same period of the prior year. This increase was primarily due to an increase of $26.0 million in cloud infrastructure costs and an increase of $1.4 million in intangible asset amortization. In addition, personnel and related costs increased by $1.1 million. The increase in personnel and related costs includes an increase of $0.9 million in salaries and related taxes and an increase of $0.2 million in employee benefit expense. Total subscription margin decreased to 77% for the six months ended October 31, 2022 compared to 78% for the same period of the prior year.

Cost of services revenue increased by $15.3 million, or 64%, for the six months ended October 31, 2022 compared to the same period of the prior year. This increase was primarily due to an increase of $9.8 million in personnel and related costs, including increases of $6.5 million in salaries and related taxes, $1.7 million in stock-based compensation, and $0.7 million in employee benefits expense driven by an increase in headcount in our services organization. In addition, subcontractor costs increased by $4.3 million and travel costs increased by $0.6 million.

Gross margin for services revenue was 6% for the six months ended October 31, 2022 compared to 25% for the same period of the prior year. The decrease in margin is primarily due to the cost of services, including personnel and related costs and subcontractor costs, growing at a higher rate than services revenue. We continue to invest in headcount for our services organization that we believe will be needed as we continue to grow and expect travel related costs will increase in the future as COVID-19 risks and travel restrictions abate. Our gross margin for services may fluctuate or decline in the near-term as we seek to expand our services business.

Operating Expenses

Research and development

	Six Months Ended October 31,		Change	
	2022	2021	$	%
	(in thousands)			
Research and development	$ 154,217	$ 123,145	$ 31,072	25 %

Research and development expense increased by $31.1 million, or 25%, for the six months ended October 31, 2022 compared to the same period of the prior year as we continued to invest in the development of new and existing offerings. Personnel and related costs increased by $25.3 million and software and equipment expense increased $0.5 million as a result of growth in headcount. In addition, cloud infrastructure costs related to our research and development activities increased by $2.2 million, travel costs increased by $1.5 million, and consulting costs increased by $1.2 million. The increase in personnel and related costs includes an increase of $11.7 million in stock-based compensation, an increase of $8.4 million in salaries and related taxes, an increase of $3.2 million in acquisition related compensation, and an increase of $1.8 million in employee benefits expense.

Sales and marketing

	Six Months Ended October 31,		Change	
	2022	2021	$	%
	(in thousands)			
Sales and marketing	$ 253,185	$ 182,986	$ 70,199	38 %

Sales and marketing expense increased by $70.2 million, or 38%, for the six months ended October 31, 2022 compared to the same period of the prior year. This increase was primarily due to an increase of $58.0 million in personnel related costs and a $2.7 million increase in software and equipment charges due to growth in headcount. In addition, travel expenses increased by $6.7 million and marketing expense increased by $2.0 million. The increase in personnel and related costs includes an increase of $29.3 million in salaries and related taxes, an increase of $13.4 million in stock-based compensation, an increase of $7.8 million in commission expense, and an increase of $5.3 million in employee benefits expense.

General and administrative

	Six Months Ended October 31,		Change	
	2022	2021	$	%
	(in thousands)			
General and administrative	$ 69,013	$ 57,607	$ 11,406	20 %

General and administrative expense increased by $11.4 million, or 20%, for the six months ended October 31, 2022 compared to the same period of the prior year. This increase was primarily due to an increase of $15.2 million in personnel related costs and a $0.6 million increase in software and equipment charges due to headcount growth. In addition, insurance and other taxes increased by $1.0 million and travel costs increased by $0.7 million. These increases were partially offset by a $4.7 million decrease in legal and professional fees and a $1.4 million decrease in bad debt expense. The increase in personnel and related costs includes an increase of $7.2 million in stock-based compensation expense, an increase of $5.9 million in salaries and related taxes, and an increase of $1.1 million in employee benefits expense.

Other Income (Expense), Net

	Six Months Ended October 31,		Change	
	2022	2021	$	%
	(in thousands)			
Other income (expense), net	$ 2,704	$ (7,800)	$ 10,504	(135)%

Other income, net was $2.7 million for the six months ended October 31, 2022 compared to Other expense, net of $7.8 million in the prior year. This change of $10.5 million was primarily due to $10.2 million of other income from a favorable settlement of a legal claim during the six months ended October 31, 2022.

Provision for Income Taxes

	Six Months Ended October 31,		Change	
	2022	2021	$	%
	(in thousands)			
Provision for income taxes	$ 9,891	$ 5,503	$ 4,388	80 %

The provision for income taxes increased $4.4 million, or 80%, for the six months ended October 31, 2022 compared to the same period of the prior year. Our effective tax rate was (9)% and (7)% of our net loss before taxes for the six months ended October 31, 2022 and 2021, respectively. Our effective tax rate is affected by recurring items, such as tax rates in jurisdictions outside the Netherlands and the relative amounts of income we earn in those jurisdictions. The increase in tax expense is driven primarily by growth in foreign jurisdictions for which we are not subject to valuation allowances or net operating losses and a one-time charge of $3.7 million related to the completion of acquisition related integration.

Liquidity and Capital Resources

As of October 31, 2022, we had cash and cash equivalents and restricted cash of $856.2 million and $2.4 million, respectively, and working capital of $536.0 million. Our restricted cash consists primarily of cash deposits with financial institutions in support of letters of credit in favor of landlords for non-cancelable lease agreements.

We have generated significant operating losses from our operations as reflected in our accumulated deficit of $934.0 million as of October 31, 2022. We have historically incurred, and expect to continue to incur, operating losses and may generate negative cash flows from operations on an annual basis for the foreseeable future due to the investments we intend to make as described above, and as a result, we may require additional capital resources to execute on our strategic initiatives to grow our business.

We believe that our existing cash and cash equivalents will be sufficient to fund our operating and capital needs for at least the next 12 months, despite the uncertainty in the changing market and economic conditions related to COVID-19 and other macroeconomic developments. Our assessment of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement and involves risks and uncertainties. Our actual results could vary as a result of, and our future capital requirements, both near-term and long-term, will depend on, many factors, including our growth rate, the timing and extent of spending to support our research and development efforts, the expansion of sales and marketing activities, the timing of new introductions of solutions or features, and the continuing market acceptance of our solutions and services. We may in the future enter into arrangements to acquire or invest in complementary businesses, services and technologies, including intellectual property rights. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. In July 2021, we issued long-term debt of $575.0 million, and we may be required to seek additional equity or debt financing. In the event that additional financing is required from outside sources, we may not be able to raise it on terms acceptable to us or at all. If we are unable to raise additional capital when desired, or if we cannot expand our operations or otherwise capitalize on our business opportunities because we lack sufficient capital, our business, operating results and financial condition would be adversely affected.

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

	Six Months Ended October 31,	
	2022	2021
	(in thousands)	
Net cash provided by operating activities	$ 937	$ 3,668
Net cash used in investing activities	$ (822)	$ (111,568)
Net cash provided by financing activities	$ 7,724	$ 586,597

Net Cash Provided By Operating Activities

Net cash provided by operating activities during the six months ended October 31, 2022 was $0.9 million, which resulted from adjustments for non-cash charges of $146.5 million, mostly offset by a net loss of $116.9 million and net cash outflow of $28.7 million from changes in operating assets and liabilities. Non-cash charges primarily consisted of $94.2 million for stock-based compensation expense, $35.7 million for amortization of deferred contract acquisition costs, $10.4 million of depreciation and intangible asset amortization expense, $5.6 million in non-cash operating lease costs, and amortization of debt issuance costs of $0.5 million. The net cash outflow from changes in operating assets and liabilities was the result of an increase in deferred contract acquisition costs of $43.6 million as our sales commissions increased due to increased business volume, a $22.2 million decrease in deferred revenue, and a decrease of $5.6 million in operating lease liabilities. These outflows were partially offset by a decrease of $25.2 million in accounts receivable, a decrease of $12.7 million in prepaid expenses and other assets, and a net increase of $4.7 million in accounts payable, accrued expenses and accrued compensation and benefits.

Net cash provided by operating activities during the six months ended October 31, 2021 was $3.7 million, which resulted from a net loss of $81.5 million and net cash outflow of $16.3 million from changes in operating assets and liabilities, fully offset by non-cash charges of $101.5 million. Non-cash charges primarily consisted of $59.6 million for stock-based compensation expense, $28.6 million for amortization of deferred contract acquisition costs, $9.3 million of depreciation and intangible asset amortization expense, $3.8 million in non-cash operating lease costs, amortization of debt issuance costs of $0.3 million expense and $0.1 million of other expenses which were partially offset by an increase in deferred income taxes of $0.2 million. The net cash outflow from changes in operating assets and liabilities was the result of an increase in deferred contract acquisition costs of $39.3 million as our sales commissions increased due to increased business volume, an increase of $1.1 million in prepaid expenses and other assets, a $4.0 million decrease in operating lease liabilities and a decrease of $3.5 million in deferred revenue. These outflows were partially offset by a net increase of $31.0 million in accounts payable, accrued expenses, accrued compensation and benefits and a decrease in accounts receivable of $0.5 million.

Net Cash Used in Investing Activities

Net cash used in investing activities of $0.8 million during the six months ended October 31, 2022 was due to capital expenditures during the period.

Net cash used in investing activities during the six months ended October 31, 2021 was $111.6 million due to cash used in the acquisitions of $108.1 million, capitalization of $2.7 million in internal-use software costs and $0.8 million of capital expenditures.

Net Cash Provided by Financing Activities

Net cash provided by financing activities of $7.7 million during the six months ended October 31, 2022 was due to the proceeds from stock option exercises.

Net cash provided by financing activities during the six months ended October 31, 2021 was $586.6 million due to the proceeds of $575.0 million from debt issuance and $20.8 million of proceeds from option exercises during the period which were partially offset by $9.2 million payments of debt issuance costs.

Contractual Obligations and Commitments

Our principal commitments consist of obligations under our operating leases, which are primarily for office space, and purchase commitments to our cloud hosting providers. There have been no material changes to our contractual obligations and commitments discussed in our Annual Report on Form 10-K.

Recently Issued Accounting Pronouncements

Refer to Note 2 of our accompanying Notes to Condensed Consolidated Financial Statements included elsewhere in this Quarterly Report on Form 10-Q for recently adopted accounting pronouncements and new accounting pronouncements not yet adopted as of the date of this report.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We have operations both within the United States and internationally, and we are exposed to market risk in the ordinary course of our business.

Interest Rate Risk

We had cash, cash equivalents, and restricted cash of $858.6 million as of October 31, 2022. Our cash, cash equivalents, and restricted cash are held in cash deposits and money market funds. The primary objectives of our investment activities are the preservation of capital, the fulfillment of liquidity needs and the fiduciary control of cash and investments. We do not enter into investments for trading or speculative purposes. Due to the short-term nature of these instruments, we do not believe that an immediate 10% increase or decrease in interest rates would have a material effect on the fair value of our investment portfolio. Declines in interest rates, however, would reduce our future interest income.

In July 2021, we issued $575.0 million aggregate principal amount of 4.125% Senior Notes due 2029 in a private placement. The fair value of the Senior Notes is subject to market risk. In addition, the fair market value of the Senior Notes is exposed to interest rate risk. Generally, the fair market value of our fixed interest rate Senior Notes will increase as interest rates fall and decrease as interest rates rise. The interest rate and market value changes affect the fair value of the Senior Notes, but do not impact our financial position, cash flows or results of operations due to the fixed nature of the debt obligation. Additionally, we carry the Senior Notes at face value less unamortized debt issuance cost on our balance sheet, and we present the fair value for required disclosure purposes only.

Foreign Currency Risk

Our revenue and expenses are primarily denominated in U.S. dollars, and to a lesser extent the Euro, British Pound Sterling, and other currencies. To date, we have not had a formal hedging program with respect to foreign currency, but we may do so in the future if our exposure to foreign currency should become more significant. For business conducted outside of the United States, we may have both revenue and costs incurred in the local currency of the subsidiary, creating a partial natural hedge. Changes to exchange rates therefore have not had a material impact on our net operating results to date; however, we will continue to reassess our foreign exchange exposure as we continue to grow our business globally.

We have experienced and will continue to experience fluctuations in net loss as a result of transaction gains or losses related to remeasurement of certain asset and liability balances that are denominated in currencies other than the functional currency of the entities in which they are recorded. An immediate 10% increase or decrease in the relative value of the U.S. dollar to other currencies could have a material effect on our revenue, operating expenses, and net loss. As a component of other income, net, we recognized a foreign currency transaction loss of $0.3 million and a foreign currency transaction gain of $0.3 million for the six months ended October 31, 2022 and 2021, respectively.

As of October 31, 2022, our cash, cash equivalents, and restricted cash were primarily denominated in U.S. dollars, Euros, and British Pound Sterling. A 10% increase or decrease in current exchange rates would have an impact of approximately $13.5 million on our cash, cash equivalents, and restricted cash balances.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act, that are designed to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that as of October 31, 2022, our disclosure controls and procedures were effective to provide reasonable assurance that the information required to be disclosed by us in the reports we file or submit under the Exchange Act (a) is recorded, processed, summarized and reported within the time periods specified by the SEC rules and forms and (b) 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 Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the period covered by this Quarterly Report on Form 10-Q that 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 and are effective at the reasonable assurance level. However, our management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent 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. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls 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 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

The information called for by this Item is incorporated herein by reference to Part I, Item 1. "Financial Statements," Note 8, "Commitments and Contingencies — Legal Matters" included in this Quarterly Report on Form 10-Q.

From time to time, we may be subject to legal proceedings and claims that arise in the ordinary course of business, including patent, commercial, product liability, employment, class action, whistleblower and other litigation and claims, as well as governmental and other regulatory investigations and proceedings. In addition, third parties may from time to time assert claims against us in the form of letters and other communications. We are not currently a party to any legal proceedings that, if determined adversely to us, would individually or taken together, in our opinion, have a material adverse effect on our business, results of operations, financial condition or cash flows. 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

A description of the risks and uncertainties associated with our business, industry and ownership of our ordinary shares is set forth below. You should carefully consider the following risks, together with all of the other information in this Quarterly Report on Form 10-Q, including our condensed consolidated financial statements and the related notes thereto, before making a decision to invest in our ordinary shares. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that affect us. If any of the following risks occur, our business, financial condition, operating results and prospects could be materially and adversely affected. In that event, the price of our ordinary shares could decline, and you could lose part or all of your investment. In addition, the impact of the COVID-19 pandemic and any worsening of the economic environment may exacerbate the risks described below, any of which could have a material impact on us and additional impacts that are currently not known to us may arise.

The following is a summary of the key risks and uncertainties associated with our business, industry, and ownership of our ordinary shares. The below 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 description of each risk factor contained in the subheadings below.

- If we do not appropriately manage future growth or are unable to improve our systems and processes, our business and results of operations will be adversely affected.
- We have a history of losses and may not be able to achieve profitability on a consistent basis or at all or positive cash flows on a consistent basis.
- Our ability to grow our business will significantly depend on the expansion and adoption of our Elastic Cloud offerings.
- Information technology spending, sales cycles, and other factors affecting the demand for our offerings and our results of operations have been, and may continue to be, negatively impacted by current adverse macroeconomic conditions, including declining rates of economic growth, supply chain disruptions, inflationary pressures, increased interest rates, and other conditions discussed in this report.
- Our plan to reduce costs and rebalance investments we announced on November 30, 2022 may not result in anticipated savings or operational efficiencies, could result in total costs and expenses that are greater than expected and could disrupt our business.
- Our future growth, business and results of operations will be harmed if we are not able to keep pace with technological and competitive developments, increase sales of our subscriptions to new and existing customers, renew existing customers' subscriptions, increase adoption of our cloud-based offerings, respond effectively to evolving markets or offer high quality support services.
- Russia's invasion of Ukraine and resulting international political crisis could have significant negative economic consequences on the businesses of our customers and partners and negatively impact their spending on our offerings.
- Any actual or perceived failure by us to comply with regulations or any other obligations relating to privacy, data protection or information security could adversely affect our business.
- Due to political uncertainty and military actions associated with Russia's invasion of Ukraine, we and our third-party vendors and service providers are vulnerable to a heightened risk of cybersecurity attacks, phishing attacks, viruses, malware, ransomware, hacking or similar breaches from nation-state and affiliated actors.
- The ongoing COVID-19 pandemic could harm our business and results of operations.
- Our operating results may fluctuate from quarter to quarter.

- Our decision to no longer offer Elasticsearch and Kibana under an open source license may harm the adoption of Elasticsearch and Kibana.
- We could be negatively impacted if the Elastic License or the Server Side Public License under which some of our software is licensed is not enforceable.
- Because of the permissive rights accorded to third parties under our open source and source available licenses, there are limited technological barriers to entry into the markets in which we compete.
- We may not be able to effectively develop and expand our sales and marketing capabilities.
- Because we recognize the vast majority of the revenue from subscriptions, either based on actual consumption or monthly, over the term of the relevant subscription period, downturns or upturns in sales are not immediately reflected in full in our results of operations.
- We do not have an adequate history with a consumption-based arrangements for our Elastic Cloud offerings to accurately predict the long-term rate of customer adoption or renewal, or the impact it will have on our near-term or long-term revenue or operating results.
- A real or perceived defect, security vulnerability, error, or performance failure in our software could cause us to lose revenue, damage our reputation, and expose us to liability.
- Incorrect implementation or use of our software could negatively affect our business, operations, financial results, and growth prospects.
- Third parties may offer inadequate or defective implementations of software that we have previously made available under an open source license and our reputation could be harmed.
- Breaches of security measures or unauthorized access to, or other processing of, confidential information, including personal data, may result in our software being perceived as not secure, customers reducing or stopping usage of our products, and our incurring significant liabilities.
- Interruptions or performance problems, and our reliance on technologies from third parties, may adversely affect our business operations and financial results.
- If our partners, including cloud providers, systems integrators, channel partners, referral partners, OEM and MSP partners, and technology partners, fail to perform or we are unable to maintain successful relationships with them, our ability to market, sell and distribute our solution will be more limited, and our results of operations could be harmed.
- Failure to protect our proprietary technology and intellectual property rights could substantially harm our business and results of operations.
- We could incur substantial costs as a result of any claim of infringement, misappropriation or violation of another party's intellectual property rights, including as a result of the indemnity provisions in various agreements.
- Our use of third-party open source software within our products could negatively affect our ability to sell our products and subject us to possible litigation.
- We may not be able to realize the benefits of our marketing strategies to offer some of our product features for free and to provide free trials to some of our paid features.
- Our international business exposes us to several risks, and if we are not successful in sustaining and expanding our international business, we may incur additional losses and our revenue growth could be harmed.
- A portion of our revenue is generated by sales to government entities, and this creates a number of challenges and risks.
- Our business is subject to a variety of government and industry regulations, as well as other obligations, including compliance with export control, trade sanctions, anti-bribery, anti-corruption, and anti-money laundering laws.
- The market price for our ordinary shares has been and is likely to continue to be volatile.
- The concentration of our share ownership with insiders will likely limit your ability to influence corporate matters.
- Dutch law and our articles of association include certain anti-takeover provisions, which may impact the value of our ordinary shares.
- Claims of U.S. civil liabilities may not be enforceable against us.

- We have a substantial amount of indebtedness and may not be able to generate sufficient cash to service all of our indebtedness.
- If industry or financial analysts do not publish research or reports about our business, or if they issue inaccurate or unfavorable research regarding our ordinary shares, our share price and trading volume could decline.
- We may fail to maintain an effective system of disclosure controls and internal control over financial reporting.

Risks Related to our Business and Industry

Our business and operations have experienced rapid growth, and if we do not appropriately manage future growth, if any, or are unable to improve our systems and processes, our business, financial condition, results of operations, and prospects will be adversely affected.

We have experienced rapid growth and increased demand for our offerings. Our employee headcount and number of customers have increased significantly. For example, our total number of customers has grown from over 2,800 as of April 30, 2017 to approximately 19,700 as of October 31, 2022. Further, while our employee headcount has grown as we have been implementing our growth plans, we may modify our pace of hiring to align with our growth plans. The growth and expansion of our business and offerings place a continuous and significant strain on our management, operational, and financial resources. In addition, as customers adopt our technology for an increasing number of use cases, we have had to support more complex commercial relationships. We may not be able to hire, train and retain enough qualified employees, and we may not be able to hire, train and onboard new employees fast or effectively enough to maintain our growth plans. We must continue to improve and expand our information technology and financial infrastructure, our operating and administrative systems, our relationships with various partners and other third parties, and our ability to manage headcount and processes in an efficient manner to manage our growth to date and any future growth effectively.

We may not be able to sustain the diversity and pace of improvements to our offerings successfully or implement systems, processes, and controls in an efficient or timely manner or in a manner that does not negatively affect our results of operations. Our failure to improve our systems, processes, and controls, or their failure to operate in the intended manner, may result in our inability to manage the growth of our business and to forecast our revenue, expenses, and earnings accurately, or to prevent losses.

As we expand our business, we may find it difficult to maintain our corporate culture while managing our employee growth. Any failure to manage our anticipated growth and related organizational changes in a manner that preserves our culture could negatively impact future growth and achievement of our business objectives. Additionally, our productivity and the quality of our offerings may be adversely affected if we do not integrate and train our new employees quickly and effectively. Failure to manage any future growth effectively could result in increased costs, negatively affect our customers' satisfaction with our offerings, and harm our results of operations.

We have a history of losses and may not be able to achieve profitability on a consistent basis or at all, and may not be able to achieve positive cash flows on a consistent basis. As a result, our business, financial condition, and results of operations may suffer.

We have incurred losses in all years since our incorporation. We incurred a net loss of $116.9 million, $203.8 million, and $129.4 million for the six months ended October 31, 2022 and the years ended April 30, 2022 and 2021, respectively. As a result, we had an accumulated deficit of $934.0 million as of October 31, 2022. We anticipate that our operating expenses will increase substantially in the foreseeable future as we continue to enhance our offerings, broaden our customer base and pursue larger transactions, expand our sales and marketing activities, expand our operations, hire additional employees, and continue to develop our technology. These efforts may prove more expensive than we currently anticipate, and we may not succeed in increasing our revenue sufficiently, or at all, to offset these higher expenses. Revenue growth may slow or revenue may decline for a number of possible reasons, including slowing demand for our offerings, increasing competition, or economic downturns, including as a result of the COVID-19 pandemic. You should not consider our revenue growth in recent periods as indicative of our future performance. Any failure to increase our revenue or grow our business could prevent us from achieving profitability at all or on a consistent basis, which would cause our business, financial condition, and results of operations to suffer. Additionally, although we generated positive operating cash flow in fiscal 2022, any failure to grow our business could prevent us from achieving positive operating cash flow on a consistent basis, which would cause our business, financial condition, and results of operations to suffer.

Our ability to grow our business will depend significantly on the expansion and adoption of our Elastic Cloud offerings.

We believe our future success will depend significantly on the growth in the adoption of Elastic Cloud, our family of cloud-based offerings. We have and will continue to incur substantial costs to develop, sell and support our Elastic Cloud offerings. We have also entered into non-cancelable multi-year cloud hosting capacity commitments with certain third-party cloud providers, which require us to pay for such capacity irrespective of actual usage. We believe that we must offer a family of cloud-based products to address the market segment that prefers a cloud-based solution to a self-managed solution and that there will be increasing demand for cloud-based offerings of our products. For the six months ended October 31, 2022 and the years ended April 30, 2022 and 2021, Elastic Cloud contributed 39%, 35%, and 27% of our total revenue, respectively. However, as the use of cloud-based computing solutions is rapidly evolving, it is difficult to predict the potential growth, if any, of general market adoption, customer adoption, and retention rates of our cloud-based offerings. There could be decreased demand for our cloud-based offerings due to reasons within or outside of our control, including, among other things, lack of customer acceptance, technological challenges with bringing cloud offerings to market and maintaining those offerings, information security, data protection, or privacy concerns, our inability to properly manage and support our cloud-based offerings, competing technologies and products, weakening economic conditions, and decreases in corporate spending. If we are not able to develop, market, or deliver cloud-based offerings that satisfy customer requirements technically or commercially, if our investments in cloud-based offerings do not yield the expected return, or if we are unable to decrease the cost of providing our cloud-based offerings, our business, competitive position, financial condition and results of operations may be harmed.

Unfavorable or uncertain conditions in our industry or the global economy or reductions in information technology spending, including as a result of adverse macroeconomic conditions, Russia's invasion of Ukraine, or the COVID-19 pandemic, 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. Current, future, or sustained economic uncertainties or downturns, whether actual or perceived, could adversely affect our business and results of operations. Negative conditions 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, changes in inflation and interest rate environments, recessionary fears, supply chain constraints, energy costs, political instability, natural catastrophes, warfare, and infectious diseases and terrorist attacks, could cause a decrease in business investments by our customers and potential customers, including spending on information technology, and negatively affect the growth of our business. For example, inflation rates have recently reached levels not seen in decades and may continue to create economic volatility as governments adjust interest rates in an attempt to regulate the inflationary environment, and Russia's invasion of Ukraine and resulting international political crisis could have significant negative macroeconomic consequences, including on the businesses of our customers and partners and negatively impact their spending on our offerings.

