UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 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 March 31, 2020

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: 001-37496

RAPID7, INC.
(Exact Name of Registrant as Specified in its Charter)

Delaware	**35-2423994**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
120 Causeway Street	
Boston, MA	**02114**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (617) 247-1717

Securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934:

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common Stock, $0.01 par value per share	RPD	The Nasdaq Global Market

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

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

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

Large Accelerated Filer	☒		Accelerated Filer	☐
Non-accelerated Filer	☐		Small Reporting Company	☐
Emerging Growth Company	☐			

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

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

As of April 30, 2020, there were 50,501,098 shares of the registrant's common stock, $0.01 par value per share, outstanding.

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PART I—FINANCIAL INFORMATION

Item 1. Financial Statements.

RAPID7, INC.
Consolidated Balance Sheets (Unaudited)
(in thousands, except share and per share data)

	March 31, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	$ 204,434	$ 123,413
Short-term investments	36,384	116,158
Accounts receivable, net of allowance for doubtful accounts of $2,251 and $1,829 at March 31, 2020 and December 31, 2019, respectively	64,388	87,927
Deferred contract acquisition and fulfillment costs, current portion	17,486	17,047
Prepaid expenses and other current assets	19,624	20,051
Total current assets	342,316	364,596
Long-term investments	12,804	22,887
Property and equipment, net	50,075	50,670
Operating lease right-of-use assets	62,942	60,984
Deferred contract acquisition and fulfillment costs, non-current portion	34,289	34,213
Goodwill	97,866	97,866
Intangible assets, net	27,867	28,561
Other assets	5,518	5,136
Total assets	$ 633,677	$ 664,913
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 10,062	$ 6,836
Accrued expenses	26,486	41,021
Operating lease liabilities, current portion	8,866	7,179
Deferred revenue, current portion	219,432	231,518
Other current liabilities	35	119
Total current liabilities	264,881	286,673
Convertible senior notes, net	187,944	185,200
Operating lease liabilities, non-current portion	71,586	72,294
Deferred revenue, non-current portion	31,641	36,226
Other long-term liabilities	1,325	1,352
Total liabilities	557,377	581,745
Stockholders' equity:		
Preferred stock, $0.01 par value per share; 10,000,000 shares authorized at March 31, 2020 and December 31, 2019; 0 shares issued at March 31, 2020 and December 31, 2019	—	—
Common stock, $0.01 par value per share; 100,000,000 shares authorized at March 31, 2020 and December 31, 2019; 50,906,182 and 50,397,922 shares issued at March 31, 2020 and December 31, 2019, respectively; 50,419,374 and 49,911,114 shares outstanding at March 31, 2020 and December 31, 2019, respectively	504	499
Treasury stock, at cost, 486,808 shares at March 31, 2020 and December 31, 2019	(4,764)	(4,764)
Additional paid-in-capital	621,992	605,650
Accumulated other comprehensive (loss) income	(78)	213
Accumulated deficit	(541,354)	(518,430)
Total stockholders' equity	76,300	83,168
Total liabilities and stockholders' equity	$ 633,677	$ 664,913

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

RAPID7, INC.
Consolidated Statements of Operations (Unaudited)
(in thousands, except share and per share data)

	Three Months Ended March 31,	
	2020	2019
Revenue:		
Products	$ 87,549	$ 65,845
Professional services	6,791	7,340
Total revenue	94,340	73,185
Cost of revenue:		
Products	21,256	14,369
Professional services	6,458	5,604
Total cost of revenue	27,714	19,973
Total gross profit	66,626	53,212
Operating expenses:		
Research and development	24,202	17,865
Sales and marketing	48,145	35,138
General and administrative	14,099	9,953
Total operating expenses	86,446	62,956
Loss from operations	(19,820)	(9,744)
Other income (expense), net:		
Interest income	1,048	1,731
Interest expense	(3,462)	(3,229)
Other income (expense), net	(447)	(206)
Loss before income taxes	(22,681)	(11,448)
Provision for income taxes	243	225
Net loss	$ (22,924)	$ (11,673)
Net loss per share, basic and diluted	$ (0.46)	$ (0.24)
Weighted-average common shares outstanding, basic and diluted	50,127,310	47,827,939