In addition, the COVID-19 pandemic has curtailed business spending by our customers, resulted in business disruptions for us and/or our customers, restricted travel to customer sites and resulted in a quarantine of affected populations impacting our employees, partners and customers. Additionally, mitigation and containment measures adopted or reinstated by government authorities to contain the spread of COVID-19 may significantly impact business continuity for our partners and our customers, reduce our customers' business operations, delay their engagement with us (including due to travel restrictions and restrictions on in-person meetings) and could thereby adversely affect our business and financial results. Further, these measures by government authorities may continue to remain in place for a significant period of time or, even if lifted, could be reinstated at any time, and additional and/or extended measures could significantly impact the ability of our employees and customers and vendors to work productively.

As a result of the foregoing conditions, our revenue may be disproportionately affected by longer and more unpredictable sales cycles, delays or reductions in customer consumption or in general information technology spending, and further impacts of changing foreign exchange rates. Also, customers may choose to develop in-house software as an alternative to using our products. Moreover, competitors may respond to market conditions by lowering prices. Such impacts of the current adverse macroeconomic environment negatively affected our results of operations for the second quarter of fiscal 2023. We cannot predict the timing, strength or duration of the current economic slowdown and instability or any recovery, generally or within our industry. If the economic conditions of the general economy or markets in which we operate do not improve, or worsen from present levels, our business, results of operations and financial condition could be adversely affected.

Our plan to reduce costs and rebalance investments we announced on November 30, 2022 may not result in anticipated savings or operational efficiencies, could result in total costs and expenses that are greater than expected, and could disrupt our business.

On November 30, 2022, we announced a plan to reduce our workforce by approximately 13% and optimize facilities-related costs. We adopted this plan to improve operational efficiencies and align our investments more closely with our strategic priorities. We may incur additional expenses associated with the reduction in our workforce not contemplated by our plan, which may have an impact on other areas of our liabilities and obligations and contribute to losses in future periods. We may not realize, in full or in part, the anticipated benefits and savings from our plan due to unforeseen difficulties, delays or unexpected costs. If we are unable to realize the expected operational efficiencies and cost savings, our operating results and financial condition would be adversely affected.

Furthermore, implementation of our plan may be disruptive to our operations. For example, our workforce reduction could result in attrition beyond planned staff reductions, increased difficulties in our day-to-day operations, and reduced employee morale. If employees who were not affected by the reduction in force seek alternative employment, we could incur unplanned additional expense to ensure adequate resourcing and fail to attract and retain qualified management, sales and marketing personnel who are critical to our business. Our failure to do so could harm our business and our future performance.

We may not be able to compete successfully against current and future competitors.

The market for our products is highly competitive, quickly evolving, fragmented, and subject to rapid changes in technology, shifting customer needs, and frequent introductions of new offerings. We believe that our ability to compete depends upon many factors both within and beyond our control, including the following:

- product capabilities, including speed, scale, and relevance, with which to power search experiences;
- an extensible product “stack” that enables developers to build a wide variety of solutions;
- powerful and flexible technology that can manage a broad variety and large volume of data;
- ease of deployment and ease of use;
- ability to address a variety of evolving customer needs and use cases;
- strength and execution of sales and marketing strategies;
- flexible deployment model across public or private clouds, hybrid environments, or multi-cloud environments;
- productized solutions engineered to be rapidly adopted to address specific applications;
- mindshare with developers and IT and security executives;
- adoption of products by many types of users and decision makers (developers, architects, DevOps personnel, IT professionals, security analysts, and departmental and organizational leaders);
- enterprise-grade technology that is secure and reliable;
- size of customer base and level of user adoption;
- quality of training, consulting, and customer support;
- brand awareness and reputation; and
- low total cost of ownership.

We face competition from both established and emerging competitors. Our current primary competitors generally fall into the following categories:

- For Enterprise Search: offerings such as Solr (open source offering) and Lucidworks Fusion, search tools including Google Programmable Search Engine, and workplace search tools including Coveo and Endeca (owned by Oracle).
- For Observability: software vendors with specific observability solutions to analyze logging data, metrics, APM data, or infrastructure uptime, such as Splunk, New Relic, Dynatrace, AppDynamics (owned by Cisco Systems), and Datadog.
- For Security: security vendors such as Splunk, Azure Sentinel (by Microsoft), CrowdStrike, Carbon Black (owned by VMware/Broadcom), McAfee, and Symantec (owned by Broadcom).

- Certain cloud hosting providers and managed service providers, including Amazon Web Services, that offer hosted products based on a forked version of the Elastic Stack. These offerings are not supported by Elastic and come without any of Elastic's proprietary features, whether free or paid.

Some of our current and potential competitors have longer operating histories, significantly greater financial, technical, marketing and other resources, stronger brand recognition, broader global distribution and presence, more established relationships with current or potential customers and partners, and larger customer bases than we do. These factors may allow our competitors to respond more quickly than we can to new or emerging technologies and changes in customer preferences. These competitors may engage in more extensive research and development efforts, undertake more far-reaching and successful sales and marketing campaigns, have more experienced sales professionals, execute more successfully on their go-to-market strategy and have greater access to more markets and decision makers, and adopt more aggressive pricing policies which may allow them to build larger customer bases than we have. New start-up companies that innovate and large competitors that are making significant investments in research and development may develop similar offerings that compete with our offerings or that achieve greater market acceptance than our offerings. This could attract customers away from our offerings and reduce our market share. If we are unable to anticipate or react to these competitive challenges, our competitive position would weaken, which would adversely affect our business and results of operations.

Our limited operating history at the current scale of our business makes it difficult to evaluate our current business and prospects and may increase the risks associated with your investment.

We were founded in 2012. Our limited operating history with the current scale of our business makes it difficult to evaluate our current business and our future prospects, including our ability to plan for and model future growth. We have encountered and will continue to encounter risks and difficulties frequently experienced by rapidly growing companies in constantly evolving industries, including the risks described in this Quarterly Report on Form 10-Q. If we do not address these risks successfully, our business and results of operations will be adversely affected, and the market price of our ordinary shares could decline.

Further, we have limited historical financial data at the current scale of our business, and we operate in a rapidly evolving market. As such, any predictions about our future revenue and expenses may not be as accurate as they would be if we had a longer operating history or operated in a more predictable market.

If we are not able to keep pace with technological and competitive developments, our business will be harmed.

The market for search technologies, including enterprise search, observability and security, is subject to rapid technological change, evolving industry standards, and changing regulations, as well as changing customer needs, requirements and preferences. Our success depends upon our ability to enhance existing products, expand the use cases of our products, anticipate and respond to changing customer needs, requirements, and preferences, and develop and introduce in a timely manner new offerings that keep pace with technological and competitive developments. We have in the past experienced delays in releasing new products, deployment options, and product enhancements and may experience similar delays in the future. As a result, in the past, some of our customers deferred purchasing our products until the next upgrade was released. Future delays or problems in the installation or implementation of our new releases may cause customers to forgo purchases of our products and purchase those of our competitors instead.

Additionally, the success of new product introductions depends on a number of factors including, but not limited to, timely and successful product development, market acceptance, our ability to manage the risks associated with new product releases, the availability of software components for new products, the effective management of development and other spending in connection with anticipated demand for new products, the availability of newly developed products, and the risk that new products may have bugs, errors, or other defects or deficiencies in the early stages of introduction. We have in the past experienced bugs, errors, or other defects or deficiencies in new products and product updates and may have similar experiences in the future. Furthermore, our ability to increase the usage of our products depends, in part, on the development of new use cases for our products, which is typically driven by our developer community and may be outside of our control. We also have invested, and may continue to invest, in the acquisition of complementary businesses, technologies, services, products and other assets that expand the products that we can offer our customers. We may make these investments without being certain that they will result in products or enhancements that will be accepted by existing or prospective customers. Additionally, even if we are able to develop new products and product enhancements, we cannot ensure that they will achieve market acceptance. If we are unable to successfully enhance our existing products to meet evolving customer requirements, increase adoption and usage of our products, develop new products, or if our efforts to increase the usage of our products are more expensive than we expect, then our business, results of operations, and financial condition would be adversely affected.

The markets for some of our products are evolving, and our future success depends on the growth and expansion of these markets and our ability to adapt and respond effectively to evolving markets.

The markets for certain of our products, such as our Enterprise Search, Observability and Security solutions, are evolving and our products are relatively new in these markets. Accordingly, it is difficult to predict continued customer adoption and renewals for these products, customers' demand for these products, the size, growth rate, expansion, and longevity of these markets, the entry of competitive products, or the success of existing competitive products. Our ability to penetrate these evolving markets depends on a number of factors, including the cost, performance, and perceived value associated with our products. If these markets do not continue to grow as expected or if we are unable to anticipate or react to changes in these markets, our competitive position would weaken, which would adversely affect our business and results of operations.

In connection with the operation of our business, we collect, store, transfer, and otherwise process certain personal data. As a result, our business is subject to a variety of government and industry regulations, as well as other obligations, related to privacy, data protection and information security. Any actual or perceived failure by us to comply with such regulations or any other obligations relating to privacy, data protection or information security could adversely affect our business.

In the operation of our business, we collect, store, transfer, and otherwise process personal data. As a result, we are subject to a variety of federal, state, local and foreign laws and regulations governing privacy, data protection, information security, and the collection, storage, transfer, use, retention, sharing, disclosure, protection, and processing of personal data. Privacy, data protection, and information security are significant issues in various jurisdictions where we offer our products.

The regulatory frameworks for these issues worldwide are rapidly evolving and are likely to remain uncertain for the foreseeable future. Federal, state, or non-U.S. government bodies or agencies have in the past adopted, and may in the future adopt, new laws and regulations or may make amendments to existing laws and regulations affecting data protection, data privacy and/or information security and/or regulating the use of the Internet as a commercial medium. For example, California (California Consumer Privacy Act and the California Privacy Rights Act), Colorado (Colorado Privacy Act), Connecticut (An Act Concerning Personal Data Privacy and Online Monitoring), Utah (Utah Consumer Privacy Act) and Virginia (Virginia Consumer Data Protection Act) have enacted such legislation. Such legislation may include a private right of action for certain data breaches, may provide for penalties and other remedies, and may require us to incur substantial costs and expenses and liabilities in connection with our compliance. Other U.S. states and the U.S. federal government are considering or have enacted privacy legislation. Some of these laws and legislative proposals provide for penalties, private rights of action and other remedies, which may increase our costs of compliance and potential liability. Many obligations under these laws and legislative proposals remain uncertain, and we cannot fully predict their impact on our business. Further, industry organizations regularly adopt and advocate for new standards in these areas. If we fail to comply with any of these laws or standards, we may be subject to investigations, enforcement actions, civil litigation, fines and other penalties, all of which may generate negative publicity and have a negative impact on our business.

Additionally, in the United States, we may be subject to investigation and/or enforcement actions brought by federal agencies and state attorneys general and consumer protection agencies. We publicly post privacy statements and other documentation regarding our practices concerning the processing, use and disclosure of personal data. We may fail, or be alleged to have failed, to comply with such statements, and we could be subject to potential state and federal action if they are found to be unfair or misrepresentative of our actual practices.

Internationally, most jurisdictions in which we operate have established their own privacy, data protection and information security legal frameworks with which we or our customers must comply. Within the European Union, the General Data Protection Regulation ("GDPR") became fully effective on May 25, 2018, and applies to the processing (which includes the collection and use) of personal data. The GDPR imposes significant obligations and risk upon our business, including imposing limitations on our marketing efforts, and provides for substantial penalties to which we could be subject in the event of any non-compliance. Administrative fines under the GDPR can amount to up to 20 million Euros or four percent of the group's annual global turnover, whichever is higher. Further, the United Kingdom has implemented legislation that substantially implements the GDPR in the United Kingdom, which legislation provides for penalties for violations of up to the greater of 17.5 million British Pound Sterling or four percent of the group's annual global turnover. Following the exit of the United Kingdom from the European Union, however, aspects of United Kingdom data protection law and the relationship of the United Kingdom and the European Union in the medium to longer term remain unclear, including with respect to how data transfers to and from the United Kingdom will be regulated. On June 28, 2021, the European Commission announced a decision of "adequacy" concluding that the United Kingdom ensures an equivalent level of data protection to the GDPR, which permits continued personal data flows from the European Economic Area ("EEA") to the United Kingdom. Some uncertainty remains, however, as this adequacy determination must be renewed after four years and may be modified or revoked in the interim.

Among other requirements, the GDPR regulates transfers of personal data to third countries that have not received "adequacy" status, including the United States. Some countries also are considering or have passed legislation requiring local storage and processing of data, or similar requirements, which could increase the cost and complexity of delivering our services.

The regulatory environment applicable to handling of EEA residents' personal data, and our actions taken in response, may cause us to assume additional liabilities or incur additional costs. Although we have undertaken certain efforts to conform transfers of personal data from the EEA to the United States and other jurisdictions based on our understanding of current regulatory obligations and the guidance of data protection authorities, including using standard contractual clauses approved by the European Commission (the "SCCs") and performing certain international transfer impact assessments, international data transfers may still be challenged in countries that have not received "adequacy" status from the European Commission. In the Schrems II decision issued by the Court of Justice of the European Union ("CJEU") on July 16, 2020, the CJEU, among other things, imposed additional obligations on companies when relying on the SCCs. EEA regulators since have provided guidance regarding use of the SCCs, and on June 4, 2021, the European Commission issued new SCCs. On February 2, 2022, the United Kingdom's Information Commissioner's Office issued new standard contractual clauses to support personal data transfers out of the United Kingdom ("UK SCCs"), which went into effect on March 21, 2022. In light of these and other developments relating to cross-border data transfer, we may, in addition to other impacts, experience additional costs associated with increased compliance burdens and be required to engage in new contract negotiations with third parties that aid in processing personal data on our behalf or localize certain personal data. As a result of these developments, we and our customers may face regulators in the EEA, Switzerland, and the United Kingdom applying different standards to certain data transfers or requiring additional steps in connection with data transfers, may be required to engage in new contract negotiations with third parties that aid in processing data on our behalf, and may be required to implement additional contractual and technical safeguards for the lawful transfer of personal data. We may be unsuccessful in maintaining legitimate means for our transfer and receipt of personal data from the EEA, Switzerland, and the United Kingdom and our customers may face a risk of enforcement actions by European data protection authorities relating to such transfers. We may experience hesitancy, reluctance, or refusal by customers to continue to use our products due to the potential risk exposure to such customers as a result of sentiment in the EEA, Switzerland, and the United Kingdom regarding international data transfers and data protection obligations imposed on them. These and the other risks described above could result in harm to our business, operating results and financial condition.

In addition to government regulation, industry groups have established or may establish new and different self-regulatory standards that may legally or contractually apply to us or our customers. One example of such a self-regulatory standard is the Payment Card Industry Data Security Standard ("PCI DSS"), which relates to the processing of payment card information. Further, our customers increasingly expect us to comply with more stringent privacy, data protection, and information security requirements than those imposed by laws, regulations, or self-regulatory requirements, and we may be obligated contractually to comply with additional or different standards relating to our handling or protection of data on or by our offerings. Any failure to meet our customers' requirements may adversely affect our revenues and prospects for growth.

We also expect that there will continue to be changes in interpretations of existing or new laws and regulations, proposed laws, and other obligations, which could impair our or our customers' ability to process personal data, decrease demand for our offerings, impact our marketing efforts, increase our costs, and impair our ability to maintain and grow our customer base and increase our revenue. Because the interpretation and application of many laws and regulations relating to privacy, data protection, and information security, along with industry standards, are uncertain, it is possible that these laws and regulations or other actual or asserted obligations relating to privacy, data protection, or information security may be interpreted and applied in manners that are, or are alleged to be, inconsistent with our data management practices or the features of our products. In such an event, we could face fines, lawsuits, regulatory investigations, and other claims and penalties, and we could be required to fundamentally change our products or our business practices, any of which could have an adverse effect on our business. Data protection authorities in the European Union increasingly are focused on the use of online tracking tools and have issued or indicated that they plan to issue rulings which may impact our marketing practices. Any restrictions on using online analytics and tracking tools could lead to substantial costs, require significant changes to our policies and practices, limit the effectiveness of our marketing activities, divert the attention of our technology personnel, adversely affect our margins, and subject us to additional liabilities.

We have incurred substantial expenses in complying with data protection legal frameworks and we may be required to make significant changes in our business operations, which may adversely affect our business. Because these new regimes lack a substantial enforcement history, we are unable to predict how emerging standards may be applied to us, and thus, a regulator may subject us to certain actions, fines or public censure. Any actual or perceived inability to adequately address, or failure to comply with, data protection requirements, even if unfounded, could result in additional cost and liability to us, damage our reputation, inhibit sales, and adversely affect our business.

The ongoing COVID-19 pandemic could harm our business and results of operations.

The ongoing COVID-19 pandemic and efforts to control its spread have significantly curtailed the movement of people, goods and services worldwide, including in many of the regions in which we sell our products and services and conduct our business operations, negatively impacting worldwide economic activity. We have taken precautionary measures intended to help minimize the risk of the virus to our employees, our customers, and the communities in which we operate. The continued spread of the COVID-19 pandemic and the resurgence of infection rates in certain regions has caused us to modify our business practices (including those related to travel, work locations, and events and trainings), and we may take further actions as may be required by government authorities or that we determine are in the best interests of our employees, customers, and business partners. There is no certainty that such measures will be sufficient to mitigate the risks posed by the virus or otherwise be satisfactory to government authorities. The full extent to which the COVID-19 pandemic and our precautionary measures may continue to impact our business will depend on future developments, which continue to be uncertain and cannot be predicted at this time. It has been and, until the COVID-19 pandemic is contained and global economic activity stabilizes, will continue to be more difficult for us to forecast our operating results.

We are moving toward normal operations on a market-by-market basis in accordance with local guidelines and our approach may change at any time. We may incorporate into our ongoing business operations certain business practice modifications implemented in response to the COVID-19 pandemic. These business modifications have and may continue to result in inefficiencies, delays and additional costs, including increased tax compliance obligations, that may adversely affect our business. As we resume in-person meetings and events, we may face additional challenges and incur additional costs, including those associated with workplace safety protocols, disparate regional safety guidelines and workplace or labor disputes or claims related to COVID-19, which could also negatively impact our business.

In addition, the COVID-19 pandemic has disrupted, and may continue to disrupt, the operations of our customers, vendors, channel partners and government entities for an indefinite period of time, including in specific regions of the world or sectors of the economy and as a result of travel restrictions and/or business shutdowns, all of which could negatively impact our business and results of operations, including cash flows. Further, the impact of the COVID-19 pandemic has varied significantly across different industries, with certain industries experiencing increased demand for their products and services as the needs of the economy shift, while others have struggled to maintain demand for their products and services consistent with historical levels. Because we have a limited history in understanding these impacts, our sales and marketing efforts, our ability to enter into customer contracts in a timely manner and forecast rates of customer retention, our international expansion efforts and ability to forecast expansion rates, our ability to deliver services, and our ability to recruit employees across the organization, which, in turn, could have longer term effects on our sales pipeline, or create operational or other challenges, may be negatively impacted and could harm our business. Meanwhile, a shift towards more consumption-based arrangements for our Elastic Cloud offerings, where the timing of revenue recognition is tied to our customers' actual usage of our products, may further exacerbate such uncertainty as well as the difficulty of forecasting customer retention and expansion rates.

Even after the COVID-19 pandemic has subsided, we may continue to experience materially adverse impacts to our business as a result of its global economic impact, including any recession, economic downturn, or increased unemployment that has occurred or may occur in the future. There has been increased scrutiny of business (including technology) spending by our customers and prospective customers, particularly in industries most impacted by the COVID-19 pandemic, longer sales cycles, as well as reduced demand for our solutions, customers failing to pay us under the terms of our agreements, increased cyber threats, lower renewal rates by our customers and increased competition, all of which could result in a material adverse impact on our business operations and financial condition.

While we have developed and continue to develop plans intended to help mitigate the negative impacts of the pandemic on our business, these efforts may not be effective and a protracted economic downturn may limit the effectiveness of our mitigation efforts.

Our operating results are likely to fluctuate from quarter to quarter, and our financial results in any one quarter should not be relied upon as indicative of future performance.

Our results of operations, including our revenue, cost of revenue, gross margin, operating expenses, cash flow and deferred revenue, have fluctuated from quarter-to-quarter in the past and may continue to vary significantly in the future so that period-to-period comparisons of our results of operations may not be meaningful. These variations may be further impacted as more of our Elastic Cloud customers adopt consumption-based arrangements. Accordingly, our financial results in any one quarter should not be relied upon as indicative of future performance. Our quarterly financial results may fluctuate as a result of a variety of factors, many of which are outside of our control, may be difficult to predict, and may or may not fully reflect the underlying performance of our business. Factors that may cause fluctuations in our quarterly financial results include:

- our ability to attract new customers and retain existing customers;
- the loss of existing customers;

- customer renewal rates;
- our ability to successfully expand our business in the U.S. and internationally;
- general political, geopolitical, economic, industry and market conditions (including recessionary pressures or uncertainties in the global economy);
- our ability to foster an ecosystem of developers and users to expand the use cases of our products;
- our ability to gain new partners and retain existing partners;
- fluctuations in the growth rate of the overall market that our products address;
- fluctuations in the mix of our revenue, which may impact our gross margins and operating income;
- the amount and timing of operating expenses related to the maintenance and expansion of our business and operations, including investments in sales and marketing, research and development and general and administrative resources;
- network outages or performance degradation of Elastic Cloud;
- actual or perceived breaches of, or failures or incidents relating to, privacy, data protection or information security;
- additions or departures of key personnel;
- the impact of catastrophic events, man-made problems such as terrorism, natural disasters and public health epidemics and pandemics;
- Russia's invasion of Ukraine and the related impact on macroeconomic conditions;
- increases or decreases in the number of elements of our subscriptions or pricing changes upon any renewals of customer agreements;
- changes in our pricing policies or those of our competitors;
- the budgeting cycles and purchasing practices of customers;
- decisions by potential customers to purchase alternative solutions;
- decisions by potential customers to develop in-house solutions as alternatives to our products;
- insolvency or credit difficulties confronting our customers, which could adversely affect their ability to purchase or pay for our offerings;
- our ability to collect timely on invoices or receivables;
- delays in our ability to fulfill our customers' orders;
- the cost and potential outcomes of future litigation or other disputes;
- future accounting pronouncements or changes in our accounting policies;
- our overall effective tax rate, including impacts caused by any reorganization in our corporate tax structure and any new legislation or regulatory developments;
- fluctuations in stock-based compensation expense;
- fluctuations in foreign currency exchange rates;
- the impact of changing inflation and interest rate environments;
- the timing and success of new offerings introduced by us or our competitors or any other change in the competitive dynamics of our industry, including consolidation among competitors, customers, or partners;
- the timing of expenses related to the development or acquisition of technologies or businesses and potential future charges for impairment of goodwill from acquired companies; and
- other risk factors described in this Quarterly Report on Form 10-Q.

The impact of one or more of the foregoing or other factors may cause our operating results to vary significantly. For example, the full impact of the COVID-19 pandemic remains uncertain and could result in material adverse changes in our results of operations for an unknown period of time as the virus and its related political, social, and economic impacts spread. Such fluctuations could cause us to fail to meet the expectations of investors or securities analysts, which could cause the trading price of our ordinary shares to fall substantially, and we could face costly lawsuits, including securities class action suits, which could have an adverse effect on our business.

We are exposed to fluctuations in currency exchange rates, which could negatively affect our financial condition and results of operations.

A substantial portion of our subscription revenue is generated, and a portion of our operating expenses is incurred, outside the United States in foreign currencies. Fluctuations in the value of the U.S. dollar versus foreign currencies, particularly with respect to the Euro and the British Pound Sterling, may impact our operating results when translated into U.S. dollars. We also expect that other exchange rates may also be more volatile than normal as a result of the Russian invasion of Ukraine and related events, the COVID-19 pandemic, and uncertain macroeconomic conditions. The strengthening of the U.S. dollar continues to be a headwind to year-over-year growth and increases the real cost of our offerings to our non-U.S. dollar customers, leading to delays in the purchase of our offerings and the lengthening of our sales cycle. If the strength of the U.S. dollar increases, this could adversely affect our financial condition and results of operations. In addition, increased international sales in the future, including through our channel partners, may result in greater foreign currency denominated sales, increasing our foreign currency risk. Moreover, operating expenses incurred outside the United States in foreign currencies are increasing and are subject to fluctuations due to changes in foreign currency exchange rates. If we are not able to successfully hedge against the risks associated with currency fluctuations, our financial condition and results of operations could be adversely affected. Although we may in the future decide to undertake foreign currency exchange hedging transactions to cover a portion of our foreign currency exchange exposure, we currently do not hedge our exposure to foreign currency exchange risks. If we decide to enter into hedging transactions in the future, the availability and effectiveness of these hedging transactions may be limited and we may not be able to successfully hedge our exposure, which could adversely affect our financial condition and results of operations.

If we are unable to increase sales of our subscriptions to new customers, sell additional subscriptions to our existing customers, or expand the value of our existing customers' subscriptions, our future revenue and results of operations will be harmed.

We offer certain features of our products with no payment required. Customers purchase subscriptions in order to gain access to additional functionality and support. Our future success depends on our ability to sell our subscriptions to new customers, including to large enterprises, and to expand the deployment of our offerings with existing customers by selling paid subscriptions to our existing users and expanding the value and number of existing customers' subscriptions. Our ability to sell new subscriptions depends on a number of factors, including the prices of our offerings, the prices of products offered by our competitors, and the budgets of our customers. We also face difficulty in displacing the products of incumbent competitors. In addition, a significant aspect of our sales and marketing focus is to expand deployments within existing customers. The rate at which our existing customers purchase additional subscriptions and expand the value of existing subscriptions depends on a number of factors, including customers' level of satisfaction with our offerings, the nature and size of the deployments, the desire to address additional use cases, the perceived need for additional features, and general economic conditions. If our existing customers do not purchase additional subscriptions or expand the value of their subscriptions, our Net Expansion Rate may decline. We rely in large part on our customers to identify new use cases for our products in order to expand such deployments and grow our business. If our customers do not recognize the potential of our offerings, our business would be materially and adversely affected. If our efforts to sell subscriptions to new customers and to expand deployments at existing customers are not successful, our total revenue and revenue growth rate may decline, and our business will suffer.

If our existing customers do not renew their subscriptions, our business and results of operations may be adversely affected.

We expect to derive a significant portion of our revenue from renewals of existing subscriptions. Our customers have no contractual obligation to renew their subscriptions after the completion of their subscription term. Our subscriptions for self-managed deployments typically range from one to three years, while many of our Elastic Cloud customers purchase subscriptions either on a month-to-month basis or on a committed contract of at least one year in duration.

Our customers' renewal rates may decline or fluctuate as a result of a number of factors, including their satisfaction with our products and our customer support, our products' ability to integrate with new and changing technologies, the frequency and severity of product outages, our product uptime or latency, and the pricing of our, or competing, products. If our customers renew their subscriptions, they may renew for shorter subscription terms or on other terms that are less economically beneficial to us. We may not accurately predict future renewal trends. If our existing customers do not renew their subscriptions, or renew on less favorable terms, our revenue may grow more slowly than expected or decline.

Our decision to no longer offer Elasticsearch and Kibana under an open source license may harm the adoption of Elasticsearch and Kibana.

In February 2021, with the release of version 7.11 of the Elastic Stack, we changed the source code of Elasticsearch and Kibana that had historically been licensed under Apache 2.0, to be dual licensed under Elastic License 2.0 and the Server Side Public License Version 1.0 ("SSPL"), at the user's election. Neither the Elastic License nor the SSPL has been approved by the Open Source Initiative or is included in the Free Software Foundation's list of free software licenses. Further, neither has been interpreted by any court. While the vast majority of downloads of Elasticsearch and Kibana from mid-2018 through early 2021 were licensed under the Elastic License, the removal of the Apache 2.0 alternative could negatively impact certain developers for whom the availability of an open source license was important. In addition, some developers and the companies for whom they work may be hesitant to download or upgrade to new versions of Elasticsearch or Kibana under the Elastic License or SSPL because of uncertainty around how these licenses may be interpreted and enforced. Other developers, including competitors of Elastic such as Amazon, have announced that they have "forked" Elasticsearch and Kibana. For example, Amazon has launched an open source project called OpenSearch based on a forked version of the Elastic Stack, which is licensed under Apache 2.0, and rebranded their existing Elasticsearch Service to OpenSearch Service. The combination of uncertainty around our dual license model and the potential competition from the forked versions of our software may negatively impact adoption of Elasticsearch and Kibana, which in turn could lead to reduced brand and product awareness, ultimately leading to a decline in paying customers, which could harm our ability to grow our business or achieve profitability.

We could be negatively impacted if the Elastic License or SSPL under which some of our software is licensed is not enforceable.

We make the source code of our products available under Apache 2.0, the Elastic License, or as dual licensed under the Elastic License and SSPL, depending on the product and version. Apache 2.0 is a permissive open source license that allows licensees to freely copy, modify and distribute Apache 2.0-licensed software provided that they meet certain conditions. The Elastic License is our proprietary source available license. The Elastic License permits licensees to use, copy, modify and distribute the licensed software provided that they do not offer access to the software as a cloud service, interfere with the license key or remove proprietary notices. SSPL is a source available license that is based on the GNU Affero General Public License ("AGPL") open source license and permits licensees to copy, modify and distribute SSPL-licensed software, but expressly requires licensees that offer the SSPL-licensed software as a third-party service to open source all of the software that they use to offer such service. We rely upon the enforceability of the restrictions set forth in the Elastic License and SSPL to protect our proprietary interests. It is possible that a court could hold that the Elastic License or SSPL are unenforceable. If a court held that the Elastic License or SSPL or certain aspects of these licenses are unenforceable, others may be able to use our software to compete with us in the marketplace in a manner not subject to the restrictions set forth in the Elastic License or SSPL.

Because of the permissive rights accorded to third parties under our open source and source available licenses, there are limited technological barriers to entry into the markets in which we compete and it may be relatively easy for competitors, some of whom may have greater resources than we have, to enter our markets and compete with us.

Anyone may obtain access to source code for the features of our software that we have licensed under open source or source available licenses. Depending on the product and version of the Elastic software, this source code is available under Apache 2.0, SSPL, or the Elastic License. Each of these licenses allows anyone, subject to compliance with the conditions of the applicable license, to redistribute our software in modified or unmodified form and use it to compete in our markets. Such competition can develop without the degree of overhead and lead time required by traditional proprietary software companies, due to the rights granted to licensees of open source and source available software. It is possible for competitors to develop their own software, including software based on our products, potentially reducing the demand for our products and putting pricing pressure on our subscriptions. For example, Amazon offers some of the features that we had previously made available under an open source license as part of its Amazon Web Services offering. As such, Amazon competes with us for potential customers, and while Amazon cannot provide our proprietary software, Amazon's offerings may reduce the demand for our offerings and the pricing of Amazon's offerings may limit our ability to adjust the price of our products. We cannot guarantee that we will be able to compete successfully against current and future competitors or that competitive pressure or the availability of new software will not result in price reductions, reduced operating margins and loss of market share, any one of which could harm our business, financial condition, results of operations and cash flows.

If we do not effectively develop and expand our sales and marketing capabilities, including expanding, training, and compensating our sales force, we may be unable to add new customers, increase sales to existing customers or expand the value of our existing customers' subscriptions and our business will be adversely affected.

We dedicate significant resources to sales and marketing initiatives, which require us to invest significant financial and other resources, including in markets in which we have limited or no experience. Our business and results of operations will be harmed if our sales and marketing efforts do not generate significant revenue increases or increases that are smaller than anticipated.

We may not achieve revenue growth from expanding our sales force if we are unable to hire, train, and retain talented and effective sales personnel. We depend on our sales force to obtain new customers and to drive additional sales to existing customers. We believe that there is significant competition for sales personnel, including sales representatives, sales managers, and sales engineers, with the requisite skills and technical knowledge. Our ability to achieve significant revenue growth will depend, in large part, on our success in recruiting, training and retaining sufficient sales personnel to support our growth, and as we introduce new products, solutions, and marketing strategies, we may need to re-train existing sales personnel. For example, we may need to provide additional training and development to our sales personnel in relation to selling consumption-based arrangements and expanding customer usage of our offerings over time. New hires also require significant training and may take significant time before they achieve full productivity. Our recent hires and planned hires may not become productive as quickly as we expect, and we may be unable to hire or retain sufficient numbers of qualified individuals in the markets where we do business or plan to do business. As we continue to grow rapidly, a large percentage of our sales force will have relatively little experience working with us, our subscriptions, and our business model. Additionally, we may need to evolve our sales compensation plans to drive the growth of our Elastic Cloud offerings with consumption-based arrangements. Such changes may have adverse consequences if not designed effectively. If we are unable to hire and train sufficient numbers of effective sales personnel, our new and existing sales personnel are unable to achieve desired productivity levels in a reasonable period of time, our sales personnel are not successful in obtaining new customers or increasing sales to our existing customer base, or our sales and marketing programs, including our sales compensation plans, are not effective, our growth and results of operations could be negatively impacted, and our business will be harmed.

Our ability to increase sales of our offerings is highly dependent on the quality of our customer support, and our failure to offer high quality support would have an adverse effect on our business, reputation and results of operations.

After our products are deployed within our customers' IT environments, our customers depend on our technical support services to resolve issues relating to our products. If we do not succeed in helping our customers quickly resolve post-deployment issues or provide effective ongoing support and education on our products, our ability to renew or sell additional subscriptions to existing customers or expand the value of existing customers' subscriptions would be adversely affected and our reputation with potential customers could be damaged. Many larger enterprise and government entity customers have more complex IT environments and require higher levels of support than smaller customers. If we fail to meet the requirements of these enterprise customers, it may be more difficult to grow sales with them.

Additionally, it can take several months to recruit, hire, and train qualified technical support employees. We may not be able to hire such resources fast enough to keep up with demand, particularly if the sales of our offerings exceed our internal forecasts. Due to the uncertainty related to the ongoing COVID-19 pandemic and macroeconomic conditions, there may also be more competition for qualified employees and delays in hiring, onboarding, and training new employees. To the extent that we are unsuccessful in hiring, training, and retaining adequate support resources, our ability to provide adequate and timely support to our customers, and our customers' satisfaction with our offerings, will be adversely affected. Our failure to provide and maintain, or a market perception that we do not provide or maintain, high-quality support services would have an adverse effect on our business, financial condition, and results of operations.

We rely significantly on revenue from subscriptions and, because we recognize the vast majority of the revenue from subscriptions, either based on actual consumption or monthly, over the term of the relevant subscription period, downturns or upturns in sales are not immediately reflected in full in our results of operations.

Subscription revenue accounts for the substantial majority of our revenue, comprising 91%, 93%, and 93% of total revenue for the six months ended October 31, 2022 and the years ended April 30, 2022 and 2021, respectively. We recognize the vast majority of our subscription revenue, either based on actual consumption or monthly, over the term of the relevant time period. As a result, much of the subscription revenue we report each fiscal quarter represents the recognition of deferred revenue from subscription contracts entered into during previous fiscal quarters. Consequently, a decline in new or renewed subscriptions in any one fiscal quarter will not be fully or immediately reflected in revenue in that fiscal quarter and will negatively affect our revenue in future fiscal quarters. Accordingly, the effect of significant downturns in new or renewed sales of our subscriptions is not reflected in full in our results of operations until future periods.

We do not have an adequate history with our consumption-based arrangements for our Elastic Cloud offerings to accurately predict the long-term rate of customer adoption or renewal, or the impact it will have on our near-term or long-term revenue or operating results.

We expect that our consumption-based arrangements for our Elastic Cloud offerings will continue to increase, both in amount and as a percentage of our total revenue. Because we recognize revenue under a consumption-based arrangement based on actual customer consumption, we do not have the same visibility into the timing of revenue recognition as we do under subscription arrangements where revenue is recognized on a predetermined schedule over the subscription term. Additionally, customers may consume our products at a different pace than we expect. For these reasons, our revenue may be less predictable or more variable than our historical revenue, and our actual results may differ materially from our forecasts.

A real or perceived defect, security vulnerability, error, or performance failure in our software could cause us to lose revenue, damage our reputation, and expose us to liability.

Our products are inherently complex and, despite extensive testing and quality control, have in the past and may in the future contain defects or errors, especially when first introduced, or otherwise not perform as contemplated. These defects, security vulnerabilities, errors or performance failures could cause damage to our reputation, loss of customers or revenue, product returns, order cancellations, service terminations, or lack of market acceptance of our software. As the use of our products, including products that were recently acquired or developed, expands to more sensitive, secure, or mission-critical uses by our customers, we may be subject to increased scrutiny, potential reputational risk, or potential liability should our software fail to perform as contemplated in such deployments. We have issued in the past and may in the future need to issue corrective releases of our software to fix these defects, errors or performance failures, which could require us to allocate significant research and development and customer support resources to address these problems.

Any limitation of liability provisions that may be contained in our customer and partner agreements may not be effective as a result of existing or future applicable law or unfavorable judicial decisions. The sale and support of our products entail the risk of liability claims, which could be substantial in light of the use of our products in enterprise-wide environments. In addition, our insurance against this liability may not be adequate to cover a potential claim.

Incorrect implementation or use of our software, or our customers' failure to update our software, could result in customer dissatisfaction and negatively affect our business, operations, financial results, and growth prospects.

Our products are often operated in large scale, complex IT environments. Our customers and some partners require training and experience in the proper use of, and the benefits that can be derived from, our products to maximize their potential. If our products are not implemented, configured, updated, or used correctly or as intended, or in a timely manner, inadequate performance, errors, loss of data, corruptions, and/or security vulnerabilities may result. For example, there have been and may in the future continue to be, reports of our customers not properly securing implementations of our products, which can result in unprotected data. Because our customers rely on our software to manage a wide range of operations, the incorrect implementation or use of our software, or our customers' failure to update our software, or our failure to train customers on how to use our software productively, may result in customer dissatisfaction, negative publicity and may adversely affect our reputation and brand. Failure by us to effectively provide training and implementation services to our customers could result in lost opportunities for follow-on sales to these customers and decrease subscriptions by new customers, and adversely affect our business and growth prospects.

If third parties offer inadequate or defective implementations of software that we have previously made available under an open source license, our reputation could be harmed.

Certain cloud hosting providers and managed service providers, including Amazon Web Services, offer hosted products based on a forked version of the Elastic Stack. These offerings are not supported by us and come without any of our proprietary features, whether free or paid. We do not control how these third parties may use or offer our open source technology. These third parties could inadequately or incorrectly implement our open source technology or fail to update such technology in light of changing technological or security requirements, which could result in real or perceived defects, security vulnerabilities, errors, or performance failures with respect to their offerings. Users, customers, and potential customers could confuse these third-party products with our products, and attribute such defects, security vulnerabilities, errors, or performance failures to our products. Any damage to our reputation and brand from defective implementations of our open source software could result in lost sales and lack of market acceptance of our products and could adversely affect our business and growth prospects.

We rely on traditional web search engines to direct traffic to our website. If our website fails to rank prominently in unpaid search results, traffic to our website could decline and our business would be adversely affected.

Our success depends in part on our ability to attract users through unpaid Internet search results on traditional web search engines, such as Google. The number of users we attract to our website from search engines is due in large part to how and where our website ranks in unpaid search results. These rankings can be affected by a number of factors, many of which are not in our direct control, and they may change frequently. For example, a search engine may change its ranking algorithms, methodologies or design layouts. As a result, links to our website may not be prominent enough to drive traffic to our website, and we may not know how or otherwise be in a position to influence the results. Any reduction in the number of users directed to our website could reduce our revenue or require us to increase our customer acquisition expenditures.

If our security measures are breached, a security incident occurs, or unauthorized access to or other processing of confidential information, including personal data, otherwise occurs, our software may be perceived as not being secure, customers may reduce the use of or stop using our products, and we may incur significant liabilities.

Any security breach or incident, including those resulting from a cybersecurity attack, phishing attack, unauthorized access, unauthorized usage, virus, malware, ransomware, denial of service, credential stuffing attack, supply chain attack, hacking, or similar breach involving our networks and systems, or those of third parties upon which we rely, could result in the loss of confidential information, including personal data, disruption to our operations, significant remediation costs, lost revenue, increased insurance premiums, damage to our reputation, litigation, regulatory investigations or other liabilities. These attacks may come from individual hackers, criminal groups, and state-sponsored organizations, and security breaches and incidents may arise from other sources, such as employee or contractor error or malfeasance. Cyber threats are constantly evolving and becoming increasingly sophisticated and complex, increasing the difficulty of detecting and successfully defending against them. As a provider of security solutions, we have been and may continue to be specifically targeted by bad actors for attacks intended to circumvent our security capabilities as an entry point into customers' endpoints, networks, or systems. Our industry is experiencing an increase in phishing attacks and unauthorized scans of systems searching for vulnerabilities or misconfigurations to exploit. If our security measures are breached or otherwise compromised as a result of third-party action, employee or contractor error, defect, vulnerability, or bug in our products or products of third parties upon which we rely, malfeasance or otherwise, including any such breach or compromise resulting in someone obtaining unauthorized access to our confidential information, including personal data or the confidential information or personal data of our customers or others, or if any of these are perceived or reported to occur, we may suffer the loss, compromise, corruption, unavailability, or destruction of our or others' confidential information and personal data, we may face a loss in intellectual property protection, our reputation may be damaged, our business may suffer and we could be subject to claims, demands, regulatory investigations and other proceedings, indemnity obligations, and otherwise incur significant liability. Even the perception of inadequate security or an inability to maintain security certifications or to comply with our customer or user agreements, contracts with third-party vendors or service providers or other contracts may damage our reputation and negatively impact our ability to win new customers and retain existing customers. Further, we could be required to expend significant capital and other resources to address any security incident or breach, and we may face difficulties or delays in identifying and responding to any security breach or incident.

In addition, many of our customers may use our software for processing their confidential information, including business strategies, financial and operational data, personal data and other related data. As a result, unauthorized access to or use of our software or such data could result in the loss, compromise, corruption, or destruction of our customers' confidential information and lead to claims, demands, litigation, regulatory investigations, indemnity obligations, and other liabilities. It could also hinder our ability to obtain and maintain information security certifications that support customers' adoption of our products and our retention of those customers. We have implemented administrative, technical and physical measures designed to protect the integrity of our customers' data and prevent data loss, misappropriation and other security breaches and incidents and may incur significant costs in connection with the implementation of additional preventative measures in the future.

We engage third-party vendors and service providers to store and otherwise process some of our and our customers' data, including sensitive and personal data. There have been and may continue to be significant supply chain attacks generally, and our third-party vendors and service providers may be targeted or impacted by such attacks, and face other risks of security breaches and incidents. Our third-party vendors and service providers have been subject to phishing attacks and other security incidents, and we cannot guarantee that our or our third-party vendors and service providers' systems and networks have not been breached or otherwise compromised or that they do not contain exploitable vulnerabilities, defects or bugs that could result in a breach of or disruption to our systems and networks or the systems and networks of third parties that support us and our services. For example, in December 2021, a vulnerability in a popular logging software, Log4j, was publicly announced. If left unpatched, the Log4j vulnerability could be exploited to allow unauthorized actors to execute code remotely on a system using Log4j. We have taken steps to ensure these vulnerabilities have been patched in our systems, but we cannot guarantee that all vulnerabilities have been patched in every system upon which we are dependent or that additional critical vulnerabilities of Log4j or other open source software upon which we rely will not be discovered. Our ability to monitor our third-party vendors and service providers' data security is limited, and, in any event, third parties may be able to circumvent those security measures, resulting in the unauthorized access to, or misuse, disclosure, loss, destruction, or other unauthorized processing of our and our customers' data, including sensitive and personal data.

Techniques used to sabotage or obtain unauthorized access to systems or networks are constantly evolving and, in some instances, are not identified until launched against a target. We and our third-party vendors and service providers may be unable to anticipate these techniques, react in a timely manner, or implement adequate preventative measures. Security risks are also heightened during the ongoing COVID-19 pandemic as more individuals are working remotely and utilizing home networks for transmitting information, and reported ransomware incidents with significant operational impacts also appear to be escalating in frequency and degree. Also, due to political uncertainty and military actions associated with Russia's invasion of Ukraine, we and our third-party vendors and service providers are vulnerable to a heightened risk of cybersecurity attacks, phishing attacks, viruses, malware, ransomware, hacking or similar breaches from nation-state and affiliated actors, including attacks that could materially disrupt our systems and operations, supply chain, and ability to produce, sell and distribute our products and services as well as retaliatory cybersecurity attacks from Russian and Russian-affiliated actors against companies with a U.S. presence. We may be at a heightened risk of such retaliatory attacks due to our decision to no longer sell our products to companies in Russia or Belarus until further notice, and to support Ukraine by, among other things, providing free access to Elastic Cloud solutions, including our platinum security capabilities, to organizations in Ukraine. In addition, laws, regulations, government guidance, and industry standards and practices in the United States and elsewhere are rapidly evolving to combat these threats. We may face increased compliance burdens regarding such requirements with regulators and customers regarding our products and services and also incur additional costs for oversight and monitoring of our own supply chain. We and our customers may also experience increased costs associated with security measures and increased risk of suffering cybersecurity attacks, including ransomware attacks. Should we or the third-party vendors and service providers upon which we rely experience such attacks, including from ransomware or other security breaches or incidents, our operations may also be hindered or interrupted due to system disruptions or otherwise, with foreseeable secondary contractual, regulatory, financial, and reputational harms that may arise from such an incident.

Further, we cannot assure that any limitations of liability provisions in our customer and user agreements, contracts with third-party vendors and service providers or other contracts would be enforceable or adequate or would otherwise protect us from any liabilities or damages with respect to any particular claim relating to a security breach or other security incident. We also cannot be sure that our existing insurance coverage will continue to be available on acceptable terms or will be available in sufficient amounts to cover claims related to a security incident or breach, or that the insurer will not deny coverage as to any future claim. The successful assertion of claims against us that exceed available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have a material adverse effect on our business, including our financial condition, operating results, and reputation.

Interruptions or performance problems associated with our technology and infrastructure, and our reliance on technologies from third parties, may adversely affect our business operations and financial results.

We rely on third-party cloud platforms to host our cloud offerings. If we experience an interruption in service for any reason, our cloud offerings would similarly be interrupted. The COVID-19 pandemic, Russia's invasion of Ukraine, and increased energy prices could also disrupt the supply chain of hardware needed to maintain our third-party data center operations. An interruption in our services to our customers could cause our customers' internal and consumer-facing applications to not function properly, which could have a material adverse effect on our business, results of operations, customer relationships and reputation.

In addition, our website and internal technology infrastructure may experience performance issues due to a variety of factors, including infrastructure changes, human or software errors, website or third-party hosting disruptions, capacity constraints, technical failures, natural disasters or fraud or security attacks. Our use of third-party open source software may increase this risk. If our website is unavailable or our users are unable to download our products or order subscriptions or services within a reasonable amount of time or at all, our business could be harmed. We expect to continue to make significant investments to maintain and improve website performance and to enable rapid releases of new features and applications for our products. To the extent that we do not effectively upgrade our systems as needed and continually develop our technology to accommodate actual and anticipated changes in technology, our business and results of operations may be harmed.

We rely on third-party service providers for many aspects of our business, and any failure to maintain these relationships could harm our business.

Our success depends upon our relationships with third-party service providers, including providers of cloud hosting infrastructure, customer relationship management systems, financial reporting systems, human resource management systems, credit card processing platforms, marketing automation systems, and payroll processing systems, among others. If any of these third parties experience difficulty meeting our requirements or standards, become unavailable due to extended outages or interruptions, temporarily or permanently cease operations, face financial distress or other business disruptions such as a security incident, increase their fees, if our relationships with any of these providers deteriorate, or if any of the agreements we have entered into with such third parties are terminated or not renewed without adequate transition arrangements, we could suffer liabilities, penalties, fines, increased costs and delays in our ability to provide customers with our products and services, our ability to manage our finances could be interrupted, receipt of payments from customers may be delayed, our processes for managing sales of our offerings could be impaired, our ability to generate and manage sales leads could be weakened, or our business operations could be disrupted. Further, supply chain disruptions due to Russia's invasion of Ukraine and any impacts that may have on our third-party service providers may disrupt our business operations. Any of such disruptions may adversely impact our business and our financial condition, results of operations or cash flows could be adversely affected until we replace such providers or develop replacement technology or operations. In addition, if we are unsuccessful in identifying high-quality service providers, negotiating cost-effective relationships with them or effectively managing these relationships, our business and financial results could be adversely affected.

The length of our sales cycle can be unpredictable, particularly with respect to sales through our channel partners or sales to large customers, and our sales efforts may require considerable time and expense.

Our results of operations may fluctuate, in part, because of the length and variability of the sales cycle of our subscriptions and the difficulty in making short-term adjustments to our operating expenses. Our results of operations depend in part on sales to new customers, including large customers, and increasing sales to existing customers. The length of our sales cycle, from initial contact with our sales team to contractually committing to our subscriptions, can vary substantially from customer to customer based on deal complexity as well as whether a sale is made directly by us or through a channel partner. Our sales cycle can extend to more than a year for some customers, and the length of sales cycles may be further impacted due to the COVID-19 pandemic and worsening economic conditions. Some customers have been scrutinizing their spending more carefully given an uncertain economic environment, and we generally expect this to continue. We have experienced and, if economic conditions continue to decline, we may continue to experience longer and more unpredictable sales cycles. As we target more of our sales efforts at larger enterprise customers, we may face greater costs, longer sales cycles, greater competition and less predictability in completing some of our sales. A customer's decision to use our solutions may be an enterprise-wide decision, which may require greater levels of education regarding the use cases of our products or prolonged negotiations. In addition, larger customers may demand more configuration, integration services and features. It is difficult to predict exactly when, or even if, we will make a sale to a potential customer or if we can increase sales to our existing customers. As a result, large individual sales have, in some cases, occurred in quarters subsequent to those we anticipated, or have not occurred at all. The loss or delay of one or more large transactions in a quarter could affect our cash flows and results of operations for that quarter and for future quarters. Because a substantial proportion of our expenses are relatively fixed in the short term, our cash flows and results of operations will suffer if revenue falls below our expectations in a particular quarter, which could cause the price of our ordinary shares to decline.

We depend on our senior management and other key employees, and the loss of one or more of these employees or an inability to attract and retain highly skilled employees could harm our business.

Our future success depends, in part, on our ability to continue to attract and retain highly skilled personnel. The loss of the services of any of our key personnel, the inability to attract or retain qualified personnel, or delays in hiring required personnel, particularly in engineering and sales, may seriously harm our business, financial condition, and results of operations. Further, our ability to attract additional qualified personnel may be impacted by the economic uncertainty and insecurity caused by the COVID-19 pandemic. The loss of services of any of our key personnel also increases our dependency on other key personnel who remain with us. Although we have entered into employment offer letters with our key personnel, their employment is for no specific duration and constitutes at-will employment. We are also substantially dependent on the continued service of our existing engineering personnel because of the complexity of our products.