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

RAPID7, INC.
Consolidated Statements of Comprehensive Loss (Unaudited)
(in thousands)

	Three Months Ended March 31,	
	2020	2019
Net loss	$ (22,924)	$ (11,673)
Other comprehensive income (loss):		
Change in fair value of investments	(235)	193
Adjustments for net gains realized and included in net loss	(56)	—
Total change in unrealized (losses) gains on investments	(291)	193
Comprehensive loss	$ (23,215)	$ (11,480)

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

RAPID7, INC.
Consolidated Statements of Changes in Stockholders' Equity (Unaudited)
(in thousands)

	Common stock		Treasury stock					
	Shares	Amount	Shares	Amount	Additional paid-in-capital	Accumulated other comprehensive gain (loss)	Accumulated deficit	Total stockholders' equity
Balance, December 31, 2019	49,911	$ 499	487	$ (4,764)	$ 605,650	$ 213	$ (518,430)	$ 83,168
Stock-based compensation expense	—	—	—	—	12,965	—	—	12,965
Issuance of common stock under employee stock purchase plan	102	1	—	—	3,345	—	—	3,346
Vesting of restricted stock units	308	3	—	—	(3)	—	—	—
Shares withheld for employee taxes	(27)	—	—	—	(1,533)	—	—	(1,533)
Issuance of common stock upon exercise of stock options	125	1	—	—	1,568	—	—	1,569
Change in unrealized losses on investments	—	—	—	—	—	(291)	—	(291)
Net loss	—	—	—	—	—	—	(22,924)	(22,924)
Balance, March 31, 2020	50,419	$ 504	487	$ (4,764)	$ 621,992	$ (78)	$ (541,354)	$ 76,300

	Common stock		Treasury stock					
	Shares	Amount	Shares	Amount	Additional paid-in-capital	Accumulated other comprehensive gain (loss)	Accumulated deficit	Total stockholders' equity
Balance, December 31, 2018	47,600	$ 476	487	$ (4,764)	$ 556,223	$ (31)	$ (464,585)	$ 87,319
Stock-based compensation expense	—	—	—	—	8,634	—	—	8,634
Issuance of common stock under employee stock purchase plan	111	1			2,633			2,634
Vesting of restricted stock units	244	3	—	—	(3)	—	—	—
Shares withheld for employee taxes	(22)	—	—	—	(980)	—	—	(980)
Issuance of common stock upon exercise of stock options	225	2	—	—	2,722	—	—	2,724
Change in unrealized gains on investments	—	—	—	—	—	193	—	193
Net loss	—	—	—	—	—	—	(11,673)	(11,673)
Balance, March 31, 2019	48,158	$ 482	487	$ (4,764)	$ 569,229	$ 162	$ (476,258)	$ 88,851

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

RAPID7, INC.
Consolidated Statements of Cash Flows (Unaudited)
(in thousands)