Our future performance also depends on the continued services and continuing contributions of our senior management, particularly our Chief Executive Officer, Ashutosh Kulkarni, and Chief Technology Officer, co-founder and former Chief Executive Officer, Shay Banon, to execute on our business plan and to identify and pursue new opportunities and product innovations. We do not maintain key person life insurance policies on any of our employees. The loss of services of senior management could significantly delay or prevent the achievement of our development and strategic objectives, which could adversely affect our business, financial condition, and results of operations. Any search for senior management in the future or any search to replace the loss of any senior management may be prolonged, and we may not be able to attract a qualified candidate or replacement, as applicable, in a timely manner or at all, particularly as potential candidates may be wary to transition during the unstable economic conditions caused by the COVID-19 pandemic and geopolitical events.

Additionally, the industry in which we operate is generally characterized by significant competition for skilled personnel as well as high employee attrition. We may not be successful in attracting, integrating, or retaining qualified personnel to fulfill our current or future needs. We may need to invest significant amounts of cash and equity to attract and retain new employees, and we may never realize returns on these investments. Also, to the extent we hire personnel from competitors, we may be subject to allegations that they have been improperly solicited, that they have divulged proprietary or other confidential information, or that their former employers own their inventions or other work product.

If we are not able to maintain and enhance our brand, especially among developers, our ability to expand our customer base will be impaired and our business and operating results may be adversely affected.

We believe that developing and maintaining widespread awareness of our brand, especially with developers, is critical to achieving widespread acceptance of our software and attracting new users and customers. We also believe that the importance of brand recognition will increase as competition in our market increases. Successfully maintaining and enhancing our brand will depend largely on the effectiveness of our marketing efforts, our ability to maintain our customers' trust, our ability to continue to develop new functionality and use cases, and our ability to successfully differentiate our products and platform capability from competitive products. Brand promotion activities may not generate user or customer awareness or increase revenue, and even if they do, any increase in revenue may not offset the expenses we incur in building our brand. For instance, our continued focus and investment in our ElasticON user conferences and similar investments in our brand, user engagement, and customer engagement may not generate the desired customer awareness or a sufficient financial return. If we fail to successfully promote and maintain our brand, we may fail to attract or retain users and customers necessary to realize a sufficient return on our brand-building efforts, or to achieve the widespread brand awareness that is critical for broad customer adoption of our products, which would adversely affect our business and results of operations.

Our corporate culture has contributed to our success, and if we cannot maintain this culture as we grow, we could lose the innovation, creativity and entrepreneurial spirit we have worked to foster, which could harm our business.

We believe that our culture has been and will continue to be a key contributor to our success. We expect to continue to hire as we expand. If we do not continue to maintain our corporate culture as we grow, we may be unable to foster the innovation, creativity, and entrepreneurial spirit we believe we need to support our growth. Moreover, many of our existing employees may be able to receive significant proceeds from sales of our ordinary shares in the public markets, which could lead to employee attrition and disparities of wealth among our employees that adversely affects relations among employees and our culture in general. Additional headcount growth and employee turnover may result in a change to our corporate culture, which could harm our business.

If our channel partners, on which we rely to execute a portion of our sales, fail to perform or we are unable to maintain successful relationships with our channel partners, our ability to market, sell and distribute our solution will be more limited, and our results of operations and reputation could be harmed.

A portion of our revenue is generated by sales through our channel partners, especially to U.S. federal government customers and in certain international markets, and these sales may grow and represent a larger portion of our revenues in the future. We provide certain of our channel partners with specific training and programs to assist them in selling our offerings, but there can be no assurance that these steps will be effective. In addition, our channel partners may be unsuccessful in marketing and selling our offerings. If we are unable to develop and maintain effective sales incentive programs for our channel partners, we may not be able to incentivize these partners to sell our offerings to customers.

Some of these partners may also market, sell, and support offerings that compete with ours, may devote more resources to the marketing, sales, and support of such competitive offerings, may have incentives to promote our competitors' offerings to the detriment of our own or may cease selling our offerings altogether. Our agreements with our channel partners typically have an initial duration of three years, with one-year auto renewals thereafter, and generally may be terminated for any reason by either party with advance notice 30 to 60 days prior to each renewal date, or at any time upon 90-day notice. We may not be able to retain these channel partners or secure additional or replacement channel partners. The loss of one or more of our significant channel partners or a decline in the number or size of orders from any of them could harm our results of operations. In addition, many of our new channel partners require extensive training and may take several months or more to achieve productivity. Our channel partner sales structure could subject us to lawsuits, potential liability, misstatement of revenue, and reputational harm if, for example, any of our channel partners misrepresents the functionality of our offerings to customers or violates laws or our or their corporate policies, including our terms of business, which in turn could impact reported revenue, deferred revenue and remaining performance obligations. If our channel partners are unsuccessful in fulfilling the orders for our offerings, or if we are unable to enter into arrangements with and retain high-quality channel partners, our ability to sell our offerings and results of operations could be harmed.

If we are unable to maintain successful relationships with our partners, our business operations, financial results and growth prospects could be adversely affected.

We maintain partnership relationships with a variety of partners, including cloud providers, systems integrators, channel partners, referral partners, OEM and MSP partners, and technology partners, to deliver offerings to our end customers and complement our broad community of users. In particular, we partner with various cloud providers to jointly market, sell and deliver our Elastic Cloud offerings, which in some instances also involves technical integration with such cloud providers.

Our agreements with our partners are generally non-exclusive, meaning our partners may offer customers the offerings of several different companies, including offerings that compete with ours, or may themselves be or become competitors. If our partners do not effectively market and sell our offerings, choose to use greater efforts to market and sell their own offerings or those of our competitors, fail to provide adequate technical integration with their own offerings, fail to meet the needs of our customers, or fail to deliver services to our customers, our ability to grow our business and sell our offerings may be harmed. Our partners may cease marketing our offerings with limited or no notice and with little or no penalty. The loss of a substantial number of our partners, our possible inability to replace them, or the failure to recruit additional partners could harm our results of operations.

Our ability to achieve revenue growth in the future will depend in part on our success in maintaining successful relationships with our partners and in helping our partners enhance their ability to market and sell our subscriptions. If we are unable to maintain our relationships with these partners, our business, results of operations, financial condition or cash flows could be harmed.

The sales prices of our offerings may decrease, which may reduce our gross profits and adversely affect our financial results.

The sales prices for our offerings may decline or we may introduce new pricing models for a variety of reasons, including competitive pricing pressures, discounts, in anticipation of or in conjunction with the introduction of new offerings, or promotional programs.

Competition continues to increase in the market segments in which we operate, and we expect competition to continue to increase, thereby leading to increased pricing pressures. Larger competitors with more diverse offerings may reduce the price of offerings that compete with ours or may bundle them with other offerings. Additionally, currency fluctuations in certain countries and regions and pressures from uncertain inflation and interest rate environments may negatively impact actual prices that customers and channel partners are willing to pay in those countries and regions. Any decrease in the sales prices for our offerings, without a corresponding decrease in costs or increase in volume, would adversely impact our gross profit. Gross profit could also be adversely impacted by a shift in the mix of our subscriptions from self-managed to our cloud offering, for which we incur hosting costs, as well as any increase in our mix of services relative to subscriptions. We may not be able to maintain our prices and gross profits at levels that will allow us to achieve and maintain profitability.

We expect our revenue mix to vary over time, which could harm our gross margin and operating results.

We expect our revenue mix to vary over time due to a number of factors, and we expect that revenue from Elastic Cloud will continue to become a larger part of our revenue mix. Due to the differing revenue recognition policies applicable to our subscriptions and services, shifts in our business mix from quarter to quarter could produce substantial variation in revenue recognized. The growth of consumption-based arrangements for our Elastic Cloud offerings, where the revenue we recognize is tied to our customers' actual usage of our products, may further exacerbate the variation in our revenue. Further, our gross margins and operating results could be harmed by changes in revenue mix and costs, together with numerous other factors, including entry into new markets or growth in lower margin markets; entry into markets with different pricing and cost structures; pricing discounts; and increased price competition. Any one of these factors or the cumulative effects of certain of these factors may result in significant fluctuations in our gross margin and operating results. This variability and unpredictability could result in our failure to meet internal expectations or those of securities analysts or investors for a particular period. If we fail to meet or exceed such expectations for these or any other reasons, the market price of our ordinary shares could decline.

Failure to protect our proprietary technology and intellectual property rights could substantially harm our business and results of operations.

Our success depends to a significant degree on our ability to protect our proprietary technology, methodologies, know-how and brand. We rely on a combination of trademarks, copyrights, patents, contractual restrictions, and other intellectual property laws and confidentiality procedures to establish and protect our proprietary rights. However, the steps we take to protect our intellectual property rights may be inadequate. We will not be able to protect our intellectual property rights if we are unable to enforce our rights or if we do not detect unauthorized use of our intellectual property rights. The source code of the proprietary features for the Elastic Stack is publicly available, which may enable others to replicate our proprietary technology and compete more effectively. If we fail to protect our intellectual property rights adequately, our competitors may gain access to our proprietary technology and our business may be harmed. In addition, defending our intellectual property rights might entail significant expense. Any patents, trademarks, or other intellectual property rights that we have or may obtain may be challenged by others or invalidated through administrative process or litigation. There can be no assurance that any ongoing patent applications we may have will result in issued patents. Even if we continue to seek patent protection in the future, we may be unable to obtain further patent protection for our technology. In addition, any patents issued in the future may not provide us with competitive advantages, or may be successfully challenged by third parties. Furthermore, legal standards relating to the validity, enforceability, and scope of protection of intellectual property rights are uncertain. Despite our precautions, it may be possible for unauthorized third parties to copy our products and use information that we regard as proprietary to create offerings that compete with ours. Effective patent, trademark, copyright, and trade secret protection may not be available to us in every country in which our products are available. We may be unable to prevent third parties from acquiring domain names or trademarks that are similar to, infringe upon, or diminish the value of our trademarks and other proprietary rights. The laws of some countries may not be as protective of intellectual property rights as those in the United States, and mechanisms for enforcement of intellectual property rights may be inadequate. As we expand our international activities, our exposure to unauthorized copying and use of our products and proprietary information will likely increase. Accordingly, despite our efforts, we may be unable to prevent third parties from infringing upon or misappropriating our intellectual property.

We enter into confidentiality and invention assignment agreements with our employees and consultants and enter into confidentiality agreements with other parties. No assurance can be given that these agreements will be effective in controlling access to and distribution of our proprietary information. Further, these agreements may not prevent our competitors from independently developing technologies that are substantially equivalent or superior to our products.

In order to protect our intellectual property rights, we may be required to spend significant resources to monitor and protect our intellectual property rights. Litigation has previously been, and may in the future be, necessary to enforce our intellectual property rights and to protect our trade secrets. Even if we prevail in such disputes, we may not be able to recover all or a portion of any judgments, and litigation brought to protect and enforce our intellectual property rights could be costly, time-consuming, and distracting to management. If unsuccessful, litigation could result in the impairment or loss of portions of our intellectual property. Further, our efforts to enforce our intellectual property rights may be met with defenses, counterclaims, and countersuits attacking the validity and enforceability of our intellectual property rights. Our inability to protect our proprietary technology against unauthorized copying or use, as well as any costly litigation or diversion of our management's attention and resources, could delay further sales or the implementation of our products, impair the functionality of our products, delay introductions of new products, result in our substituting inferior or more costly technologies into our products, or injure our reputation.

We could incur substantial costs as a result of any claim of infringement, misappropriation or violation of another party's intellectual property rights.

In recent years, there has been significant litigation involving patents and other intellectual property rights in the software industry. Companies providing software are increasingly bringing and becoming subject to suits alleging infringement, misappropriation or violation of proprietary rights, particularly patent rights, and to the extent we gain greater market visibility, we face a higher risk of being the subject of intellectual property infringement, misappropriation or violation claims. The risk of patent litigation has been amplified by the increase in the number of a type of patent holder, which we refer to as a non-practicing entity, whose sole or principal business is to assert such claims and against whom our own intellectual property portfolio may provide little deterrent value. We could incur substantial costs in prosecuting or defending any intellectual property litigation. If we sue to enforce our rights or are sued by a third party that claims that our products infringe, misappropriate or violate their rights, the litigation could be expensive and could divert our management resources.

Any intellectual property litigation to which we might become a party, or for which we are required to provide indemnification, may require us to do one or more of the following:

- cease selling or using products that incorporate the intellectual property rights that we allegedly infringe, misappropriate or violate;
- make substantial payments for legal fees, settlement payments or other costs or damages;
- obtain a license, which may not be available on reasonable terms or at all, to sell or use the relevant technology; or
- redesign the allegedly infringing products to avoid infringement, misappropriation or violation, which could be costly, time-consuming or impossible.

If we are required to make substantial payments or undertake any of the other actions noted above as a result of any intellectual property infringement, misappropriation or violation claims against us or any obligation to indemnify our customers for such claims, such payments or actions could harm our business.

Indemnity provisions in various agreements potentially expose us to substantial liability for intellectual property infringement, misappropriation, violation and other losses.

Our agreements with customers and other third parties may include indemnification provisions under which we agree to indemnify them for losses suffered or incurred as a result of claims of intellectual property infringement, misappropriation or violation, damages caused by us to property or persons, or other liabilities relating to or arising from our software, services or other contractual obligations. Large indemnity payments could harm our business, results of operations and financial condition. Although we normally contractually limit our liability with respect to such indemnity obligations, we may still incur substantial liability related to them. Any dispute with a customer with respect to such obligations could have adverse effects on our relationship with that customer and other existing customers and new customers and harm our business and results of operations.

Our use of third-party open source software within our products could negatively affect our ability to sell our products and subject us to possible litigation.

Our technologies incorporate open source software from other developers, and we expect to continue to incorporate such open source software in our products in the future. Few of the licenses applicable to open source software have been interpreted by courts, and there is a risk that these licenses could be construed in a manner that could impose unanticipated conditions or restrictions on our ability to commercialize our products. Moreover, we cannot assure that we have not incorporated third-party open source software in our software in a manner that is inconsistent with the terms of the applicable license or our current policies and procedures. If we fail to comply with these licenses, we may be subject to certain requirements, including requirements that we offer our solutions that incorporate the open source software for no cost, that we make available source code for modifications or derivative works we create based upon, incorporating or using the open source software and that we license such modifications or derivative works under the terms of applicable open source licenses. If an author or other third party that distributes such open source software were to allege that we had not complied with the conditions of one or more of these licenses, we could be required to incur significant legal expenses defending against such allegations and could be subject to significant damages, enjoined from the sale of our products that contained the open source software and required to comply with onerous conditions or restrictions on these products, which could disrupt the distribution and sale of these products. In addition, there have been claims challenging the ownership rights in open source software against companies that incorporate open source software into their products, and the licensors of such open source software provide no warranties or indemnities with respect to such claims. In any of these events, we and our customers could be required to seek licenses from third parties in order to continue offering our products, and to re-engineer our products or discontinue the sale of our products in the event re-engineering cannot be accomplished on a timely basis. We and our customers may also be subject to suits by parties claiming infringement, misappropriation or violation due to the reliance by our solutions on certain open source software, and such litigation could be costly for us to defend or subject us to an injunction. Some open source projects have known vulnerabilities and architectural instabilities and are provided on an "as-is" basis which, if not properly addressed, could negatively affect the performance of our product. Any of the foregoing could require us to devote additional research and development resources to re-engineer our solutions, could result in customer dissatisfaction, and may adversely affect our business, results of operations and financial condition.

We may not be able to realize the benefits of our marketing strategies to offer some of our product features for free and to provide free trials of some of our paid features.

We are dependent upon lead generation strategies, including offering free use of some of our product features and free trials of some of our paid features. These strategies may not be successful in continuing to generate sufficient sales opportunities necessary to increase our revenue. Many users never convert from the free use model or from free trials to the paid versions of our products. To the extent that users do not become, or we are unable to successfully attract, paying customers, we will not realize the intended benefits of these marketing strategies and our ability to grow our revenue will be adversely affected.

Our international operations and expansion expose us to several risks.

As of October 31, 2022, we had customers located in over 125 countries, and our strategy is to continue to expand internationally. In addition, as a result of our strategy of leveraging a distributed workforce, as of October 31, 2022, we had employees located in over 40 countries. Our current international operations involve and future initiatives may involve a variety of risks, including:

- political and economic instability related to international disputes, such as Russia's invasion of Ukraine and the related impact on macroeconomic conditions as a result of such conflict, which may negatively impact our customers, partners, and vendors;
- unexpected changes in regulatory requirements, taxes, trade laws, tariffs, export quotas, custom duties or other trade restrictions;
- different labor regulations, especially in the European Union, where labor laws are generally more advantageous to employees as compared to the United States, including deemed hourly wage and overtime regulations in these locations;
- exposure to many stringent, particularly in the European Union, and potentially inconsistent laws and regulations relating to privacy, data protection and information security;
- changes in a specific country's or region's political or economic conditions;
- the evolving relations between the United States and China;
- changes in relations between the Netherlands and the United States;

- risks resulting from changes in currency exchange rates and inflationary pressures;
- risks resulting from the migration of invoicing from local billing entities to centralized regional billing entities;
- the impact of public health epidemics or pandemics on our employees, partners, and customers;
- challenges inherent to efficiently managing an increased number of employees over large geographic distances, including the need to implement appropriate systems, policies, benefits and compliance programs;
- risks relating to enforcement of U.S. export control laws and regulations including the Export Administration Regulations, and trade and economic sanctions, including restrictions promulgated by the Office of Foreign Assets Control ("OFAC"), and other similar trade protection regulations and measures in the United States or in other jurisdictions;
- risks relating to our third-party vendors and service providers' storage and processing of some of our and our customers' data, including any supply chain cybersecurity attacks;
- reduced ability to timely collect amounts owed to us by our customers in countries where our recourse may be more limited;
- limitations on our ability to reinvest earnings from operations derived from one country to fund the capital needs of our operations in other countries;
- political, economic and trade uncertainties or instability related to the United Kingdom's withdrawal from the European Union (Brexit);
- limited or unfavorable intellectual property protection; and
- exposure to liabilities under anti-corruption and anti-money laundering laws, including the U.S. Foreign Corrupt Practices Act of 1977, as amended ("FCPA"), and similar applicable laws and regulations in other jurisdictions.

If we are unable to address these difficulties and challenges or other problems encountered in connection with our international operations and expansion, we might incur unanticipated liabilities or we might otherwise suffer harm to our business generally.

If we are not successful in sustaining and expanding our international business, we may incur additional losses and our revenue growth could be harmed.

Our future results depend, in part, on our ability to sustain and expand our penetration of the international markets in which we currently operate and to expand into additional international markets. We depend on direct sales and our channel partner relationships to sell our offerings in international markets. Our ability to expand internationally will depend upon our ability to deliver functionality and foreign language translations that reflect the needs of the international clients that we target. Our ability to expand internationally involves various risks, including the need to invest significant resources in such expansion, and the possibility that returns on such investments will not be achieved in the near future or at all in these less familiar competitive environments. We may also choose to conduct our international business through other partnerships. If we are unable to identify partners or negotiate favorable terms, our international growth may be limited. In addition, we have incurred and may continue to incur significant expenses in advance of generating material revenue as we attempt to establish our presence in particular international markets.

Any need by us to raise additional capital or generate the significant capital necessary to expand our operations and invest in new offerings could reduce our ability to compete and could harm our business.

We may need to raise additional funds in the future, and we may not be able to obtain additional debt or equity financing on favorable terms, if at all, particularly during times of market volatility, changes in the interest rate environment, and general economic instability. If we raise additional equity financing, our shareholders may experience significant dilution of their ownership interests and the per share value of our ordinary shares could decline. Furthermore, if we engage in debt financing, the holders of debt would have priority over the holders of our ordinary shares, and we may be required to accept terms that restrict our ability to incur additional indebtedness. We may also be required to take other actions that would otherwise be in the interests of the debt holders and force us to maintain specified liquidity or other ratios, any of which could harm our business, results of operations, and financial condition. If we need additional capital and cannot raise it on acceptable terms, we may not be able to, among other things:

- develop or enhance our products;
- continue to expand our sales and marketing and research and development organizations;
- acquire complementary technologies, products or businesses;

- expand operations in the United States or internationally;
- hire, train, and retain employees; or
- respond to competitive pressures or unanticipated working capital requirements.

Our failure to have sufficient capital to do any of these things could harm our business, financial condition, and results of operations.

Our generation of a portion of our revenue by sales to government entities creates a number of challenges and risks.

Sales to government entities are subject to a number of risks. Selling to government entities can be highly competitive, expensive, and time-consuming, often requiring significant upfront time and expense without any assurance that these efforts will generate a sale. Government certification and security requirements for products like ours may change, thereby restricting our ability to sell into the U.S. federal government sector, U.S. state government sector, or government sectors of countries other than the United States until we have obtained the revised certification or met the changed security requirements. If we are unable to timely meet such requirements, our ability to compete for and retain federal government contracts may be diminished, which could adversely affect our business, results of operations and financial condition.

Government entities may have statutory, contractual, or other legal rights to terminate contracts with us or our channel partners for convenience or due to a default, and any such termination may adversely affect our future results of operations. Government demand and payment for our offerings may be affected by public sector budgetary cycles and funding authorizations, with funding reductions or delays adversely affecting public sector demand for our offerings or exercise of options under multi-year contracts. Contracts with government agencies, including classified contracts, are subject to extensive, evolving and sometimes complex regulations, as well as audits and reviews of contractors' administrative processes and other contract related compliance obligations. Breaches of government contracts, failure to comply with applicable regulations or unfavorable findings from government audits or reviews could result in contract terminations, reputational harm or other adverse consequences, including but not limited to ineligibility to sell to government agencies in the future, the government refusing to continue buying our subscriptions, a reduction of revenue, or fines or civil or criminal liability, which could adversely affect our results of operations in a material way.

Unanticipated changes in effective tax rates or adverse outcomes resulting from examination of our income or other tax returns could expose us to greater than anticipated tax liabilities.

Our income tax obligations are based in part on our corporate structure and intercompany arrangements, including the manner in which we develop, value, and use our intellectual property and the valuations of our intercompany transactions. The tax laws applicable to our business, including the laws of the Netherlands, the United States and other jurisdictions, are subject to change and interpretation. These changes include the introduction of a global minimum tax at a rate of 15% under the Two-Pillar Solution to Address the Tax Challenges of the Digitalisation of the Economy, agreed upon by 137 jurisdictions under the Organisation for Economic Co-operation and Development (OECD)/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS), which is expected to enter into force in 2023. The United States has recently enacted legislation implementing several changes to U.S. tax laws, including a 15% minimum tax on adjusted financial statement income (AFSI) in excess of $1 billion. In addition, on January 1, 2022, a provision of the Tax Cuts and Jobs Act of 2017 went into effect that eliminates the option to deduct domestic research and development costs in the year incurred and instead requires taxpayers to amortize such costs over five years. Once we have taxable profits in the United States, this provision is expected to decrease cash flows from operations and increase net deferred tax assets by a similar amount for our U.S. operations. Any new legislation or interpretations of existing legislation could impact our tax obligations in countries where we do business or cause us to change the way we operate our business and result in increased taxation of our international earnings.

The taxing authorities of the jurisdictions in which we operate may challenge our methodologies for valuing developed technology or intercompany arrangements, which could increase our worldwide effective tax rate and harm our financial position and results of operations. Tax authorities examine and may audit our income tax returns and other non-income tax returns, such as payroll, sales, value-added, net worth or franchise, property, goods and services, and excise taxes, in both the United States and foreign jurisdictions. It is possible that tax authorities may disagree with certain positions we have taken, and any adverse outcome of such a review or audit could have a negative effect on our financial position and results of operations. Further, the determination of our worldwide provision for or benefit from, as applicable, income taxes and other tax liabilities requires significant judgment by management, and there are transactions where the ultimate tax determination is uncertain. Although we believe that our estimates are reasonable, the ultimate tax outcome may differ from the amounts recorded in our consolidated financial statements and may materially affect our financial results in the period or periods for which such determination is made.

Our corporate structure and intercompany arrangements are subject to the tax laws of various jurisdictions under which we could be obligated to pay additional taxes, which would harm our results of operations.

Based on our current corporate structure, we may be subject to taxation in several jurisdictions around the world with increasingly complex tax laws, the application of which can be uncertain. The amount of taxes we pay in these jurisdictions could increase substantially as a result of changes in the applicable tax principles, including increased tax rates, new tax laws or revised interpretations of existing tax laws and precedents. In addition, the authorities in the jurisdictions in which we operate could review our tax returns or require us to file tax returns in jurisdictions in which we are not currently filing, and could impose additional tax, interest and penalties. These authorities could also claim that various withholding requirements apply to us or our subsidiaries, assert that benefits of tax treaties are not available to us or our subsidiaries, or challenge our methodologies for valuing developed technology or intercompany arrangements, including our transfer pricing. The relevant taxing authorities may determine that the manner in which we operate our business does not achieve the intended tax consequences. If such a disagreement were to occur, and our position were not sustained, we could be required to pay additional taxes, and interest and penalties. Additionally, both the COVID-19 pandemic and increased use of flexible work policies may increase the probability of payroll tax audits. Any increase in the amount of taxes we pay or that are imposed on us could increase our worldwide effective tax rate and harm our business and results of operations.