	Three Months Ended March 31,	
	2020	2019
Cash flows from operating activities:		
Net loss	$ (22,924)	$ (11,673)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	4,843	3,427
Amortization of debt discount and issuance costs	2,743	2,510
Stock-based compensation expense	13,347	8,634
Provision for doubtful accounts	527	437
Foreign currency re-measurement loss	447	249
Other non-cash (income) expense	(138)	(722)
Changes in operating assets and liabilities:		
Accounts receivable	22,608	14,729
Deferred contract acquisition and fulfillment costs	(516)	(1,094)
Prepaid expenses and other assets	135	(5,940)
Accounts payable	4,010	66
Accrued expenses	(14,563)	(13,690)
Deferred revenue	(16,671)	(12,104)
Other liabilities	(1,063)	1,605
Net cash used in operating activities	(7,215)	(13,566)
Cash flows from investing activities:		
Purchases of property and equipment	(2,756)	(8,463)
Capitalization of internal-use software costs	(1,474)	(1,601)
Purchases of investments	(24,272)	(63,029)
Sales/maturities of investments	113,924	72,738
Net cash provided by (used in) investing activities	85,422	(355)
Cash flows from financing activities:		
Taxes paid related to net share settlement of equity awards	(1,533)	(979)
Proceeds from employee stock purchase plan	3,346	2,634
Proceeds from stock option exercises	1,561	2,718
Net cash provided by financing activities	3,374	4,373
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(560)	(148)
Net increase (decrease) in cash, cash equivalents and restricted cash	81,021	(9,696)
Cash, cash equivalents and restricted cash, beginning of period	123,413	99,565
Cash, cash equivalents and restricted cash, end of period	$ 204,434	$ 89,869
Supplemental cash flow information:		
Cash paid for interest on convertible senior notes	$ 1,438	$ 1,342
Cash paid for income taxes, net of refunds	$ 33	$ 88
Non-cash investing activities:		
Leasehold improvements acquired through tenant improvement allowance	$ —	$ 7,313

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

RAPID7, INC.
Notes to Consolidated Financial Statements (Unaudited)

Note 1. Description of Business, Basis of Presentation and Consolidation and Significant Accounting Policies

Description of Business

Rapid7, Inc. and subsidiaries (we, us or our) is advancing security with visibility, analytics, and automation delivered through our Insight Platform. Our solutions simplify the complex, allowing security teams to work more effectively with IT and development to reduce vulnerabilities, monitor for malicious behavior, investigate and shut down attacks, and automate routine tasks.

Basis of Presentation and Consolidation

The accompanying unaudited consolidated financial statements have been prepared by us in accordance with accounting principles generally accepted in the United States of America (GAAP), as well as pursuant to the rules and regulations of the Securities and Exchange Commission (SEC), regarding interim financial reporting. Accordingly, certain information and note disclosures normally included in the financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to such rules and regulations. These consolidated financial statements should be read in conjunction with the consolidated financial statements and related notes included in our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on February 28, 2020.

The consolidated financial statements include our results of operations and those of our wholly-owned subsidiaries and reflect all adjustments (consisting solely of normal, recurring adjustments) which are, in the opinion of management, necessary for a fair statement of results for the interim periods presented. All intercompany transactions and balances have been eliminated in consolidation. The results of operations for the three months ended March 31, 2020 are not necessarily indicative of the results to be expected for any future period or the entire fiscal year.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates, judgments and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Significant items subject to such estimates and assumptions include the determination of the estimated economic life of perpetual licenses for revenue recognition, the determination of standalone selling prices in revenue transactions with multiple performance obligations, the estimated period of benefit for deferred contract acquisition and fulfillment costs, the useful lives of long-lived assets, the valuation of allowance for doubtful accounts, the valuation of stock-based compensation, the valuation of intangible assets acquired in a business combination, the incremental borrowing rate for operating leases and the valuation for deferred tax assets. We base our estimates on historical experience and on various other assumptions that we believe are reasonable. Actual results could differ from those estimates.

The COVID-19 pandemic is expected to result in a global slowdown of economic activity that is likely to decrease demand for a broad variety of goods and services, including from our customers. We currently expect our operational and financial performance to be negatively impacted by the slowdown in activity associated with the COVID-19 pandemic for the year ending December 31, 2020 and beyond. 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, we are not aware of any specific event or circumstance that would require us to update our estimates, assumptions and judgments or revise the carrying value of our assets or liabilities. These estimates may change as new events occur and additional information is obtained and will be 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 our financial statements.

Reclassification

Historically, we have presented revenue on our consolidated statement of operations as products, maintenance and support and professional services revenue. For the three months ended March 31, 2020, we have combined products and maintenance and support revenue as products revenue on our consolidated statement of operations as our customers continue to migrate from our on-premise products to our SaaS Insight Platform. Given this continued migration, we believe it is more relevant to categorize maintenance and support revenue together as products revenue. Prior periods have been adjusted to conform with this presentation.

Significant Accounting Policies

Our significant accounting policies are described in Note 2, *Summary of Significant Accounting Policies*, to the consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2019. There have been no changes to the significant accounting policies during the three-month period ended March 31, 2020.

Recent Accounting Pronouncements

Accounting Pronouncements Recently Adopted

In August 2018, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2018-15, *Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That is a Service Contract*, which aligns the requirements for capitalizing implementation costs in cloud computing arrangements with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. We adopted this standard on January 1, 2020 using the prospective adoption approach. The impact to our consolidated financial statements as a result of the adoption was not material.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement*, which eliminates, modifies and adds disclosure requirements for fair value measurements. We adopted this standard on January 1, 2020 and there was no impact to our consolidated financial statements as a result of the adoption.

Accounting Pronouncements Not Yet Effective

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*. This standard is intended to simplify various aspects related to accounting for income taxes by removing certain exceptions to the general principles in Topic 740 and clarifying certain aspects of the current guidance to promote consistency among reporting entities. The new standard will be effective for us in the first quarter of 2021, with early adoption permitted. An entity that elects early adoption must adopt all the amendments in the same period. Most amendments within this ASU are required to be applied on a prospective basis, while certain amendments must be applied on a retrospective or modified retrospective basis. The Company is currently assessing the impact of adopting this standard but does not expect the adoption of this guidance to have a material impact on its consolidated financial statements.

Note 2. Revenue from Contracts with Customers

We generate products revenue from the sale of (1) cloud-based subscriptions for our InsightIDR, InsightVM, InsightAppSec and InsightConnect products, (2) managed services offerings which utilize our products and (3) term or perpetual software licenses for our Nexpose, Metasploit and AppSpider products, and associated content subscriptions for our Nexpose and Metasploit products. We also generate appliance revenue that is included in our products revenue and is associated with hardware sold with our Nexpose product to certain customers. We generate maintenance and support revenue associated with customers' purchases of our software licenses for Nexpose, Metasploit and AppSpider. We generate professional service revenue from the sale of our deployment and training services related to our solutions, incident response services, penetration testing and security advisory services. Our deployment services educate and assist our customers on the best use and best practices to deploy our solutions.

The following table summarizes revenue from contracts with customers for the three months ended March 31, 2020 and 2019:

	Three Months Ended March 31,	
	2020	2019
	(in thousands)	
Subscription revenue	$ 68,625	$ 46,969
Term and perpetual software licenses	10,271	8,676
Maintenance and support	8,422	9,557
Professional services	6,791	7,340
Other	231	643
Total revenue	$ 94,340	$ 73,185

Subscription Revenue

Subscription revenue consists of revenue from our cloud-based subscription, managed services offerings and content subscriptions associated with our software licenses.

- We generate cloud-based subscription revenue primarily from sales of subscriptions to access our cloud platform, together with related support services to our customers. These arrangements do not provide the customer with the right to take possession of our software operating on our cloud platform at any time. Instead, customers are granted continuous access to our cloud platform over the contractual period. Revenue is recognized over time on a ratable basis over the contract term beginning on the date that our service is made available to the customer. Our cloud-based subscription contracts generally have annual or multi-year contractual terms which are billed in advance of the annual subscription period and are non-cancellable.
- Managed services offerings consist of fees generated when we operate our software and provide our capabilities on behalf of our customers. Revenue is recognized on a ratable basis over the contract term beginning on the date that our service is made available to the customer. Our managed services offerings generally have annual or multi-year contractual terms which are billed in advance of the annual subscription period and are non-cancellable.
- Revenue related to our content subscriptions associated with our software licenses is recognized ratably over the contractual period.

Term and Perpetual Software Licenses

For our perpetual software licenses where the utility to the customer is dependent on the continued delivery of content subscriptions, the content subscription renewal options result in a material right with respect to the perpetual software license. As a result, the revenue attributable to the perpetual software license is recognized ratably over the customer's estimated economic life of five years, which represents a longer period of time in comparison to the initial contractual period of maintenance and support. The estimated economic life of five years represents the period which the customer is expected to benefit from the material right. We estimated this period of benefit by taking into consideration several factors, including the terms and conditions of our customer contracts and renewals and the expected useful life of our technology.