Our ability to use our net operating loss carryforwards to offset future taxable income may be subject to certain limitations.

As of April 30, 2022, we had net operating loss carryforwards ("NOLs") for Dutch, United States (federal and state, respectively) and United Kingdom income tax purposes of $758.4 million, $1,002.5 million, $651.8 million and $67.5 million, respectively, which may be utilized against future income taxes. Limitations imposed by the applicable jurisdictions on our ability to utilize NOLs could cause income taxes to be paid earlier than would be paid if such limitations were not in effect and could cause such NOLs to expire unused, in each case reducing or eliminating the benefit of such NOLs. Furthermore, we may not be able to generate sufficient taxable income to utilize our NOLs before they expire. If any of these events occur, we may not derive some or all of the expected benefits from our NOLs.

Seasonality may cause fluctuations in our sales and results of operations.

Historically, we have experienced quarterly fluctuations and seasonality based on the timing of entering into agreements with new and existing customers and the mix between annual and monthly contracts entered in each reporting period. Trends in our business, financial condition, results of operations and cash flows are impacted by seasonality in our sales cycle which generally reflects a trend to greater sales in our second and fourth quarters and lower sales in our first and third quarters, though we believe this trend has been somewhat masked by our overall growth. We expect that this seasonality will continue to affect our results of operations in the future, and might become more pronounced as we continue to target larger enterprise customers.

Risks Related to Regulatory Matters

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

Our software and services, in some cases, are subject to U.S. export control laws and regulations including the Export Administration Regulations ("EAR"), and trade and economic sanctions maintained by OFAC as well as similar laws and regulations in the countries in which we do business. As such, an export license may be required to export or re-export our software and services to, or import our software and services into, certain countries and to certain end-users or for certain end-uses. If we were to fail to comply with such U.S. and foreign export control laws and regulations, trade and economic sanctions, or other similar laws, we could be subject to both civil and criminal penalties, including substantial fines, possible incarceration for employees and managers for willful violations, and the possible loss of our export or import privileges. Obtaining the necessary export license for a particular sale or offering may not be possible and may be time-consuming and may result in the delay or loss of sales opportunities. Furthermore, export control laws and economic sanctions in many cases prohibit the export of software and services to certain embargoed or sanctioned countries, governments and persons, as well as for prohibited end-uses. For example, following Russia's invasion of Ukraine, the United States and other countries imposed economic sanctions and severe export control restrictions on certain individuals and entities located in Russia and Belarus. The United States and other countries continue to expand sanctions and export restrictions and could take other actions should the conflict continue or further escalate. Monitoring and ensuring compliance with these complex U.S. export control laws is particularly challenging because our offerings are widely distributed throughout the world, and information available on the users of these offerings is, in some cases, limited. Even though we take precautions to ensure that we and our partners comply with all relevant export control laws and regulations, any failure by us or our partners to comply with such laws and regulations could have negative consequences for us, including reputational harm, government investigations and penalties.

In addition, various countries regulate the export and import of certain encryption software and technology, including through import permit and license requirements, and have enacted laws that could limit our ability to distribute our products and services or could limit our end-customers' ability to implement our products in those countries. Because we incorporate encryption functionality into our products, we are also subject in many cases to these provisions. Specifically, export restrictions recently imposed on Russia and Belarus limit the export of encryption software and related source code and technology to these locations, which has severely limited and could continue to limit our ability to provide our software and services in these countries. Changes in our products or changes in export and import regulations in such countries may create delays in the introduction of our products and services into international markets, prevent our end-customers with international operations from deploying our products globally or, in some cases, prevent or delay the export or import of our products and services to certain countries, governments or persons altogether. The following developments could result in decreased use of our products and services by, or in our decreased ability to export or sell our products to, existing or potential end-customers with international operations: any change in export or import laws or regulations, economic sanctions or related legislation; shift in the enforcement or scope of existing export, import or sanctions laws or regulations; or change in the countries, governments, persons, or technologies targeted by such export, import or sanctions laws or regulations. Any decreased use of our products or services or limitation on our ability to export to or sell our products or services in international markets could adversely affect our business, financial condition and operating results.

Failure to comply with anti-bribery, anti-corruption, and anti-money laundering laws could subject us to penalties and other adverse consequences.

We are subject to the FCPA, the U.K. Bribery Act and other anti-corruption, anti-bribery and anti-money laundering laws in various jurisdictions both in the U.S. and in non-U.S. jurisdictions. We leverage channel partners to sell our offerings abroad and use other third parties, including recruiting firms, professional employer organizations, legal, accounting and other professional advisors, and local vendors to meet our needs associated with doing business abroad. We and these third parties may have direct or indirect interactions with officials and employees of government agencies, or state-owned or affiliated entities, and we may be held liable for the corrupt or other illegal activities of our channel partners and third-party representatives, as well as 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, we cannot assure that the channel partners, third-party representatives, our employees, contractors or agents will not take actions in violation of our policies and applicable law, for which we may be ultimately held responsible. Any violation of the FCPA, U.K. Bribery Act or other applicable anti-bribery, anti-corruption laws, and anti-money laundering laws could result in whistleblower complaints, adverse media coverage, investigations, loss of export privileges, severe criminal or civil sanctions, or suspension or debarment from U.S. government contracts, all of which may have an adverse effect on our reputation, business, operating results and prospects.

Risks Related to Ownership of our Ordinary Shares

The market price for our ordinary shares has been and is likely to continue to be volatile or may decline regardless of our operating performance.

The stock markets, and securities of technology companies in particular, have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many technology companies. Stock prices of many technology companies have fluctuated in a manner unrelated or disproportionate to the operating performance of those companies. In particular, stock prices of companies with significant operating losses have recently declined significantly, and in many instances more significantly than stock prices of companies with operating profits. The economic impact and uncertainty of the ongoing COVID-19 pandemic, Russia's invasion of Ukraine, and changes in the inflation and interest rate environments have exacerbated this volatility in both the overall stock markets and the market price of our ordinary shares. A significant decline in the price of our shares could have an adverse impact on investor confidence and employee retention. In the past, shareholders have instituted securities class action litigation following periods of market volatility. If we were to become involved in securities litigation, it could subject us to substantial costs, divert resources and the attention of management from our business and adversely affect our business. The market price of our ordinary shares may fluctuate significantly in response to numerous factors, many of which are beyond our control, including:

- actual or anticipated changes or fluctuations in our operating results;
- the financial projections we may provide to the public, any changes in these projections or our failure to meet these projections;
- announcements by us or our competitors of new offerings or new or terminated significant contracts, commercial relationships or capital commitments;

- industry or financial analyst or investor reaction to our press releases, other public announcements, and filings with the SEC;
- rumors and market speculation involving us or other companies in our industry;
- a gain or loss of investor confidence in the market for technology stocks or the stock market in general;
- future sales or expected future sales of our ordinary shares;
- investor perceptions of us, the benefits of our offerings and the industries in which we operate;
- price and volume fluctuations in the overall stock market from time to time;
- changes in operating performance and/or stock market valuations of other technology companies generally, or those in our industry in particular;
- failure of industry or financial analysts to maintain coverage of us, changes in financial estimates by any analysts who follow our company, or our failure to meet these estimates or the expectations of investors;
- actual or anticipated developments in our business or our competitors' businesses or the competitive landscape generally;
- litigation involving us, our industry or both, or investigations by regulators into our operations or those of our competitors;
- developments or disputes concerning our intellectual property rights or our solutions, or third-party proprietary rights;
- announced or completed acquisitions of businesses or technologies by us or our competitors;
- breaches of, or failures relating to, privacy, data protection or information security;
- new laws or regulations or new interpretations of existing laws or regulations applicable to our business;
- any major changes in our management or our board of directors;
- general economic conditions and slow or negative growth of our markets, including as a result of the COVID-19 pandemic, Russia's invasion of Ukraine, and the general inflation and interest rate environments; and
- other events or factors, including those resulting from war, incidents of terrorism or responses to these events.

We may fail to meet our publicly announced guidance or other expectations about our business and future operating results, which would cause our stock price to decline.

We have provided and may continue to provide guidance and other expectations in our quarterly and annual earnings conference calls, quarterly and annual earnings releases, or otherwise, regarding our future performance. Guidance, as well as other expectations, are forward-looking and represent our management's estimates as of the date of release and are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic and competitive uncertainties and contingencies on our business, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. Furthermore, analysts and investors may develop and publish their own projections of our business, which may form a consensus about our future performance. Our actual business results may vary significantly from such guidance or other expectations or that consensus due to a number of factors, many of which are outside of our control, including due to the global economic uncertainty and financial market conditions caused by the ongoing COVID-19 pandemic and current macroeconomic environment, and which could adversely affect our business and future operating results. There are no comparable recent events that provide insights as to the probable effect of the ongoing COVID-19 pandemic coupled with other global current events, and, as a result, the ultimate impact of the COVID-19 outbreak is highly uncertain and subject to change. Furthermore, if we make downward revisions of our previously announced guidance or other expectations, if we withdraw our previously announced guidance or other expectations, or if our publicly announced guidance or other expectations of future operating results fail to meet expectations of securities analysts, investors or other interested parties, the price of our ordinary shares would decline. In light of the foregoing, investors are urged not to rely upon our guidance or other expectations in making an investment decision regarding our ordinary shares.

Any failure to successfully implement our operating strategy or the occurrence of any of the events or circumstances set forth in this "Risk Factors" section in this report could result in the actual operating results being different from our guidance or other expectations, and the differences may be adverse and material.

The concentration of our share ownership with insiders will likely limit your ability to influence corporate matters, including the ability to influence the outcome of director elections and other matters requiring shareholder approval.

Our executive officers and directors together beneficially own a significant amount of our outstanding ordinary shares. As a result, these shareholders, acting together, will have significant influence over matters that require approval by our shareholders, including matters such as adoption of the financial statements, declarations of dividends, the appointment and dismissal of directors, capital increases, amendment to our articles of association and approval of significant corporate transactions. Corporate action might be taken even if other shareholders oppose them. This concentration of ownership might also have the effect of delaying or preventing a change of control of us that other shareholders may view as beneficial.

The issuance of additional shares in connection with financings, acquisitions, investments, our share incentive plans or otherwise will dilute all other shareholders.

Our articles of association authorize us to issue up to 165 million ordinary shares and up to 165 million preference shares with such rights and preferences as included in our articles of association. On September 28, 2018, our extraordinary general meeting of shareholders (the "2018 Extraordinary Meeting") empowered our board of directors to issue ordinary shares and preference shares up to our authorized share capital for a period of five years from October 10, 2018. Subject to compliance with applicable rules and regulations, we may issue ordinary shares or securities convertible into ordinary shares from time to time in connection with a financing, acquisition, investment, our share incentive plans or otherwise. Any such issuance could result in substantial dilution to our existing shareholders unless pre-emptive rights exist and cause the market price of our ordinary shares to decline.

Certain holders of our ordinary shares may not be able to exercise pre-emptive rights and as a result may experience substantial dilution upon future issuances of ordinary shares.

Holders of our ordinary shares in principle have a pro rata pre-emptive right with respect to any issue of ordinary shares or the granting of rights to subscribe for ordinary shares, unless Dutch law or our articles of association state otherwise or unless explicitly provided otherwise in a resolution by our general meeting of shareholders (the "General Meeting"), or—if authorized by the annual General Meeting or an extraordinary General Meeting—by a resolution of our board of directors. Our 2018 Extraordinary Meeting has empowered our board of directors to limit or exclude pre-emptive rights on ordinary shares for a period of five years from October 10, 2018, which could cause existing shareholders to experience substantial dilution of their interest in us.

Pre-emptive rights do not exist with respect to the issue of preference shares and holders of preference shares, if any, have no pre-emptive right to acquire newly issued ordinary shares. Also, pre-emptive rights do not exist with respect to the issue of shares or grant of rights to subscribe for shares to employees of the Company or contributions in kind.

Sales of substantial amounts of our ordinary shares in the public markets, or the perception that they might occur, could reduce the price that our ordinary shares might otherwise attain.

Sales of a substantial number of shares of our ordinary shares in the public market, particularly sales by our directors, executive officers and significant shareholders, or the perception that these sales could occur, could adversely affect the market price of our ordinary shares and may make it more difficult for you to sell your ordinary shares at a time and price that you deem appropriate.

In addition, holders of an aggregate of 17,348,220 ordinary shares, based on shares outstanding as of October 31, 2022, are entitled to rights with respect to registration of these shares under the Securities Act pursuant to our amended and restated investors' rights agreement, dated July 19, 2016. If these holders of our ordinary shares, by exercising their registration rights, sell a large number of shares, they could adversely affect the market price for our ordinary shares. We have also filed, and may file in the future, registration statements on Form S-8 under the Securities Act registering all ordinary shares that we may issue under our equity compensation plans, which may in turn be sold and may adversely affect the market price for our ordinary shares.

Certain anti-takeover provisions in our articles of association and under Dutch law may prevent or could make an acquisition of our company more difficult, limit attempts by our shareholders to replace or remove members of our board of directors and may adversely affect the market price of our ordinary shares.

Our articles of association contain provisions that could delay or prevent a change in control of our company. These provisions could also make it difficult for shareholders to appoint directors that are not nominated by the current members of our board of directors or take other corporate actions, including effecting changes in our management. These provisions include:

- the staggered three-year terms of the members of our board of directors, as a result of which only approximately one-third of the members of our board of directors may be subject to election in any one year;
- a provision that the members of our board of directors may only be removed by a General Meeting by a two-thirds majority of votes cast representing at least 50% of our issued share capital if such removal is not proposed by our board of directors;
- a provision that the members of our board of directors may only be appointed upon binding nomination of the board of directors, which can only be overruled with a two-thirds majority of votes cast representing at least 50% of our issued share capital;
- the inclusion of a class of preference shares in our authorized share capital that may be issued by our board of directors, in such a manner as to dilute the interest of shareholders, including any potential acquirer or activist shareholder, in order to delay or discourage any potential unsolicited offer or shareholder activism;
- requirements that certain matters, including an amendment of our articles of association, may only be brought to our shareholders for a vote upon a proposal by our board of directors; and
- minimum shareholding thresholds, based on nominal value, for shareholders to call General Meetings of our shareholders or to add items to the agenda for those meetings.

We are subject to the Dutch Corporate Governance Code but do not comply with all the suggested governance provisions of the Dutch Corporate Governance Code, which may affect your rights as a shareholder.

As a Dutch company, we are subject to the Dutch Corporate Governance Code ("DCGC"). The DCGC contains both principles and suggested governance provisions for management boards, supervisory boards, shareholders and general meetings, financial reporting, auditors, disclosure, compliance and enforcement standards. The DCGC is based on a "comply or explain" principle. Accordingly, public companies are required to disclose in their annual reports, filed in the Netherlands, whether they comply with the suggested governance provisions of the DCGC. If they do not comply with those provisions (e.g., because of a conflicting requirement), the company is required to give the reasons for such noncompliance. The DCGC applies to all Dutch companies listed on a government-recognized stock exchange, whether in the Netherlands or elsewhere, including the New York Stock Exchange ("NYSE"). The principles and suggested governance provisions apply to our board of directors (in relation to role and composition, conflicts of interest and independency requirements, board committees and remuneration), shareholders and the General Meeting (for example, regarding anti-takeover protection and our obligations to provide information to our shareholders) and financial reporting (such as external auditor and internal audit requirements). We comply with all applicable provisions of the DCGC except where such provisions conflict with U.S. exchange listing requirements or with market practices in the United States or the Netherlands. This may affect your rights as a shareholder, and you may not have the same level of protection as a shareholder in a Dutch company that fully complies with the suggested governance provisions of the DCGC.

We do not intend to pay dividends in the foreseeable future. As a result, your ability to achieve a return on your investment will depend on appreciation in the price of our ordinary shares.

We have never declared or paid any cash dividends on our shares. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends on our ordinary shares in the foreseeable future. Were this position to change, payment of future dividends may be made only if our equity exceeds the amount of the paid-in and called-up part of the issued share capital, increased by the reserves required to be maintained by Dutch law or by our articles of association. Accordingly, investors must rely on sales of their ordinary shares after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

Claims of U.S. civil liabilities may not be enforceable against us.

We are incorporated under the laws of the Netherlands and substantial portions of our assets are located outside of the United States. In addition, two members of our board of directors and certain experts named in our filings with the SEC reside outside the United States. As a result, it may be difficult for investors to effect service of process within the United States upon us or such other persons residing outside the United States, or to enforce outside the United States judgments obtained against such persons in U.S. courts in any action, including actions predicated upon the civil liability provisions of the U.S. federal securities laws. In addition, it may be difficult for investors to enforce, in original actions brought in courts in jurisdictions located outside the United States, rights predicated upon the U.S. federal securities laws.

There is no treaty between the United States and the Netherlands for the mutual recognition and enforcement of judgments (other than arbitration awards) in civil and commercial matters. Therefore, a final judgment rendered by any federal or state court in the United States based on civil liability, whether or not predicated solely upon the U.S. federal securities laws, would not be enforceable in the Netherlands unless the underlying claim is re-litigated before a Dutch court of competent jurisdiction. In such proceedings, however, a Dutch court may be expected to recognize the binding effect of a judgment of a federal or state court in the United States without re-examination of the substantive matters adjudicated thereby, if (i) the jurisdiction of the U.S. federal or state court has been based on internationally accepted principles of private international law, (ii) that judgment resulted from legal proceedings compatible with Dutch notions of due process, (iii) that judgment does not contravene public policy of the Netherlands and (iv) that judgment is not incompatible with (x) an earlier judgment of a Dutch court between the same parties, or (y) an earlier judgment of a foreign court between the same parties in a dispute regarding the same subject and based on the same cause, if that earlier foreign judgment is recognizable in the Netherlands.

Based on the foregoing, there can be no assurance that U.S. investors will be able to enforce against us or members of our board of directors, officers or certain experts named in our filings with the SEC, who are residents of the Netherlands or countries other than the United States, any judgments obtained in U.S. courts in civil and commercial matters, including judgments under the U.S. federal securities laws.

In addition, there can be no assurance that a Dutch court would impose civil liability on us, the members of our board of directors, our officers or certain experts named in our filings with the SEC in an original action predicated solely upon the U.S. federal securities laws brought in a court of competent jurisdiction in the Netherlands against us or such members, officers or experts.

U.S. persons who hold our ordinary shares may suffer adverse tax consequences if we are characterized as a passive foreign investment company.

A non-U.S. corporation will generally be considered a passive foreign investment company ("PFIC"), for U.S. federal income tax purposes, in any taxable year if either (i) at least 75% of its gross income for such year is passive income or (ii) at least 50% of the value of its assets (based on an average of the quarterly values of the assets during such year) is attributable to assets that produce or are held for the production of passive income ("the PFIC asset test"). For purposes of the PFIC asset test, the value of our assets will generally be determined by reference to our market capitalization. Based on our past and current projections of our income and assets, we do not expect to be a PFIC for the current taxable year or for the foreseeable future. Nevertheless, a separate factual determination as to whether we are or have become a PFIC must be made each year (after the close of such year). Since our projections may differ from our actual business results and our market capitalization and value of our assets may fluctuate, we cannot assure you that we will not be or become a PFIC in the current taxable year or any future taxable year. If we are a PFIC for any taxable year during which a U.S. person (as defined in Section 7701(a)(30) of the Internal Revenue Code of 1986, as amended) holds our ordinary shares, such U.S. person may be subject to adverse tax consequences. Each U.S. person who holds our ordinary shares is strongly urged to consult his, her or its tax advisor regarding the application of these rules and the availability of any potential elections.

If a U.S. person is treated as owning at least 10% of our ordinary shares, such U.S. person may be subject to adverse U.S. federal income tax consequences.

If a U.S. person is treated as owning (directly, indirectly, or constructively) at least 10% of the total combined voting power of our shares, or of the total value of our shares, such shareholder may be treated as a "United States shareholder" with respect to each "controlled foreign corporation" in our group (if any). Because our group includes one or more U.S. subsidiaries, certain of our non-U.S. subsidiaries could be treated as controlled foreign corporations (regardless of whether we are treated as a controlled foreign corporation). A United States shareholder of a controlled foreign corporation may be required to report annually and include in its U.S. taxable income its pro rata share of "Subpart F income," "global intangible low-taxed income," and investments in U.S. property by controlled foreign corporations, regardless of whether we make any distributions. An individual that is a United States shareholder with respect to a controlled foreign corporation generally would not be allowed certain tax deductions or foreign tax credits that would be allowed to a United States shareholder that is a U.S. corporation. We cannot provide any assurances that we will assist investors in determining whether we or any of our non-U.S. subsidiaries is treated as a controlled foreign corporation or whether any investor is treated as a United States shareholder with respect to any such controlled foreign corporation or furnish to any investor who may be a United States shareholder information that may be necessary to comply with the aforementioned reporting and tax paying obligations. Failure to comply with these reporting obligations may subject a shareholder who is a United States shareholder to significant monetary penalties and may prevent from starting the statute of limitations with respect to such shareholder's U.S. federal income tax return for the year for which reporting was due. A U.S. person should consult its advisors regarding the potential application of these rules to an investment in our ordinary shares.

We may not be able to make distributions or repurchase shares without subjecting our shareholders to Dutch withholding tax, and dividends distributed on our ordinary shares to certain related parties in low-tax jurisdictions might in the future become subject to an additional Dutch withholding tax.

We have not paid a dividend on our ordinary shares in the past and we do not intend to pay any dividends to holders of our ordinary shares in the foreseeable future. See "We do not intend to pay dividends in the foreseeable future. As a result, your ability to achieve a return on your investment will depend on appreciation in the price of our ordinary shares." However, if we ever do pay dividends or repurchase shares, then under current Dutch tax law, the dividend paid or repurchase price paid may be subject to Dutch dividend withholding tax at a rate of 15% under the Dutch Dividend Withholding Tax Act (*Wet op de dividendbelasting 1965*, "Regular Dividend Withholding Tax"), unless a domestic or treaty exemption applies.

The Dutch parliament has adopted a proposal of law pursuant to which an alternative withholding tax ("Alternative Withholding Tax") will be imposed on dividends paid to related entities in designated low-tax jurisdictions, effective January 1, 2024. An entity is considered related if (i) it has a "Qualifying Interest" in our company, (ii) our company has a "Qualifying Interest" in the entity holding the ordinary shares, or (iii) a third party has a "Qualifying Interest" in both our company and the entity holding the ordinary shares. The term "Qualifying Interest" means a direct or indirectly held interest either by an entity individually or jointly if an entity is part of a collaborating group (*samenwerkende groep*) that enables such entity or such collaborating group to exercise a definite influence over another entity's decisions, such as our company or an entity holding ordinary shares, as the case may be, and allows it to determine the other entity's activities. The Alternative Withholding Tax will be imposed at the highest Dutch corporate income tax rate in effect at the time of the distribution (currently 25.8%). The Alternative Withholding Tax will be reduced, but not below zero, with any Regular Dividend Withholding Tax imposed on distributions. As such, based on currently applicable rates, the overall effective rate of withholding of Regular Dividend Withholding Tax and Alternative Withholding Tax will not exceed the highest corporate income tax rate in effect at the time of the distribution (currently 25.8%).

If we cease to be a Dutch tax resident for the purposes of a tax treaty concluded by the Netherlands and in certain other events, we could potentially be subject to a proposed Dutch dividend withholding tax in respect of a deemed distribution of our entire market value less paid-up capital.

Under a proposal of law currently pending before the Dutch parliament, the Emergency act conditional exit dividend withholding tax (*Spoedwet conditionele eindafrekening dividendbelasting*, "DWT Exit Tax"), we will be deemed to have distributed an amount equal to our entire market capitalization less recognized paid-up capital immediately before the occurrence of certain events, including if we cease to be a Dutch tax resident for purposes of a tax treaty concluded by the Netherlands with another jurisdiction and become, for purposes of such tax treaty, exclusively a tax resident of that other jurisdiction which is a qualifying jurisdiction. A qualifying jurisdiction is a jurisdiction other than a member state of the EU/EEA which does not impose a withholding tax on distributions, or that does impose such tax but that grants a step-up for earnings attributable to the period before we become exclusively a resident in such jurisdiction. This deemed distribution will be subject to a 15% tax insofar it exceeds a franchise of EUR 50 million. The tax is payable by us as a withholding agent. A full exemption applies to entities and individuals that are resident in an EU/EEA member state or a state that has concluded a tax treaty with the Netherlands that contains a dividend article, provided we submit a declaration confirming the satisfaction of applicable conditions by qualifying shareholders within one month following the taxable event. We will be deemed to have withheld the tax on the deemed distribution and have a statutory right to recover this from our shareholders. Dutch resident shareholders qualifying for the exemption are entitled to a credit or refund, and non-Dutch resident shareholders qualifying for the exemption are entitled to a refund, subject to applicable statutory limitations, provided the tax has been actually recovered from them.

The DWT Exit Tax has been amended several times since the initial proposal of law and is under ongoing discussion. In addition, a very critical advice of the Council of State and a very critical reaction of the Dutch government to the latest proposal of law have been published. It is therefore not certain whether the DWT Exit Tax will be enacted and if so, in what form. If enacted in its present form, the DWT Exit Tax will have retroactive effect as from December 8, 2021.