For our term software licenses where the utility to the customer is dependent on the continued delivery of content subscriptions, we recognize the license revenue over the contractual term of the arrangement as a material right does not exist.

For our term and perpetual software licenses, which are not dependent on the continued delivery of content subscriptions, the license is considered distinct from the maintenance and support, and we therefore recognize revenue attributable to the license at the time of delivery.

Maintenance and support services are sold with our perpetual and term software licenses. As maintenance and support services are distinct from the perpetual and term software license, revenue attributable to maintenance and support services is recognized ratably over the contractual period.

Professional Services

All of our professional services are considered distinct performance obligations when sold stand alone or with other products. These contracts generally have terms of one year or less. For the majority of these contracts, revenue is recognized over time based upon the proportion of work performed to date.

Other

Other revenue primarily includes revenue from delivery of appliances and other miscellaneous revenue.

Contracts with Multiple Performance Obligations

In cases where our contracts with customers contain multiple performance obligations, we account for individual performance obligations separately if they are considered distinct. The transaction price is allocated to the separate performance obligations on a relative SSP basis. We determine SSP based on our overall pricing objectives, taking into consideration market conditions and other factors, including the geographic locations of our customers and selling method (i.e., partner or direct).

Contract Balances

Contract liabilities consist of deferred revenue and include payments received in advance of performance under the contract. Such amounts are recognized as revenue over the contractual period consistent with the above methodology. For the three months ended March 31, 2020 and 2019, we recognized revenue of $83.4 million and $64.6 million, respectively, that was included in the corresponding contract liability balance at the beginning of the periods presented. Deferred revenue that will be realized during the succeeding 12-month period is recorded as current, and the remaining deferred revenue is recorded as non-current.

We receive payments from customers based upon contractual billing schedules. Accounts receivable are recorded when the right to consideration becomes unconditional. Unbilled receivables include amounts related to our contractual right to consideration for both completed and partially completed performance obligations that have not been invoiced. If the right to consideration is based on satisfaction of another performance obligation in the contract other than the passage of time, we record a contract asset. As of March 31, 2020 and December 31, 2019, unbilled receivables of $1.0 million and $0.8 million, respectively, are included in prepaid expenses and other current assets in our consolidated balance sheet. As of March 31, 2020 and December 31, 2019, we had no contract assets recorded on our consolidated balance sheet.

Transaction price allocated to the remaining performance obligations

The following table includes estimated revenue expected to be recognized in the future related to performance obligations that are unsatisfied or partially unsatisfied as of March 31, 2020. The estimated revenues do not include unexercised contract renewals.

	Next Twelve Months	Thereafter
	(in thousands)	
Subscription revenue	$ 176,115	$ 31,250
Term and perpetual software licenses	24,579	13,508
Maintenance and support	19,658	3,010
Professional services	11,609	—

The amounts presented in the table above primarily consist of fixed fees, which are typically recognized ratably as the performance obligation is satisfied.

Note 3. Fair Value Measurements

We measure certain financial assets and liabilities at fair value. Fair value is determined based upon the exit price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants, as determined by either the principal market or the most advantageous market. Inputs used in the valuation techniques to derive fair values are classified based on a three-level hierarchy, as follows:

Level 1: Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2: Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in markets with insufficient volume or infrequent transactions (less active markets); or model-derived valuations in which all significant inputs are observable or can be derived principally from or corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3: Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the asset or liability.

We consider an active market to be one in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis, and we consider an inactive market to be one in which there are infrequent or few transactions for the asset or liability, the prices are not current, or price quotations vary substantially either over time or among market makers.

The following table presents our financial assets measured and recorded at fair value on a recurring basis using the above input categories:

	As of March 31, 2020			
	Level 1	Level 2	Level 3	Total
	(in thousands)			
Description:				
Assets:				
Money market funds	$ 185,309	$ —	$ —	$ 185,309
Corporate bonds	—	23,579	—	23,579
Commercial paper	—	20,009	—	20,009
Agency bonds	—	3,101	—	3,101
Asset-backed securities	—	2,499	—	2,499
Total assets	$ 185,309	$ 49,188	$ —	$ 234,497

	As of December 31, 2019			
	Level 1	Level 2	Level 3	Total
	(in thousands)			
Description:				
Assets:				
Money market funds	$ 106,781	$ —	$ —	$ 106,781
Corporate bonds	—	60,878	—	60,878
U.S. government agencies	36,979	—	—	36,979
Commercial paper	—	19,966	—	19,966
Agency bonds	—	12,242	—	12,242
Asset-backed securities	—	8,980	—	8,980
Total assets	$ 143,760	$ 102,066	$ —	$ 245,826

As of March 31, 2020, the fair value of our 1.25% convertible senior notes due 2023, as further described in Note 7, *Convertible Senior Notes and Capped Calls*, was $278.7 million based upon quoted market prices. We consider the fair value of the Notes to be a Level 2 measurement due to limited trading activity of the Notes. We had no other liabilities measured and recorded at fair value on a recurring basis as of March 31, 2020 or December 31, 2019.

Our investments, which are all classified as available-for-sale, consisted of the following:

	As of March 31, 2020			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(in thousands)			
Description:				
Corporate bonds	23,658	22	(101)	23,579
Commercial paper	20,009	—	—	20,009
Agency bonds	3,100	1	—	3,101
Asset-backed securities	2,499	—	—	2,499
Total assets	$ 49,266	$ 23	$ (101)	$ 49,188

	As of December 31, 2019			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(in thousands)			
Description:				
U.S. government agencies	$ 36,880	$ 99	$ —	$ 36,979
Corporate bonds	60,803	77	(2)	60,878
Commercial paper	19,965	1	—	19,966
Agency bonds	12,198	44	—	12,242
Asset-backed securities	8,986	1	(7)	8,980
Total assets	$ 138,832	$ 222	$ (9)	$ 139,045

As of March 31, 2020, our available-for-sale investments had maturities ranging from two to nineteen months. As of December 31, 2019, our available-for-sale investments had maturities ranging from three months to two years.

For all of our investments for which the amortized cost basis was greater than the fair value at March 31, 2020 and December 31, 2019, we have concluded that there is no plan to sell the security nor is it more likely than not that we would be required to sell the security before its anticipated maturity. In making the determination as to whether the unrealized loss is other-than-temporary, we considered the length of time and extent the investment has been in an unrealized loss position, the financial condition and near-term prospects of the issuers, the issuers' credit rating and the time to maturity.

Note 4. Property and Equipment

Property and equipment are recorded at cost and consist of the following:

	As of March 31, 2020	As of December 31, 2019
	(in thousands)	
Computer equipment and software	$ 14,037	$ 13,106
Furniture and fixtures	7,921	7,522
Leasehold improvements	44,320	44,050
Total	66,278	64,678
Less accumulated depreciation	(16,203)	(14,008)
Property and equipment, net	$ 50,075	$ 50,670

Depreciation expense was $2.7 million and $1.9 million for the three months ended March 31, 2020 and 2019, respectively.

Note 5. Goodwill and Intangible Assets

Goodwill was $97.9 million as of March 31, 2020 and December 31, 2019.