Risks Related to our Outstanding Senior Notes

We have a substantial amount of indebtedness, which could adversely affect our financial condition.

We have a substantial amount of indebtedness and we may incur additional indebtedness in the future. As of October 31, 2022, we had $575.0 million aggregate principal amount of Senior Notes outstanding. Our indebtedness could have important consequences, including:

- limiting our ability to obtain additional financing to fund future working capital, capital expenditures, acquisitions or other general corporate requirements;

- requiring a portion of our cash flows to be dedicated to debt service payments instead of other purposes, thereby reducing the amount of cash flows available for working capital, capital expenditures, acquisitions and other general corporate purposes;
- increasing our vulnerability to adverse changes in general economic, industry and competitive conditions; and
- increasing our cost of borrowing.

In addition, the indenture that governs the Senior Notes contains restrictive covenants that limit our ability to engage in activities that may be in our long-term best interest. Our failure to comply with those covenants could result in an event of default which, if not cured or waived, could result in the acceleration of substantially all of our indebtedness.

We may not be able to generate sufficient cash to service all of our indebtedness and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful.

Our ability to make scheduled payments on or to refinance our debt obligations depends on our financial condition and results of operations, which in turn are subject to prevailing economic and competitive conditions and to certain financial, business and other factors beyond our control. We may not be able to maintain a level of cash flows from operating activities sufficient to permit us to pay the principal, premium, if any, and interest on our indebtedness, which could have a material adverse effect on our business, results of operations and financial condition.

If our cash flows and capital resources are insufficient to fund our debt service obligations, we could face substantial liquidity problems and may be forced to reduce or delay investments and capital expenditures, or to sell assets, seek additional capital or restructure or refinance our indebtedness. Our ability to restructure or refinance our debt will depend on, among other things, the condition of the capital markets and our financial condition at such time. Any refinancing of our debt could be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our business operations. The terms of existing or future debt instruments and the indenture that governs the Senior Notes may restrict us from adopting some of these alternatives. In addition, any failure to make payments of interest and principal on our outstanding indebtedness on a timely basis would likely result in a reduction of our credit rating, which could harm our ability to incur additional indebtedness. In the absence of such cash flows and resources, we could face substantial liquidity problems and might be required to dispose of material assets or operations to meet our debt service and other obligations. Any of these circumstances could have a material adverse effect on our business, results of operations and financial condition.

Further, any future credit facility or other debt instrument may contain provisions that will restrict our ability to dispose of assets and use the proceeds from any such disposition. We may not be able to consummate those dispositions or to obtain the proceeds that we could realize from them and these proceeds may not be adequate to meet any debt service obligations then due. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations and any such failure to meet our scheduled debt service obligations could have a material adverse effect on our business, results of operations and financial condition.

The indenture that governs the Senior Notes contains, and any of our future debt instruments may contain, terms which restrict our current and future operations, particularly our ability to respond to changes or to take certain actions.

The indenture that governs the Senior Notes contains a number of restrictive covenants that impose significant operating and financial restrictions on us and may limit our ability to engage in acts that may be in our long-term best interest, including, among other things, restrictions on our ability to:

- create liens on certain assets to secure debt;
- grant a subsidiary guarantee of certain debt without also providing a guarantee of the Senior Notes; and
- consolidate or merge with or into, or sell or otherwise dispose of all or substantially all of our assets to, another person.

The covenants in the indenture that governs the Senior Notes are subject to important exceptions and qualifications described in such indenture.

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

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

We may be required to repurchase some of the Senior Notes upon a change of control triggering event.

Holders of the Senior Notes can require us to repurchase the Senior Notes upon a change of control (as defined in the indenture governing the Senior Notes) at a repurchase price equal to 101% of the principal amount of the Senior Notes, plus accrued and unpaid interest to, but excluding, the applicable repurchase date. Our ability to repurchase the Senior Notes may be limited by law or the terms of other agreements relating to our indebtedness. In addition, we may not have sufficient funds to repurchase the Senior Notes or have the ability to arrange necessary financing on acceptable terms, if at all. A change of control may also constitute a default under, or result in the acceleration of the maturity of, our other then-existing indebtedness. Our failure to repurchase the Senior Notes would result in a default under the Senior Notes, which may result in the acceleration of the Senior Notes and other then-existing indebtedness. We may not have sufficient funds to make any payments triggered by such acceleration, which could result in foreclosure proceedings and our seeking protection under the U.S. bankruptcy code.

General Risk Factors

We may acquire other businesses which could require significant management attention, disrupt our business, or dilute shareholder value. We may be unable to integrate acquired businesses and technologies, and acquisitions could adversely affect our results of operations.

As part of our business strategy, we may acquire or make investments in complementary companies, products, or technologies. We have in the past acquired, and expect in the future to acquire, businesses that we believe will complement or augment our existing business. The identification of suitable acquisition candidates is difficult, and we may not be able to complete such acquisitions on favorable terms, if at all. If we do complete future acquisitions, we may not ultimately strengthen our competitive position or achieve our goals and business strategy, we may be subject to claims or liabilities assumed from an acquired company, product, or technology, and any acquisitions we complete could be viewed negatively by our customers, investors, and securities analysts. In addition, if we are unsuccessful at integrating future acquisitions, or the technologies associated with such acquisitions, into our company, the revenue and results of operations of the combined company could be adversely affected. Any integration process may require significant time and resources, which may disrupt our ongoing business and divert management's attention, and we may not be able to manage the integration process successfully. We may not successfully evaluate or utilize acquired technology or personnel, realize anticipated synergies from acquisitions, or accurately forecast the financial impact of an acquisition transaction and integration of such acquisition, including accounting charges. We may have to pay cash, incur debt, or issue equity or equity-linked securities to pay for any future acquisitions, each of which could adversely affect our financial condition or the market price of our ordinary shares. The sale of equity or issuance of equity-linked debt to finance any future acquisitions could result in dilution to our shareholders. The incurrence of indebtedness would result in increased fixed obligations and could also include covenants or other restrictions that would impede our ability to manage our operations. Additionally, we may acquire development stage companies that are not yet profitable, and that require continued investment, which could adversely affect our results of operations and liquidity. The occurrence of any of these risks could harm our business, results of operations, and financial condition.

Catastrophic events, or man-made problems such as terrorism, may disrupt our business.

A significant natural disaster, such as an earthquake, fire, flood, or significant power outage, could have an adverse impact on our business, results of operations, and financial condition. The impact of climate change may increase these risks due to changes in weather patterns, such as increases in storm intensity, sea-level rise, melting of permafrost and temperature extremes in areas where we or our suppliers and customers conduct business. We have a number of our employees and executive officers located in the San Francisco Bay Area, a region known for seismic activity and wildfires. In the event our or our partners' abilities are hindered by any of the events discussed above, sales could be delayed, resulting in missed financial targets for a particular quarter. In addition, acts of terrorism, acts of war, including Russia's invasion of Ukraine, other geo-political unrest or health issues, such as an outbreak of pandemic or epidemic diseases, such as the COVID-19 pandemic, or fear of such events, could cause disruptions in our business or the business of our partners, customers or the economy as a whole. Any disruption in the business of our partners or customers that affects sales in a given fiscal quarter could have a significant adverse impact on our quarterly results for that and future quarters. For example, the full extent to which the COVID-19 pandemic impacts our business, results of operations and financial condition will depend on future developments, which are highly uncertain and cannot be predicted. In addition, the COVID-19 pandemic has adversely affected the economies of many countries, resulting in economic downturns that could affect demand for our products and likely impact our operating results. All of the aforementioned risks may be further increased if our disaster recovery plans prove to be inadequate. See the risk factor entitled "The ongoing COVID-19 pandemic could harm our business and results of operations."

If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our results of operations could fall below expectations of securities analysts and investors, resulting in a decline in the trading price of our ordinary shares.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, as provided in "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Part I, Item 2 of this Quarterly Report on Form 10-Q, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue, and expenses that are not readily apparent from other sources. 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 our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our ordinary shares. Significant assumptions and estimates used in preparing our consolidated financial statements include those related to revenue recognition and accounting of intangible assets.

If industry or financial analysts do not publish research or reports about our business, or if they issue inaccurate or unfavorable research regarding our ordinary shares, our share price and trading volume could decline, which could adversely affect our business.

The trading market for our ordinary shares is influenced by the research and reports that industry or financial analysts publish about us or our business. We do not control these analysts, or the content and opinions included in their reports. If any of the analysts who cover us issues an inaccurate or unfavorable opinion regarding our company, our stock price would likely decline. In addition, the stock prices of many companies in the technology industry have declined significantly after those companies have failed to meet, or significantly exceed, the financial guidance publicly announced by the companies or the expectations of analysts or public investors. If our financial results fail to meet, or significantly exceed, our announced guidance or the expectations of analysts or public investors, our stock price may decline. Further, analysts could downgrade our ordinary shares or publish unfavorable research about us. If one or more of the analysts who cover our company ceases to cover us, or fails to publish reports on us regularly, our profile in the financial markets could decrease, which in turn could cause our stock price or trading volume to decline and could adversely affect our business.

The requirements of being a public company may strain our resources, divert management's attention and affect our ability to attract and retain senior management and qualified board members.

As a public company, we are subject to the reporting and corporate governance requirements of the Exchange Act, the listing requirements of the NYSE and other applicable securities rules and regulations, including the Sarbanes-Oxley Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act. Compliance with these rules and regulations has increased, and we expect will continue increasing, our legal and financial compliance costs, make some activities more difficult, time-consuming or costly and increase demand on our systems and resources.

Among other things, the Exchange Act requires that we file annual, quarterly and current reports with respect to our business and results of operations, and the Sarbanes-Oxley Act requires that we maintain effective disclosure controls and procedures and internal control over financial reporting. In order to improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight is required. As a result, management's attention may be diverted from other business concerns, which could harm our business, financial condition, results of operations and prospects. Although we have already hired additional personnel to help comply with these requirements, we may need to further expand our legal and finance departments in the future or hire outside consultants, which will increase our costs and expenses.

In addition, changing laws, regulations and standards relating to corporate governance and public disclosure, including those related to climate change and other environmental, social and governance ("ESG") related matters, are creating uncertainty for public companies, increasing legal and financial compliance costs and making some activities more time-consuming. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expense and a diversion of management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to their application and practice, regulatory authorities may initiate legal proceedings against us and our business and prospects may be harmed. For example, increased efforts on and the involvement of advisors to assist with policies and disclosures practices on ESG matters may result in additional expenses. Further, our practices and public disclosures regarding ESG matters could impact our brand and reputation. If our ESG practices and disclosures do not meet evolving investor or other stakeholder expectations and societal and regulatory standards, or if we are unable to make progress on or achieve our goals and objectives in this area, then our reputation, our ability to attract or retain sales, marketing and other employees, and our attractiveness as an investment or business partner could be negatively impacted, which could adversely affect our operating results.

As a result of disclosure of information in the filings required of a public company and in this Quarterly Report on Form 10-Q, our business and financial condition will become more visible, which may result in threatened or actual litigation, including by competitors and other third parties. If such claims are successful, our business, financial condition, results of operations and prospects could be materially harmed, and even if the claims do not result in litigation or are resolved in our favor, these claims, and the time and resources necessary to resolve them, could divert the resources of our management and materially harm our business, financial condition, results of operations and prospects. These factors could also make it more difficult for us to attract and retain qualified senior management or members of our board of directors, particularly to serve on our audit and compensation committees.

If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, we may be unable to accurately report our financial results or prevent fraud, and investor confidence and the market price of our ordinary shares may decline, which could adversely affect our business.

As a public company in the United States, we are subject to the Sarbanes-Oxley Act, which requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. In order to maintain and improve the effectiveness of our disclosure controls and procedures and internal control over financial reporting, we have expended and anticipate that we will continue to expend significant resources, including accounting-related costs and significant management oversight. We have incurred and expect to continue to incur significant expenses and devote substantial management effort toward compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act. To assist us in complying with these requirements, we may need to hire more employees in the future, or engage outside consultants, which will increase our operating expenses.

Despite significant investment, our current controls and any new controls that we develop may become inadequate because of changes in conditions in our business. Further, weaknesses in our disclosure controls and internal control over financial reporting may be discovered in the future. Any failure to implement or maintain effective controls or any difficulties encountered in their implementation or improvement could harm our results of operations or cause us to fail to meet our reporting obligations and may result in a restatement of our financial statements for prior periods. Any failure to implement and maintain effective internal control over financial reporting could also adversely affect the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting that are required to be included in our periodic reports that we file with the SEC.

Ineffective disclosure controls and procedures and internal control over financial reporting could also cause investors to lose confidence in our reported financial and other information, subject us to sanctions or investigations by the NYSE, the SEC, or other regulatory authorities, and would likely cause the trading price of our ordinary shares to decline, which could adversely affect our business.

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

Not applicable.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Not applicable.

ITEM 6. EXHIBITS

The documents listed below are incorporated by reference or are filed with this Quarterly Report on Form 10-Q, in each case as indicated therein (numbered in accordance with Item 601 of Regulation S-K).

		Incorporated by Reference				
Exhibit No.	**Description**	**Form**	**File No.**	**Exhibit**	**Filing Date**	**Filed Herewith**
3.1	Articles of Association of Elastic N.V. (English translation).	10-Q	001-38675	3.1	12/12/2018	
3.2	Deed of Amendment of the Articles of Association of Elastic N.V. (English translation).	10-Q	001-38675	3.2	12/12/2018	
3.3	Deed of Conversion and Amendment of the Articles of Association of Elastic N.V. Articles of Association (English translation).	10-Q	001-38675	3.3	12/12/2018	
10.1	Elastic N.V. 2022 Employee Stock Purchase Plan	8-K	001-38675	10.1	10/6/2022	
10.2	Amended and Restated Employment Agreement between Elasticsearch, Inc. and Shay Banon, dated September 9, 2022.					X
10.3	Form of Change in Control and Severance Agreement.					X
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1*	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002.					X
32.2*	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.					X
101.SCH	Inline XBRL Taxonomy Extension Schema Document.					X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.					X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.					X
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).					X

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

SIGNATURES

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

Elastic N.V.

Date: December 2, 2022 By: /s/ Ashutosh Kulkarni

Ashutosh Kulkarni

Chief Executive Officer and Director
(*Principal Executive Officer*)

Date: December 2, 2022 By: /s/ Janesh Moorjani

Janesh Moorjani

Chief Financial Officer and Chief Operating Officer
(Principal Financial and Accounting Officer)

ELASTICSEARCH, INC.

AMENDED AND RESTATED EMPLOYMENT AGREEMENT

This Amended and Restated Employment Agreement (the "**Agreement**") is entered into as of September 9, 2022 (the "**Effective Date**") by and between Elasticsearch, Inc. (the "**Company**"), Elastic N.V. (the "**Parent**") and Shay Banon ("**Executive**").

1. Duties and Scope of Employment.

(a) Positions and Duties. As of the Effective Date, Executive will continue to serve as an employee of the Company and as the Executive Director designated as Chief Technology Officer of the Parent. Executive will render such business and professional services in the performance of his duties, consistent with Executive's position within the Company and Parent, as will reasonably be assigned to him by the Board. The period of Executive's employment under this Agreement is referred to herein as the "**Employment Term**."

(b) Board Membership. As of the Effective Date, Executive will continue to serve as Executive Director designated as Chief Technology Officer of Parent and as a member of the Board. The Executive's board membership shall be subject to the Articles of Association of the Parent, the Board Rules of the Parent and any required Board and shareholder approvals.

(c) Obligations. During the Employment Term, Executive will perform his duties to the Company and Parent faithfully and to the best of his ability and will devote his full business efforts and time to the Company. For the duration of the Employment Term, Executive agrees not to engage in any other employment or consulting activity for any direct or indirect remuneration without the prior approval of the Board.

(d) Employment. The Company will employ Executive on the terms and conditions set forth herein. Executive will receive his cash compensation and benefits from the Company and the Company will maintain and distribute employment-related records. In the event that during the Employment Term Executive becomes employed by another member of the Company Group in the performance of Executive's duties and obligations hereunder, any reference to the Company in this Agreement will be a reference to that member of the Company Group, unless the context clearly requires otherwise.

(e) Other Entities. Executive agrees to serve and may be appointed as an officer and director for any of the Parent's subsidiaries, partnerships, joint ventures, limited liability companies and other affiliates, including entities in which the Parent has a significant investment as determined by the Parent. As used in this Agreement, the term "affiliates" will include any entity controlled by, controlling, or under common control of the Parent. Upon ceasing employment with the Company for any reason, Executive agrees that he will be deemed to have resigned from all officer positions with the Parent, the Company and any affiliates and Executive agrees to execute such documents and take such actions as the Company reasonably requests to give effect to the same.

2. At-Will Employment. The parties agree that Executive's employment with the Company will continue to be "at-will" employment and may be terminated at any time with or without cause or notice; provided that the Company will provide any notice required by applicable law or provide any payment in lieu of notice as required by applicable law. Executive understands and agrees that neither his job performance nor promotions, commendations, bonuses or the like from the Company give rise to or in any way serve as the basis for modification, amendment, or

extension, by implication or otherwise, of his employment with the Company. However, as described in this Agreement, Executive may be entitled to severance benefits depending on the circumstances of Executive's termination of employment with the Company.

3. Compensation.

(a) Base Salary. During the Employment Term, the Company will pay Executive an annual salary of 1,560,785 New Israeli Shekels as compensation for his services (the "**Base Salary**"). The Base Salary will be paid in accordance with the Company's normal payroll practices and be subject to the usual, required withholdings, including paying compensation in the local currency where Executive is employed, as applicable. Executive's salary will be subject to review and may be increased (but not decreased) based upon the Company's normal performance review practices.

(b) Annual Bonus. Executive will be eligible to receive an annual bonus (the "**Target Bonus**") of up to 60% of his Base Salary, less applicable withholdings, upon achievement of performance objectives to be mutually agreed upon between the Board and Executive under the Company's Executive Incentive Compensation Plan or any successor plan or arrangement adopted and implemented by the Company. The Target Bonus, or any portion thereof, will be paid as soon as practicable after the Board determines that the Target Bonus has been earned, subject to Executive's continued employment with the Company through the payment date. Executive must be employed through the payment date to earn and receive any Target Bonus.

4. Employee Benefits. During the Employment Term, Executive will be entitled to participate in the employee benefit plans currently and hereafter maintained by the Company of general applicability to other senior executives of the Company and as applicable for the jurisdiction in which Executive is providing services, including any medical, dental, vision, life, flexible spending account, disability, and retirement plans, provided that Executive will be entitled to receive any statutory benefits required under applicable law. The Company reserves the right to cancel or change the benefit plans and programs it offers to its employees at any time.

5. Paid Time Off. During the Employment Term, Executive will be entitled to twenty-five (25) days of paid time off ("**PTO**"), in accordance with the Company's PTO policy, or such other period as required under applicable law. PTO shall be taken at such time as mutually and reasonably agreed by Executive and the Board and in accordance with the Company's policies in effect from time to time for other similarly situated employees. For purposes of clarity, any PTO to which Executive is entitled by statute or other applicable law or regulation will offset and be counted against any contractual PTO provided in accordance with this Agreement and the Company's PTO policy. Executive will receive paid holidays in accordance with the Company's regular holiday practices.

6. Expenses. The Company will reimburse Executive for reasonable travel, entertainment or other expenses incurred by Executive in the furtherance of or in connection with the performance of Executive's duties hereunder, in accordance with the Company's expense reimbursement policy as in effect from time to time.

7. Severance Benefits.

(a) Qualifying Non-CIC Termination. On a Qualifying Non-CIC Termination (as defined below), the Executive will be eligible to receive the following payments and benefits from the Company, subject to Section 7(e):

(i) Salary Severance. A single, lump sum payment equal to six (6) months of the Executive's Salary (as defined below), less applicable withholdings.

(ii) Bonus Severance. A single, lump sum payment equal to 50% of the Executive's target annual bonus as in effect for the fiscal year in which the Qualifying Non-CIC Termination occurs, less applicable withholdings.

(iii) Health Insurance Coverage. Subject to Section 7(d), the Company will pay the premiums for coverage under COBRA (as defined below) for the Executive and the Executive's eligible dependents, if any, at the rates then in effect, subject to any subsequent changes in rates that are generally applicable to the Company's active employees (the "**Health Insurance Coverage**"), until the earliest of (A) a period of twelve (12) months from the date of the Executive's termination of employment, (B) the date upon which the Executive (and the Executive's eligible dependents, as applicable) becomes covered under similar plans, or (C) the date upon which the Executive ceases to be eligible for coverage under COBRA.

(b) Qualifying CIC Termination. On a Qualifying CIC Termination, the Executive will be eligible to receive the following payments and benefits from the Company, subject to Section 7(e):

(i) Salary Severance. A single, lump sum payment equal to twelve (12) months of the Executive's Salary, less applicable withholdings.

(ii) Bonus Severance. A single, lump sum payment equal to 100% of the Executive's Target Bonus as in effect for the fiscal year in which the Qualifying CIC Termination occurs, less applicable withholdings.

(iii) Health Insurance Coverage. Subject to Section 7(d), the Company will provide Health Insurance Coverage until the earliest of (A) a period of twelve (12) months from the date of the Executive's termination of employment, (B) the date upon which the Executive (and the Executive's eligible dependents, as applicable) becomes covered under similar plans, or (C) the date upon which the Executive ceases to be eligible for coverage under COBRA.

(iv) Equity Vesting. Vesting acceleration (and exercisability, as applicable) as to 100% of the then-unvested shares subject to each of the Executive's then-outstanding Parent equity awards. In the case of an equity award with performance-based vesting, unless otherwise specified in the applicable equity award agreement governing such award, all performance goals and other vesting criteria will be deemed achieved at the greater of actual performance measured as of the date of termination or 100% of target levels. For the avoidance of doubt, in the event of the Executive's Qualifying Pre-CIC Termination (as defined below), any unvested portion of the Executive's then-outstanding equity awards will remain outstanding until the earlier of (x) three (3) months following the Qualifying Termination or (y) the occurrence of a Change in Control, solely so that any benefits due on a Qualifying Pre-CIC Termination can be provided if a Change in Control occurs within three (3) months following the Qualifying Termination (provided that in no event will the Executive's stock options or similar equity awards remain outstanding beyond the equity award's maximum term to expiration). If no Change in Control occurs within three (3) months following a Qualifying Termination, any unvested portion of the Executive's equity awards automatically and permanently will be forfeited on the date that is three (3) months following the date of the Qualifying Termination without having vested.

(c) Termination Other Than a Qualifying Termination. If the termination of the Executive's employment with the Company Group is not a Qualifying Termination, then the

Executive will not be entitled to receive severance or other benefits, except with respect to any statutory benefits required under applicable law.

(d) Conditions to Receipt of Health Insurance Coverage. The Executive's receipt of Health Insurance Coverage is subject to the Executive electing COBRA continuation coverage within the time period prescribed pursuant to COBRA for the Executive and the Executive's eligible dependents, if any. If the Company determines in its sole discretion that it cannot provide the Health Insurance Coverage pursuant to COBRA either (i) because COBRA is not available in the jurisdiction in which Executive is employed, or (ii) without potentially violating, or being subject to an excise tax under, applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then in lieu of any Health Insurance Coverage, the Company will provide to the Executive a taxable monthly payment payable on the last day of a given month (except as provided by the immediately following sentence), in an amount equal to (A) if Health Insurance Coverage pursuant to COBRA is not available in the jurisdiction in which Executive is employed, an amount equal to the premium that was required to be paid for health coverage in effective immediately prior to Executive's termination, which will include employer and employee contributions to payment of those premiums), or (B) the monthly COBRA premium that the Executive would be required to pay to continue his or her group health coverage in effect on the date of his or her Qualifying Termination (which amount will be based on the premium rates applicable for the first month of Health Insurance Coverage for the Executive and any of eligible dependents of the Executive) (each, a "**Health Coverage Replacement Payment**"), which Health Coverage Replacement Payments will be made regardless of whether the Executive elects COBRA continuation coverage, if applicable, and will end on the earlier of (x) the date upon which the Executive obtains other employment or (y) the date the Company has paid an amount totaling the number of Health Coverage Replacement Payments equal to the number of months in the applicable Health Insurance Coverage period. For the avoidance of doubt, the Health Insurance Replacement Payments may be used for any purpose, including, but not limited to continuation coverage under COBRA, and will be subject to any applicable withholdings as required by applicable law. Notwithstanding anything to the contrary under this Agreement, if the Company determines in its sole discretion at any time that it cannot provide the Health Insurance Replacement Payments without violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Executive will not receive the Health Insurance Replacement Payments or any further Health Insurance Coverage.

(e) Non-Duplication of Payment or Benefits. For purposes of clarity, in the event of a Qualifying Pre-CIC Termination, any severance payments and benefits to be provided to the Executive under Section 7(b) will be reduced by any amounts that already were provided to the Executive under Section 7(a). Notwithstanding any provision of this Agreement to the contrary, if the Executive is entitled to any cash severance, continued health coverage benefits, or vesting acceleration of any equity awards (other than under this Agreement) by operation of applicable law or under a plan, policy, contract, or arrangement sponsored by or to which any member of the Company Group is a party, including, but not limited to, Statutory Severance Benefits (collectively, "**Other Benefits**"), then the corresponding severance payments and benefits under this Agreement will be reduced by the amount of Other Benefits paid or provided to the Executive.

(f) Death of the Executive. In the event of the Executive's death before all payments or benefits the Executive is entitled to receive under this Agreement have been provided, the unpaid amounts will be provided to the Executive's designated beneficiary, if living, or otherwise to the Executive's personal representative in a single lump sum as soon as possible following the Executive's death.

(g) Transfer Between Members of the Company Group. For purposes of this Agreement, if the Executive is involuntarily transferred from one member of the Company Group to

another, the transfer will not be a termination without Cause but may give the Executive the ability to resign for Good Reason.

(h) Exclusive Remedy. In the event of a termination of the Executive's employment with the Company Group, the provisions of this Agreement are intended to be and are exclusive and in lieu of any other rights or remedies to which the Executive may otherwise be entitled, whether at law, tort or contract, or in equity. The Executive will be entitled to no benefits, compensation or other payments or rights upon termination of employment other than those benefits expressly set forth in this Agreement.

(i) Statutory Severance. In the event that Executive becomes eligible to receive statutory severance payments or benefits required under applicable law ("**Statutory Severance Benefits**"), such Statutory Severance Benefits will be provided to Executive in accordance with applicable law.

8. Accrued Compensation. On any termination of the Executive's employment with the Company Group, the Executive will be entitled to receive all accrued but unpaid vacation, expense reimbursements, wages, and other benefits due to the Executive under any Company-provided plans, policies, and arrangements in accordance with applicable law.

9. Conditions to Receipt of Severance.

(a) Separation Agreement and Release of Claims. The Executive's receipt of any severance payments or benefits upon the Executive's Qualifying Termination under Section 7 is subject to the Executive signing and not revoking the Company's then-standard separation agreement and release of claims (which may include an agreement not to disparage any member of the Company Group, non-solicit provisions, an agreement to assist in any litigation matters, and other standard terms and conditions) (the "**Release**"), which must become effective and irrevocable no later than the sixtieth (60^{th}) day following the Executive's Qualifying Termination (the "**Release Deadline**"). If the Release does not become effective and irrevocable by the Release Deadline, the Executive will forfeit any right to severance payments or benefits under Section 7.

(b) Payment Timing. Any lump sum Salary or bonus payments under Sections 7(a)(i), 7(a)(ii), 7(b)(i), and 7(b)(ii) will be provided on the first regularly scheduled payroll date of the Company following the date the Release becomes effective and irrevocable (the "**Severance Start Date**"), subject to any delay required by Section 9(d) below. Any restricted stock units, performance shares, performance units, and/or similar full value awards that accelerate vesting under Section 7(b)(iv) will be settled (x) on a date no later than ten (10) days following the date the Release becomes effective and irrevocable, or (y) if later, in the event of a Qualifying Pre-CIC Termination, on a date no later than the Change in Control.

(c) Return of Company Property. The Executive's receipt of any severance payments or benefits upon the Executive's Qualifying Termination under Section 7 is subject to the Executive returning all documents and other property provided to the Executive by any member of the Company Group (with the exception of a copy of the Company employee handbook and personnel documents specifically relating to the Executive), developed or obtained by the Executive in connection with his employment with the Company Group, or otherwise belonging to the Company Group.

(d) Section 409A. The Company intends that all payments and benefits provided under this Agreement or otherwise are exempt from, or comply with, the requirements of Section 409A of the Code and any guidance promulgated under Section 409A of the Code

(collectively, "**Section 409A**") so that none of the payments or benefits will be subject to the additional tax imposed under Section 409A, and any ambiguities in this Agreement will be interpreted in accordance with this intent. No payment or benefits to be paid to the Executive, if any, under this Agreement or otherwise, when considered together with any other severance payments or separation benefits that are considered deferred compensation under Section 409A (together, the "**Deferred Payments**") will be paid or otherwise provided until the Executive has a "separation from service" within the meaning of Section 409A. If, at the time of the Executive's termination of employment, the Executive is a "specified employee" within the meaning of Section 409A, then the payment of the Deferred Payments will be delayed to the extent necessary to avoid the imposition of the additional tax imposed under Section 409A, which generally means that the Executive will receive payment on the first payroll date that occurs on or after the date that is six (6) months and one (1) day following the Executive's termination of employment. The Company reserves the right to amend this Agreement as it considers necessary or advisable, in their sole discretion and without the consent of the Executive or any other individual, to comply with any provision required to avoid the imposition of the additional tax imposed under Section 409A or to otherwise avoid income recognition under Section 409A prior to the actual payment of any benefits or imposition of any additional tax. Each payment, installment, and benefit payable under this Agreement is intended to constitute a separate payment for purposes of U.S. Treasury Regulation Section 1.409A-2(b)(2). In no event will any member of the Company Group reimburse, indemnify, or hold harmless the Executive for any taxes, penalties and interest that may be imposed, or other costs that may be incurred, as a result of Section 409A.

(e) Resignation of Officer and Director Positions. The Executive's receipt of any severance payments or benefits upon the Executive's Qualifying Termination under Section 7 is subject to the Executive resigning from all officer and director positions with all members of the Company Group and the Executive executing any documents the Company may require in connection with the same.

10. Limitation on Payments.

(a) Reduction of Severance Benefits. If any payment or benefit that the Executive would receive from any Company Group member or any other party whether in connection with the provisions in this Agreement or otherwise (the "**Payment**") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "**Excise Tax**"), then the Payment will be equal to the Best Results Amount. The "**Best Results Amount**" will be either (x) the full amount of the Payment or (y) a lesser amount that would result in no portion of the Payment being subject to the Excise Tax, whichever of those amounts, taking into account the applicable federal, state and local employment taxes, income taxes and the Excise Tax, results in the Executive's receipt, on an after-tax basis, of the greater amount. If a reduction in payments or benefits constituting parachute payments is necessary so that the Payment equals the Best Results Amount, reduction will occur in the following order: (A) reduction of cash payments in reverse chronological order (that is, the cash payment owed on the latest date following the occurrence of the event triggering the excise tax will be the first cash payment to be reduced); (B) cancellation of equity awards that were granted "contingent on a change in ownership or control" within the meaning of Section 280G of the Code in the reverse order of date of grant of the awards (that is, the most recently granted equity awards will be cancelled first); (C) reduction of the accelerated vesting of equity awards in the reverse order of date of grant of the awards (that is, the vesting of the most recently granted equity awards will be cancelled first); and (D) reduction of employee benefits in reverse chronological order (that is, the benefit owed on the latest date following the occurrence of the event triggering the excise tax will be the first benefit to be reduced). In no event will the Executive have any discretion with respect to the ordering of Payment reductions. The Executive will be solely responsible for the payment of all

personal tax liability that is incurred as a result of the payments and benefits received under this Agreement, and the Executive will not be reimbursed, indemnified, or held harmless by any member of the Company Group for any of those payments of personal tax liability.

(b) Determination of Excise Tax Liability. Unless the Company and the Executive otherwise agree in writing, the Company will select a professional services firm (the "**Firm**") to make all determinations required under this Section 10, which determinations will be conclusive and binding upon the Executive and the Company for all purposes. For purposes of making the calculations required by this Section 10, the Firm may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and the Executive will furnish to the Firm such information and documents as the Firm reasonably may request in order to make determinations under this Section 10. The Company will bear the costs and make all payments for the Firm's services in connection with any calculations contemplated by this Section 10. The Company will have no liability to the Executive for the determinations of the Firm.

11. Definitions. The following terms referred to in this Agreement will have the following meanings:

(a) "**Board**" means the Parent's Board of Directors.

(b) "**Cause**" means the occurrence of any of the following: (i) any willful, material violation by the Executive of any law or regulation applicable to the business of any Company Group member, the Executive's conviction for, or plea of guilty or no contest to, a felony or a crime involving moral turpitude, or any willful perpetration by the Executive of a common law fraud, in each instance, which has a material adverse impact on the financial condition or business reputation of any Company Group member; (ii) the Executive's commission of an act of personal dishonesty which involves personal profit in connection with any Company Group member or any other entity having a business relationship with any Company Group member, in each instance, which has a material adverse impact on the financial condition or business reputation of any Company Group member; (iii) any material breach by the Executive of any provision of any agreement or understanding between any Company Group member and the Executive regarding the terms of the Executive's service as an employee, officer, director or consultant to any Company Group member, including without limitation, the willful and continued failure or refusal of the Executive to perform the material duties required of the Executive as an employee, officer, director or consultant of any Company Group member, other than as a result of having a Disability, or a material breach of any applicable invention assignment and confidentiality agreement or similar agreement between any Company Group member and the Executive, (iv) the Executive's disregard of the policies of any Company Group member so as to cause a material adverse impact on the financial condition or business reputation of any Company Group member, or (v) any other misconduct by the Executive which is materially injurious to the financial condition or business reputation of, or is otherwise materially injurious to, any Company Group member.

(c) "**Change in Control**" means the occurrence of any of the following events:

(i) A change in the ownership of the Parent which occurs on the date that any one person, or more than one person acting as a group ("**Person**"), acquires ownership of shares in the capital of the Parent that, together with the shares held by such Person, constitutes more than 50% of the total voting power in the Parent; provided, however, that for purposes of this subsection, (A) the acquisition of additional shares by any one Person, who is considered to own more than 50% of the total voting power in the Parent will not be considered a Change in Control, and (B) if the shareholders of the Parent immediately before such change in ownership continue to retain

immediately after the change in ownership, in substantially the same proportions as their ownership of shares in the capital of the Parent immediately prior to the change in ownership, the direct or indirect beneficial ownership of 50% or more of the total voting power in the Parent or of the ultimate parent entity of the Parent, such event will not be considered a Change in Control under this subsection (i). For this purpose, indirect beneficial ownership will include, without limitation, an interest resulting from ownership of the voting securities of one or more corporations or other business entities which own the Parent, as the case may be, either directly or through one or more subsidiary corporations or other business entities; or

(ii) A change in the effective control of the Parent which occurs on the date that a majority of members of the Board is replaced during any twelve (12) month period by members of the Board whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this subsection (ii), if any Person is considered to be in effective control of the Parent, the acquisition of additional control of the Parent by the same Person will not be considered a Change in Control; or

(iii) A change in the ownership of a substantial portion of the Parent's assets which occurs on the date that any Person acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) assets from the Parent that have a total gross fair market value equal to or more than 50% of the total gross fair market value of all of the assets of the Parent immediately prior to such acquisition or acquisitions; provided, however, that for purposes of this subsection (iii), the following will not constitute a change in the ownership of a substantial portion of the Parent's assets: (A) a transfer to an entity that is controlled by the Parent's shareholders immediately after the transfer, or (B) a transfer of assets by the Parent to: (1) a shareholder of the Parent (immediately before the asset transfer) in exchange for or with respect to the shares in the Parent's share capital, (2) an entity, 50% or more of the total value or voting power of which is owned, directly or indirectly, by the Parent, (3) a Person, that owns, directly or indirectly, 50% or more of the total value or voting power of all the outstanding shares in the capital of the Parent, or (4) an entity, at least 50% of the total value or voting power of which is owned, directly or indirectly, by a Person described in this subsection (iii)(B)(3). For purposes of this subsection (iii), gross fair market value means the value of the assets of the Parent, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this definition, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar capital reorganization or business combination transaction with the Parent.

Notwithstanding the foregoing, a transaction will not be deemed a Change in Control unless the transaction qualifies as a change in control event within the meaning of Section 409A.

Further and for the avoidance of doubt, a transaction will not constitute a Change in Control if: (i) its sole purpose is to change the jurisdiction of the Parent's incorporation, (ii) its sole purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Parent's securities immediately before such transaction, or (iii) its sole purpose is to effect a private financing of the Parent through a change in the ownership of the stock of the Parent that is approved by the Board.

(d) "**Change in Control Period**" means the period beginning three (3) months prior to a Change in Control and ending twelve (12) months following a Change in Control.

(e) **"COBRA"** means the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended.

(f) "**Code**" means the Internal Revenue Code of 1986, as amended.

(g) "**Company Group**" means the Parent and its subsidiaries, including, for the avoidance of doubt, the Company.

(h) "**Confidentiality Agreement**" means the Company's Proprietary Information and Invention Assignment Agreement entered into between the Company and Executive.

(i) "**Disability**" means a total and permanent disability as defined in Section 22(e)(3) of the Code.

(j) "**Good Reason**" means the termination of the Executive's employment with the Company Group by the Executive in accordance with the next sentence after the occurrence of one or more of the following events without the Executive's express written consent: (i) a material reduction of the Executive's duties, authorities, or responsibilities relative to the Executive's duties, authorities, or responsibilities in effect immediately prior to the reduction, including, but not limited to, a reduction arising from a change in Executive's reporting requirements; (ii) a material reduction by a Company Group member in the Executive's rate of annual base salary or annual target bonus opportunity; provided, however, that, a substantially similar reduction of annual base salary or annual target bonus opportunity that also applies to substantially all other similarly situated employees of the Company Group members will not constitute "Good Reason"; (iii) a material change in the geographic location of the Executive's primary work facility or location by more than thirty-five (35) miles from the Executive's then present location; provided, that a relocation to a location that is within thirty-five (35) miles from the Executive's then-present primary residence will not be considered a material change in geographic location, or (iv) failure of a successor corporation to assume the obligations under this Agreement as contemplated by Section 12. In order for the termination of the Executive's employment with a Company Group member to be for Good Reason, the Executive must not terminate employment without first providing written notice to the Company of the acts or omissions constituting the grounds for "Good Reason" within ninety (90) days of the initial existence of the grounds for "Good Reason" and a cure period of thirty (30) days following the date of written notice (the "**Cure Period**"), the grounds must not have been cured during that time, and the Executive must terminate the Executive's employment within ninety (90) days following the Cure Period. To the extent Executive's primary work location is Executive's residence due to a shelter in place order or work from home arrangement that applies to Executive, Executive's primary place of work, from which a change in location under the foregoing clause (iii) will be measured, will be considered to be the Company's office location where Executive's employment with the Company primarily was or would have been or would have been based immediately prior to the commencement of such shelter-in-place order or work-from-home arrangement.

(k) "**Qualifying Termination**" means a termination of the Executive's employment either (i) by a Company Group member without Cause (excluding by reason of Executive's death or Disability) or (ii) by the Executive for Good Reason, in either case, during the Change in Control Period (a "**Qualifying CIC Termination**") or outside of the Change in Control Period (a "**Qualifying Non-CIC Termination**").

(l) "**Qualifying Pre-CIC Termination**" means a Qualifying CIC Termination that occurs prior to the date of the Change in Control.

(m) "**Salary**" means the Executive's annual base salary as in effect immediately prior to the Executive's Qualifying Termination (or if the termination is due to a resignation for Good Reason based on a material reduction in base salary, then the Executive's annual base salary in effect immediately prior to the reduction) or, if the Executive's Qualifying Termination is a Qualifying CIC Termination and the amount is greater, at the level in effect immediately prior to the Change in Control.

12. Successors. This Agreement will be binding upon and inure to the benefit of (a) the heirs, executors, and legal representatives of the Executive upon the Executive's death, and (b) any successor of the Company or the Parent, as applicable. Any such successor of the Company or the Parent will be deemed substituted for the Company or the Parent, as applicable, under the terms of this Agreement for all purposes. For this purpose, "successor" means any person, firm, corporation, or other business entity which at any time, whether by purchase, merger, or otherwise, directly or indirectly acquires all or substantially all of the assets or business of the Company or the Parent, as applicable. None of the rights of the Executive to receive any form of compensation payable pursuant to this Agreement may be assigned or transferred except by will or the laws of descent and distribution. Any other attempted assignment, transfer, conveyance, or other disposition of the Executive's right to compensation or other benefits will be null and void.

13. Notice.

(a) General. All notices and other communications required or permitted under this Agreement shall be in writing and will be effectively given (i) upon actual delivery to the party to be notified, (ii) upon transmission by email, (iii) twenty-four (24) hours after confirmed facsimile transmission, (iv) one (1) business day after deposit with a recognized overnight courier, or (v) three (3) business days after deposit with the U.S. Postal Service by first class certified or registered mail, return receipt requested, postage prepaid, addressed (A) if to the Executive, at the address the Executive shall have most recently furnished to the Company in writing, (B) if to the Company, at the following address:

Elasticsearch, Inc.
800 West El Camino Real, Suite 350
Mountain View, CA 94040
Attention: Senior Vice President, Global Human Resources

(b) Notice of Termination. Any termination by a Company Group member for Cause will be communicated by a notice of termination to the Executive, and any termination by the Executive for Good Reason will be communicated by a notice of termination to the Company, in each case given in accordance with Section 13(a) of this Agreement. The notice will indicate the specific termination provision in this Agreement relied upon, will set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination under the provision so indicated, and will specify the termination date (which will be not more than thirty (30) days after the later of (i) the giving of the notice or (ii) the end of any applicable cure period).

14. Resignation. The termination of the Executive's employment for any reason will also constitute, without any further required action by the Executive, the Executive's voluntary resignation from all officer and/or director positions held at any member of the Company Group, and at the Board's request, the Executive will execute any documents reasonably necessary to reflect the resignations.

15. Confidential Information. Executive agrees to continue to be subject to the terms of the Confidentiality Agreement, which will continue in full force and effect. Further, Executive and the Parent entered into the Assignment of Technology Agreement dated September 3, 2012 (the "**Assignment Agreement**"), which will continue in full force and effect.

16. Protected Activity Not Prohibited. Executive understands that nothing in this Agreement, or any other agreement or policy with or by the Company, will in any way limit or prohibit Executive from engaging in any Protected Activity. For purposes of this Agreement, "**Protected Activity**" will mean filing a charge, complaint, or report with, or otherwise communicating, cooperating, or participating in any investigation or proceeding that may be conducted by, any federal, state or local government agency or commission, including the Securities and Exchange Commission, the Equal Employment Opportunity Commission, the Occupational Safety and Health Administration, and the National Labor Relations Board ("**Government Agencies**"). Executive understands that in connection with such Protected Activity, Executive is permitted to disclose documents or other information as permitted by law, and without giving notice to, or receiving authorization from, the Company. Notwithstanding the foregoing, Executive agrees to take all reasonable precautions to prevent any unauthorized use or disclosure of any information that may constitute Company confidential information under the Confidentiality Agreement to any parties other than the Government Agencies. Executive further understands that "**Protected Activity**" does not include the disclosure of any Company attorney-client privileged communications. Any language in the Confidentiality Agreement, or any other agreement or policy of the Company, regarding Executive's right to engage in Protected Activity that conflicts with, or is contrary to, this paragraph is superseded by this provision. In addition, pursuant to the Defend Trade Secrets Act of 2016, Executive is notified that an individual will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (a) is made in confidence to a federal, state, or local government official (directly or indirectly) or to an attorney solely for the purpose of reporting or investigating a suspected violation of law, or (b) is made in a complaint or other document filed in a lawsuit or other proceeding, if (and only if) such filing is made under seal. In addition, an individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the individual's attorney and use the trade secret information in the court proceeding, if the individual files any document containing the trade secret under seal and does not disclose the trade secret, except pursuant to court order.

17. Miscellaneous Provisions.

(a) No Duty to Mitigate. The Executive will not be required to mitigate the amount of any payment contemplated by this Agreement, nor will any payment be reduced by any earnings that the Executive may receive from any other source except as specified in Section 7(e).

(b) Waiver; Amendment. No provision of this Agreement will be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by an authorized officer of the Company (other than the Executive) and by the Executive. No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party will be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) Headings. All captions and section headings used in this Agreement are for convenient reference only and do not form a part of this Agreement.

(d) Entire Agreement. This Agreement, the Assignment Agreement, and the Confidentiality Agreement constitute the entire agreement of the parties and supersedes in their

entirety all prior representations, understandings, undertakings or agreements (whether oral or written and whether expressed or implied) of the parties with respect to the subject matter of this Agreement, including, for the avoidance of doubt, any other employment letter or agreement, severance policy or program, or equity award agreement.

(e) Choice of Law. This Agreement will be governed by the laws of the State of California without regard to California's conflicts of law rules that may result in the application of the laws of any jurisdiction other than California. To the extent that any lawsuit is permitted under this Agreement, Executive hereby expressly consents to the personal and exclusive jurisdiction and venue of the state and federal courts located in California for any lawsuit filed against the Executive by the Company. In the event Executive becomes employed by a member of the Company Group and is primarily providing services hereunder in a jurisdiction other than California, then the laws and venue of that jurisdiction will apply for purposes of this Agreement.

(f) Arbitration. Any and all controversies, claims, or disputes with anyone under this Agreement (including the Company and any employee, officer, director, stockholder or benefit plan of the Company in their capacity as such or otherwise) arising out of, relating to, or resulting from the Executive's employment with the Company Group, shall be subject to arbitration in accordance with the provisions of the Confidentiality Agreement.

(g) Severability. The invalidity or unenforceability of any provision or provisions of this Agreement will not affect the validity or enforceability of any other provision of this Agreement, which will remain in full force and effect.

(h) Taxation. All payments made pursuant to this Agreement will be subject to withholding of any applicable taxes. Executive acknowledges that he has reviewed with his own tax advisors the federal, state, local and foreign tax consequences of payments and transactions described in this Agreement, and he is relying solely on such advisors and not on any statements or representations of the Company or any of its agents. Executive understands that Executive (and not the Company or any other member of the Company Group) shall be responsible for any tax liability (other than employment tax liability owed by the Company or any other member of the Company Group) that may arise as a result of the payments and transactions contemplated by this Agreement.

(i) Acknowledgment. Executive acknowledges that he has had the opportunity to discuss this matter with and obtain advice from his private attorney, has had sufficient time to, and has carefully read and fully understands all the provisions of this Agreement, and is knowingly and voluntarily entering into this Agreement.

(j) Counterparts. This Agreement may be executed in counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company and Parent by its duly authorized officer, as of the day and year first above written.

COMPANY:

Elasticsearch, Inc.

By: /s/ Leah Sutton Date: September 9, 2022

Leah Sutton

Title: SVP, Global Human Resources

PARENT:

Elastic N.V.

By: /s/ Ashutosh Kulkarni Date: September 9, 2022

Ashutosh Kulkarni

Title: Chief Executive Officer

EXECUTIVE:

By: /s/ Shay Banon Date: September 9, 2022

Shay Banon

[SIGNATURE PAGE TO BANON AMENDED AND RESTATED EMPLOYMENT AGREEMENT]

ELASTICSEARCH, INC.

CHANGE IN CONTROL AND SEVERANCE AGREEMENT

This Change in Control and Severance Agreement (the "**Agreement**") is made between Elasticsearch, Inc. (the "**Company**"), Elastic N.V., the parent corporation of the Company ("**Elastic N.V.**") and [_____] (the "**Executive**"), effective as of _____, (the "**Effective Date**").

This Agreement provides certain protections to the Executive in connection with a change in control of the Company or in connection with the involuntary termination of the Executive's employment under the circumstances described in this Agreement.

The Company and the Executive agree as follows:

1. Term of Agreement. This Agreement will continue indefinitely until terminated by written consent of the parties hereto, or if earlier, upon the date that all of the obligations of the parties hereto with respect to this Agreement have been satisfied.

2. At-Will Employment. The Company and the Executive acknowledge that the Executive's employment is and will continue to be at-will, as defined under applicable law.

3. Severance Benefits.

(a) Qualifying Non-CIC Termination. On a Qualifying Non-CIC Termination (as defined below), the Executive will be eligible to receive the following payments and benefits from the Company:

(i) Salary Severance. A single, lump sum payment equal to six (6) months of the Executive's Salary (as defined below), less applicable withholdings.

(ii) Bonus Severance. A single, lump sum payment equal to 50% of the Executive's target annual bonus as in effect for the fiscal year in which the Qualifying Non-CIC Termination occurs, less applicable withholdings.

(iii) COBRA Coverage. Subject to Section 3(d), the Company will pay the premiums for coverage under COBRA (as defined below) for the Executive and the Executive's eligible dependents, if any, at the rates then in effect, subject to any subsequent changes in rates that are generally applicable to the Company's active employees (the "**COBRA Coverage**"), until the earliest of (A) a period of twelve (12) months from the date of the Executive's termination of employment, (B) the date upon which the Executive (and the Executive's eligible dependents, as applicable) becomes covered under similar plans, or (C) the date upon which the Executive ceases to be eligible for coverage under COBRA.

(b) Qualifying CIC Termination. On a Qualifying CIC Termination, the Executive will be eligible to receive the following payments and benefits from the Company:

(i) Salary Severance. A single, lump sum payment equal to twelve (12) months of the Executive's Salary, less applicable withholdings.

(ii) Bonus Severance. A single, lump sum payment equal to 100% of the Executive's target annual bonus as in effect for the fiscal year in which the Qualifying CIC Termination occurs, less applicable withholdings.

(iii) COBRA Coverage. Subject to Section 3(d), the Company will provide COBRA Coverage until the earliest of (A) a period of twelve (12) months from the date of the Executive's termination of employment, (B) the date upon which the Executive (and the Executive's eligible dependents, as applicable) becomes covered under similar plans, or (C) the date upon which the Executive ceases to be eligible for coverage under COBRA.

(iv) Equity Vesting. Vesting acceleration (and exercisability, as applicable) as to 100% of the then-unvested shares subject to each of the Executive's then-outstanding Elastic N.V. equity awards. In the case of an equity award with performance-based vesting, unless otherwise specified in the applicable equity award agreement governing such award, all performance goals and other vesting criteria will be deemed achieved at the greater of actual performance measured as of the date of termination or 100% of target levels. For the avoidance of doubt, in the event of the Executive's Qualifying Pre-CIC Termination (as defined below), any unvested portion of the Executive's then-outstanding equity awards will remain outstanding until the earlier of (x) three (3) months following the Qualifying Termination or (y) the occurrence of a Change in Control, solely so that any benefits due on a Qualifying Pre-CIC Termination can be provided if a Change in Control occurs within three (3) months following the Qualifying Termination (provided that in no event will the Executive's stock options or similar equity awards remain outstanding beyond the equity award's maximum term to expiration). If no Change in Control occurs within three (3) months following a Qualifying Termination, any unvested portion of the Executive's equity awards automatically and permanently will be forfeited on the date that is three (3) months following the date of the Qualifying Termination without having vested.

(c) Termination Other Than a Qualifying Termination. If the termination of the Executive's employment with the Company Group is not a Qualifying Termination, then the Executive will not be entitled to receive severance or other benefits.

(d) Conditions to Receipt of COBRA Coverage. The Executive's receipt of COBRA Coverage is subject to the Executive electing COBRA continuation coverage within the time period prescribed pursuant to COBRA for the Executive and the Executive's eligible dependents, if any. If the Company determines in its sole discretion that it cannot provide the COBRA Coverage without potentially violating, or being subject to an excise tax under, applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then in lieu of any COBRA Coverage, the Company will provide to the Executive a taxable monthly payment payable on the last day of a given month (except as provided by the immediately following sentence), in an amount equal to the monthly COBRA premium that the Executive would be required to pay to continue his or her group health coverage in effect on the date of his or her Qualifying Termination (which amount will be based on the premium rates applicable for the first month of COBRA Coverage for the Executive and any of eligible dependents of the Executive) (each, a "**COBRA Replacement Payment**"), which COBRA Replacement Payments will be made regardless of whether the Executive elects COBRA continuation coverage and will end on the earlier of (x) the date upon which the Executive obtains other employment or (y) the date the Company has paid an amount totaling the number of COBRA Replacement Payments equal to the number of months in the applicable COBRA Coverage period. For the avoidance of doubt, the COBRA Replacement Payments may be used for any purpose, including, but not limited to continuation coverage under COBRA, and will be subject to any applicable withholdings. Notwithstanding anything to the contrary under this Agreement, if the Company determines in its sole discretion at any time that it cannot provide the COBRA Replacement Payments without violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Executive will not receive the COBRA Replacement Payments or any further COBRA Coverage.

(e) Non-Duplication of Payment or Benefits. For purposes of clarity, in the event of a Qualifying Pre-CIC Termination, any severance payments and benefits to be provided to the Executive under Section 3(b) will be reduced by any amounts that already were provided to the Executive under Section 3(a). Notwithstanding any provision of this Agreement to the contrary, if the Executive is entitled to any cash severance, continued health coverage benefits, or vesting acceleration of any equity awards (other than under this Agreement) by operation of applicable law or under a plan, policy, contract, or arrangement sponsored by or to which any member of the Company Group is a party ("**Other Benefits**"), then the corresponding severance payments and benefits under this Agreement will be reduced by the amount of Other Benefits paid or provided to the Executive.

(f) Death of the Executive. In the event of the Executive's death before all payments or benefits the Executive is entitled to receive under this Agreement have been provided, the unpaid amounts will be provided to the Executive's designated beneficiary, if living, or otherwise to the Executive's personal representative in a single lump sum as soon as possible following the Executive's death.

(g) Transfer Between Members of the Company Group. For purposes of this Agreement, if the Executive is involuntarily transferred from one member of the Company Group to another, the transfer will not be a termination without Cause but may give the Executive the ability to resign for Good Reason.

(h) Exclusive Remedy. In the event of a termination of the Executive's employment with the Company Group, the provisions of this Agreement are intended to be and are exclusive and in lieu of any other rights or remedies to which the Executive may otherwise be entitled, whether at law, tort or contract, or in equity. The Executive will be entitled to no benefits, compensation or other payments or rights upon termination of employment other than those benefits expressly set forth in this Agreement.

4. Accrued Compensation. On any termination of the Executive's employment with the Company Group, the Executive will be entitled to receive all accrued but unpaid vacation, expense reimbursements, wages, and other benefits due to the Executive under any Company-provided plans, policies, and arrangements.

5. Conditions to Receipt of Severance.

(a) Separation Agreement and Release of Claims. The Executive's receipt of any severance payments or benefits upon the Executive's Qualifying Termination under Section 3 is subject to the Executive signing and not revoking the Company's then-standard separation agreement and release of claims (which may include an agreement not to disparage any member of the Company Group, non-solicit provisions, an agreement to assist in any litigation matters, and other standard terms and conditions) (the "**Release**" and that requirement, the "**Release Requirement**"), which must become effective and irrevocable no later than the sixtieth (60^{th}) day following the Executive's Qualifying Termination (the "**Release Deadline**"). If the Release does not become effective and irrevocable by the Release Deadline, the Executive will forfeit any right to severance payments or benefits under Section 3.

(b) Payment Timing. Any lump sum Salary or bonus payments under Sections 3(a)(i), 3(b)(i), and 3(b)(ii) will be provided on the first regularly scheduled payroll date of the Company following the date the Release becomes effective and irrevocable (the "**Severance Start Date**"), subject to any delay required by Section 5(d) below. Any taxable installments of any COBRA-related severance benefits that otherwise would have been made to the Executive on or before the Severance Start Date will be paid on the Severance Start Date, and any remaining installments

thereafter will be provided as specified in the Agreement. Any restricted stock units, performance shares, performance units, and/or similar full value awards that accelerate vesting under Section 3(b)(iv) will be settled (x) on a date no later than ten (10) days following the date the Release becomes effective and irrevocable, or (y) if later, in the event of a Qualifying Pre-CIC Termination, on a date no later than the Change in Control.

(c) Return of Company Property. The Executive's receipt of any severance payments or benefits upon the Executive's Qualifying Termination under Section 3 is subject to the Executive returning all documents and other property provided to the Executive by any member of the Company Group (with the exception of a copy of the Company employee handbook and personnel documents specifically relating to the Executive), developed or obtained by the Executive in connection with his employment with the Company Group, or otherwise belonging to the Company Group.

(d) Section 409A. The Company intends that all payments and benefits provided under this Agreement or otherwise are exempt from, or comply with, the requirements of Section 409A of the Code and any guidance promulgated under Section 409A of the Code (collectively, "**Section 409A**") so that none of the payments or benefits will be subject to the additional tax imposed under Section 409A, and any ambiguities in this Agreement will be interpreted in accordance with this intent. No payment or benefits to be paid to the Executive, if any, under this Agreement or otherwise, when considered together with any other severance payments or separation benefits that are considered deferred compensation under Section 409A (together, the "**Deferred Payments**") will be paid or otherwise provided until the Executive has a "separation from service" within the meaning of Section 409A. If, at the time of the Executive's termination of employment, the Executive is a "specified employee" within the meaning of Section 409A, then the payment of the Deferred Payments will be delayed to the extent necessary to avoid the imposition of the additional tax imposed under Section 409A, which generally means that the Executive will receive payment on the first payroll date that occurs on or after the date that is six (6) months and one (1) day following the Executive's termination of employment. The Company reserves the right to amend this Agreement as it considers necessary or advisable, in its sole discretion and without the consent of the Executive or any other individual, to comply with any provision required to avoid the imposition of the additional tax imposed under Section 409A or to otherwise avoid income recognition under Section 409A prior to the actual payment of any benefits or imposition of any additional tax. Each payment, installment, and benefit payable under this Agreement is intended to constitute a separate payment for purposes of U.S. Treasury Regulation Section 1.409A-2(b)(2). In no event will any member of the Company Group reimburse, indemnify, or hold harmless the Executive for any taxes, penalties and interest that may be imposed, or other costs that may be incurred, as a result of Section 409A.

(e) Resignation of Officer and Director Positions. The Executive's receipt of any severance payments or benefits upon the Executive's Qualifying Termination under Section 3 is subject to the Executive resigning from all officer and director positions with all members of the Company Group and the Executive executing any documents the Company may require in connection with the same.

6. Limitation on Payments.

(a) Reduction of Severance Benefits. If any payment or benefit that the Executive would receive from any Company Group member or any other party whether in connection with the provisions in this Agreement or otherwise (the "**Payment**") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "**Excise Tax**"), then the Payment will be equal to the Best Results Amount. The "**Best Results Amount**" will be either (x) the full amount of the Payment

or (y) a lesser amount that would result in no portion of the Payment being subject to the Excise Tax, whichever of those amounts, taking into account the applicable federal, state and local employment taxes, income taxes and the Excise Tax, results in the Executive's receipt, on an after-tax basis, of the greater amount. If a reduction in payments or benefits constituting parachute payments is necessary so that the Payment equals the Best Results Amount, reduction will occur in the following order: (A) reduction of cash payments in reverse chronological order (that is, the cash payment owed on the latest date following the occurrence of the event triggering the excise tax will be the first cash payment to be reduced); (B) cancellation of equity awards that were granted "contingent on a change in ownership or control" within the meaning of Section 280G of the Code in the reverse order of date of grant of the awards (that is, the most recently granted equity awards will be cancelled first); (C) reduction of the accelerated vesting of equity awards in the reverse order of date of grant of the awards (that is, the vesting of the most recently granted equity awards will be cancelled first); and (D) reduction of employee benefits in reverse chronological order (that is, the benefit owed on the latest date following the occurrence of the event triggering the excise tax will be the first benefit to be reduced). In no event will the Executive have any discretion with respect to the ordering of Payment reductions. The Executive will be solely responsible for the payment of all personal tax liability that is incurred as a result of the payments and benefits received under this Agreement, and the Executive will not be reimbursed, indemnified, or held harmless by any member of the Company Group for any of those payments of personal tax liability.

(b) Determination of Excise Tax Liability. Unless the Company and the Executive otherwise agree in writing, the Company will select a professional services firm (the "**Firm**") to make all determinations required under this Section 6, which determinations will be conclusive and binding upon the Executive and the Company for all purposes. For purposes of making the calculations required by this Section 6, the Firm may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and the Executive will furnish to the Firm such information and documents as the Firm reasonably may request in order to make determinations under this Section 6. The Company will bear the costs and make all payments for the Firm's services in connection with any calculations contemplated by this Section 6. The Company will have no liability to the Executive for the determinations of the Firm.

7. Definitions. The following terms referred to in this Agreement will have the following meanings:

(a) "**Board**" means the Board of Directors of Elastic N.V.

(b) "**Cause**" means the occurrence of any of the following: (i) any willful, material violation by the Executive of any law or regulation applicable to the business of any Company Group member, the Executive's conviction for, or plea of guilty or no contest to, a felony or a crime involving moral turpitude, or any willful perpetration by the Executive of a common law fraud, in each instance, which has a material adverse impact on the financial condition or business reputation of any Company Group member; (ii) the Executive's commission of an act of personal dishonesty which involves personal profit in connection with any Company Group member or any other entity having a business relationship with any Company Group member, in each instance, which has a material adverse impact on the financial condition or business reputation of any Company Group member; (iii) any material breach by the Executive of any provision of any agreement or understanding between any Company Group member and the Executive regarding the terms of the Executive's service as an employee, officer, director or consultant to any Company Group member, including without limitation, the willful and continued failure or refusal of the Executive to perform the material duties required of the Executive as an employee, officer, director or consultant of any Company Group member, other than as a result of having a Disability, or a material breach of any applicable invention assignment and

confidentiality agreement or similar agreement between any Company Group member and the Executive, (iv) the Executive's disregard of the policies of any Company Group member so as to cause a material adverse impact on the financial condition or business reputation of any Company Group member, or (v) any other misconduct by the Executive which is materially injurious to the financial condition or business reputation of, or is otherwise materially injurious to, any Company Group member.

(c) "**Change in Control**" means the occurrence of any of the following events:

(i) A change in the ownership of Elastic N.V. which occurs on the date that any one person, or more than one person acting as a group ("**Person**"), acquires ownership shares in the capital of Elastic N.V. that, together with the shares held by such Person, constitutes more than 50% of the total voting power in Elastic N.V.; provided, however, that for purposes of this subsection, (A) the acquisition of additional shares by any one Person, who is considered to own more than 50% of the total voting power in Elastic N.V. will not be considered a Change in Control, and (B) if the shareholders of Elastic N.V. immediately before such change in ownership continue to retain immediately after the change in ownership, in substantially the same proportions as their ownership of shares in the capital of Elastic N.V. immediately prior to the change in ownership, the direct or indirect beneficial ownership of 50% or more of the total voting power in Elastic N.V. or of the ultimate parent entity of Elastic N.V., such event will not be considered a Change in Control under this subsection (i). For this purpose, indirect beneficial ownership will include, without limitation, an interest resulting from ownership of the voting securities of one or more corporations or other business entities which own Elastic N.V., as the case may be, either directly or through one or more subsidiary corporations or other business entities; or

(ii) A change in the effective control of Elastic N.V. which occurs on the date that a majority of members of the Board is replaced during any twelve (12) month period by members of the Board whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this subsection (ii), if any Person is considered to be in effective control of Elastic N.V., the acquisition of additional control of Elastic N.V. by the same Person will not be considered a Change in Control; or

(iii) A change in the ownership of a substantial portion of Elastic N.V.'s assets which occurs on the date that any Person acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from Elastic N.V. that have a total gross fair market value equal to or more than 50% of the total gross fair market value of all of the assets of Elastic N.V. immediately prior to such acquisition or acquisitions; provided, however, that for purposes of this subsection (iii), the following will not constitute a change in the ownership of a substantial portion of Elastic N.V.'s assets: (A) a transfer to an entity that is controlled by Elastic N.V.'s shareholders immediately after the transfer, or (B) a transfer of assets by Elastic N.V. to: (1) a shareholder of Elastic N.V. (immediately before the asset transfer) in exchange for or with respect to shares in Elastic N.V.'s share capital, (2) an entity, 50% or more of the total value or voting power of which is owned, directly or indirectly, by Elastic N.V., (3) a Person, that owns, directly or indirectly, 50% or more of the total value or voting power of all the outstanding shares of capital of Elastic N.V., or (4) an entity, at least 50% of the total value or voting power of which is owned, directly or indirectly, by a Person described in this subsection (iii)(B)(3). For purposes of this subsection (iii), gross fair market value means the value of the assets of Elastic N.V., or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this definition, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or

acquisition of stock, or similar capital reorganization or business combination transaction with Elastic N.V..

Notwithstanding the foregoing, a transaction will not be deemed a Change in Control unless the transaction qualifies as a change in control event within the meaning of Section 409A.

Further and for the avoidance of doubt, a transaction will not constitute a Change in Control if: (i) its sole purpose is to change the jurisdiction of Elastic N.V.'s incorporation, (ii) its sole purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held Elastic N.V.'s securities immediately before such transaction, or (iii) its sole purpose is to effect a private financing of Elastic N.V. through a change in the ownership of the stock of Elastic N.V. that is approved by the Board.

(d) "**Change in Control Period**" means the period beginning three (3) months prior to a Change in Control and ending twelve (12) months following a Change in Control.

(e) "**COBRA**" means the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended.

(f) "**Code**" means the Internal Revenue Code of 1986, as amended.

(g) "**Company Group**" means Elastic N.V., the Company and their respective subsidiaries.

(h) "**Confidentiality Agreement**" means the At Will Employment, Confidential Information, Invention Assignment, Nonsolicitation, and Arbitration Agreement entered into between the Company and Executive.

(i) "**Disability**" means a total and permanent disability as defined in Section 22(e)(3) of the Code.

(j) "**Good Reason**" means the termination of the Executive's employment with the Company Group by the Executive in accordance with the next sentence after the occurrence of one or more of the following events without the Executive's express written consent: (i) a material reduction of the Executive's duties, authorities, or responsibilities relative to the Executive's duties, authorities, or responsibilities in effect immediately prior to the reduction, including, but not limited to, a reduction arising from a change in Executive's reporting requirements[FOR CEO, CFO AND GENERAL COUNSEL ONLY:; provided, however, that continued employment following a Change in Control with substantially the same duties, authorities, or responsibilities with respect to the Company Group's business and operations will constitute "Good Reason" (for example, "Good Reason" will exist if the Executive is employed by the Company Group or a successor with substantially the same duties, authorities, or responsibilities with respect to the Company Group's business that the Executive had immediately prior to the Change in Control, but is not afforded such duties, authorities or responsibilities with respect to the ultimate parent corporation in a control group of corporations that includes the Company Group or a successor]; (ii) a material reduction by a Company Group member in the Executive's rate of annual base salary or annual target bonus opportunity; provided, however, that, a substantially similar reduction of annual base salary or annual target bonus opportunity that also applies to substantially all other similarly situated employees of the Company Group members will not constitute "Good Reason"; (iii) a material change in the geographic location of the Executive's primary work facility or location by more than thirty-five (35) miles from the Executive's then present location; provided, that a relocation to a location that is within thirty-five (35) miles from the Executive's then-

present primary residence will not be considered a material change in geographic location, or (iv) failure of a successor corporation to assume the obligations under this Agreement as contemplated by Section 8(a). In order for the termination of the Executive's employment with a Company Group member to be for Good Reason, the Executive must not terminate employment without first providing written notice to the Company of the acts or omissions constituting the grounds for "Good Reason" within ninety (90) days of the initial existence of the grounds for "Good Reason" and a cure period of thirty (30) days following the date of written notice (the "**Cure Period**"), the grounds must not have been cured during that time, and the Executive must terminate the Executive's employment within ninety (90) days following the Cure Period. To the extent Executive's primary work location is Executive's residence due to a shelter in place order or work from home arrangement that applies to Executive, Executive's primary place of work, from which a change in location under the foregoing clause (iii) will be measured, will be considered to be the Company's office location where Executive's employment with the Company primarily was or would have been or would have been based immediately prior to the commencement of such shelter-in-place order or work-from-home arrangement.

(k) "**Qualifying Termination**" means a termination of the Executive's employment either (i) by a Company Group member without Cause (excluding by reason of Executive's death or Disability) or (ii) by the Executive for Good Reason, in either case, during the Change in Control Period (a "**Qualifying CIC Termination**") or outside of the Change in Control Period (a "**Qualifying Non-CIC Termination**").

(l) "**Qualifying Pre-CIC Termination**" means a Qualifying CIC Termination that occurs prior to the date of the Change in Control.

(m) "**Salary**" means the Executive's annual base salary as in effect immediately prior to the Executive's Qualifying Termination (or if the termination is due to a resignation for Good Reason based on a material reduction in base salary, then the Executive's annual base salary in effect immediately prior to the reduction) or, if the Executive's Qualifying Termination is a Qualifying CIC Termination and the amount is greater, at the level in effect immediately prior to the Change in Control.

8. Successors. This Agreement will be binding upon and inure to the benefit of (a) the heirs, executors, and legal representatives of the Executive upon the Executive's death, and (b) any successor of the Company or Elastic N.V., as applicable. Any such successor of the Company or Elastic N.V. will be deemed substituted for the Company or Elastic N.V., as applicable, under the terms of this Agreement for all purposes. For this purpose, "successor" means any person, firm, corporation, or other business entity which at any time, whether by purchase, merger, or otherwise, directly or indirectly acquires all or substantially all of the assets or business of the Company or Elastic N.V., as applicable. None of the rights of the Executive to receive any form of compensation payable pursuant to this Agreement may be assigned or transferred except by will or the laws of descent and distribution. Any other attempted assignment, transfer, conveyance, or other disposition of the Executive's right to compensation or other benefits will be null and void.

9. Notice.

(a) General. All notices and other communications required or permitted under this Agreement shall be in writing and will be effectively given (i) upon actual delivery to the party to be notified, (ii) upon transmission by email, (iii) twenty-four (24) hours after confirmed facsimile transmission, (iv) one (1) business day after deposit with a recognized overnight courier, or (v) three (3) business days after deposit with the U.S. Postal Service by first class certified or registered mail, return receipt requested, postage prepaid, addressed (A) if to the Executive, at the address the

Executive shall have most recently furnished to the Company in writing, (B) if to the Company, at the following address:

Elasticsearch, Inc.
800 West El Camino Real, Suite 350
Mountain View, CA 94040
Attention: Senior Vice President, Global Human Resources

(b) Notice of Termination. Any termination by a Company Group member for Cause will be communicated by a notice of termination to the Executive, and any termination by the Executive for Good Reason will be communicated by a notice of termination to the Company, in each case given in accordance with Section 9(a) of this Agreement. The notice will indicate the specific termination provision in this Agreement relied upon, will set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination under the provision so indicated, and will specify the termination date (which will be not more than thirty (30) days after the later of (i) the giving of the notice or (ii) the end of any applicable cure period).

10. Resignation. The termination of the Executive's employment for any reason will also constitute, without any further required action by the Executive, the Executive's voluntary resignation from all officer and/or director positions held at any member of the Company Group, and at the Company's request, the Executive will execute any documents reasonably necessary to reflect the resignations.

11. Miscellaneous Provisions.

(a) No Duty to Mitigate. The Executive will not be required to mitigate the amount of any payment contemplated by this Agreement, nor will any payment be reduced by any earnings that the Executive may receive from any other source except as specified in Section 3(e).

(b) Waiver; Amendment. No provision of this Agreement will be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by an authorized officer of the Company (other than the Executive) and by the Executive. No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party will be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) Headings. All captions and section headings used in this Agreement are for convenient reference only and do not form a part of this Agreement.

(d) Entire Agreement. This Agreement constitutes the entire agreement of the parties and supersedes in their entirety all prior representations, understandings, undertakings or agreements (whether oral or written and whether expressed or implied) of the parties with respect to the subject matter of this Agreement, including, for the avoidance of doubt, any other employment letter or agreement, severance policy or program, or equity award agreement.

(e) Choice of Law. This Agreement will be governed by the laws of the State of California without regard to California's conflicts of law rules that may result in the application of the laws of any jurisdiction other than California. To the extent that any lawsuit is permitted under this Agreement, Employee hereby expressly consents to the personal and exclusive jurisdiction and venue of the state and federal courts located in California for any lawsuit filed against the Executive by the Company.

(f) Arbitration. Any and all controversies, claims, or disputes with anyone under this Agreement (including the Company and any employee, officer, director, stockholder or benefit plan of the Company in their capacity as such or otherwise) arising out of, relating to, or resulting from the Executive's employment with the Company Group, shall be subject to arbitration in accordance with the provisions of the Confidentiality Agreement.

(g) Severability. The invalidity or unenforceability of any provision or provisions of this Agreement will not affect the validity or enforceability of any other provision of this Agreement, which will remain in full force and effect.

(h) Withholding. All payments and benefits under this Agreement will be paid less applicable withholding taxes. The Company is authorized to withhold from any payments or benefits all federal, state, local, and/or foreign taxes required to be withheld from the payments or benefits and make any other required payroll deductions. No member of the Company Group will pay the Executive's taxes arising from or relating to any payments or benefits under this Agreement.

(i) Counterparts. This Agreement may be executed in counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

[Signature page follows.]

By its signature below, each of the parties signifies its acceptance of the terms of this Agreement, in the case of the Company and Elastic N.V. by its duly authorized officer.

COMPANY

ELASTICSEARCH, INC.

By: _____

Title: _____

Date: _____

ELASTIC N.V.

ELASTIC N.V.

By: _____

Title: _____

Date: _____

EXECUTIVE

[NAME]

Date: _____

Exhibit 31.1

Certification by the Principal Executive Officer pursuant to
Securities Exchange Act Rules 13a-14(a) and 15d-14(a)
as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Ashutosh Kulkarni, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Elastic N.V. (the "registrant") for the fiscal quarter ended October 31, 2022;
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 02, 2022

By: /s/ Ashutosh Kulkarni

Name: Ashutosh Kulkarni
Title: Chief Executive Officer and Director
(Principal Executive Officer)

Exhibit 31.2

Certification by the Principal Financial Officer pursuant to
Securities Exchange Act Rules 13a-14(a) and 15d-14(a)
as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Janesh Moorjani, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Elastic N.V. (the "registrant") for the fiscal quarter ended October 31, 2022;
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 02, 2022

By: /s/ Janesh Moorjani
Name: Janesh Moorjani
Title: Chief Financial Officer and Chief Operating Officer
(Principal Financial and Accounting Officer)

Exhibit 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

I, Ashutosh Kulkarni, certify, 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 Elastic N.V. for the fiscal quarter ended October 31, 2022 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and that information contained in such Quarterly Report on Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Elastic N.V.

Date: December 02, 2022

By: /s/ Ashutosh Kulkarni

Name: Ashutosh Kulkarni

Title: Chief Executive Officer and Director
(Principal Executive Officer)

This certification accompanies the Annual Report, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Elastic N.V. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Quarterly Report on Form 10-Q), irrespective of any general incorporation language contained in such filing.

Exhibit 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

I, Janesh Moorjani, certify, 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 Elastic N.V. for the fiscal quarter ended October 31, 2022 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and that information contained in such Quarterly Report on Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Elastic N.V.

Date: December 02, 2022

By: /s/ Janesh Moorjani

Name: Janesh Moorjani
Title: Chief Financial Officer and Chief Operating Officer
(Principal Financial and Accounting Officer)

This certification accompanies the Annual Report, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Elastic N.V. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Quarterly Report on Form 10-Q), irrespective of any general incorporation language contained in such filing.