The following table presents details of our intangible assets, which include acquired identifiable intangible assets and capitalized internal-use software costs:

		As of March 31, 2020			As of December 31, 2019		
	Weighted-Average Life (years)	Gross Carrying Amount	Accumulated Amortization	Net Book Value	Gross Carrying Amount	Accumulated Amortization	Net Book Value
		(in thousands)					
Intangible assets subject to amortization:							
Developed technology	5.4	$ 35,855	$ (17,738)	$ 18,117	$ 35,855	$ (16,080)	$ 19,775
Customer relationships	6.7	1,000	(673)	327	1,000	(641)	359
Trade names	6.1	519	(519)	—	519	(519)	—
Non-compete agreements	2.0	40	(40)	—	40	(40)	—
Total acquired intangible assets		37,414	(18,970)	18,444	37,414	(17,280)	20,134
Internal-use software	3.0	11,347	(1,924)	9,423	9,873	(1,446)	8,427
Total intangible assets		$ 48,761	$ (20,894)	$ 27,867	$ 47,287	$ (18,726)	$ 28,561

Amortization expense was $2.1 million and $1.6 million for the three months ended March 31, 2020 and 2019, respectively.

Estimated future amortization expense of the acquired identifiable intangible assets and completed capitalized internal-use software costs as of March 31, 2020 was as follows (in thousands):

2020 (for the remaining nine months)	$	6,469
2021		7,841
2022		4,970
2023		2,667
2024		304
2025 and thereafter		—
Total	$	22,251

The table above excludes the impact of $5.6 million of capitalized internal-use software costs for projects that have not been completed as of March 31, 2020, and therefore, we have not determined the useful life of the software, nor have all the costs associated with these projects been incurred.

Note 6. Deferred Contract Acquisition and Fulfillment Costs

The following table summarizes the activity of the deferred contract acquisition and fulfillment costs for the three months ended March 31, 2020 and 2019:

	Three Months Ended March 31,			
	2020		2019	
	(in thousands)			
Beginning balance	$	51,260	$	39,955
Capitalization of contract acquisition and fulfillment costs		5,084		4,309
Amortization of deferred contract acquisition and fulfillment costs		(4,569)		(3,216)
Ending balance	$	51,775	$	41,048

Note 7. Convertible Senior Notes and Capped Calls

In August 2018, we issued $200.0 million aggregate principal amount of convertible senior notes due August 1, 2023 and an additional $30.0 million aggregate principal amount of such notes pursuant to the exercise in full of the over-allotment options of the initial purchasers (collectively, the 2023 Notes). The 2023 Notes are our senior unsecured obligations and bear interest at a fixed rate of 1.25% per annum, payable semi-annually in arrears on February 1 and August 1 of each year, commencing on February 1, 2019. The 2023 Notes will mature on August 1, 2023, unless earlier converted, redeemed or repurchased. The Notes do not contain any financial covenants. The total net proceeds from the 2023 Notes offering, after deducting initial purchase discounts and estimated debt issuance costs was $223.1 million. The 2023 Notes are governed by an indenture between the Company, as issuer, and U.S. Bank National Association, as trustee (the Indenture).

Each $1,000 principal amount of the 2023 Notes is initially convertible into 24.0460 shares of our common stock, the Conversion Option, which is equivalent to an initial conversion price of approximately $41.59 per share, subject to adjustment upon the occurrence of specified events. The holders of the 2023 Notes may convert their 2023 Notes at their option at any time prior to the close of business on the business day immediately preceding February 1, 2023, only under the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on December 31, 2018 (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price of the 2023 Notes on each applicable trading day; (2) during the five business day period after any five consecutive trading day period (measurement period) in which the trading price (as defined in the Indenture) per $1,000 principal amount of the 2023 Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate of the 2023 Notes on each such trading day; (3) if we call any or all of the 2023 Notes for redemption, at any time prior to the close of business on the scheduled trading day immediately preceding the redemption date; or (4) upon the occurrence of specified corporate events (as set forth in the Indenture).

On or after February 1, 2023 until the close of business on the second scheduled trading day immediately preceding the maturity date, holders may convert their 2023 Notes at any time, regardless of the foregoing circumstances. Upon conversion, we will pay or deliver, as the case may be, cash, shares of our common stock or a combination of cash and shares of our common stock, at our election, in the manner and subject to the terms and conditions provided in the Indenture.

If we undergo a fundamental change (as set forth in the Indenture) at any time prior to the maturity date, holders of the 2023 Notes, will have the right, at their option, to require us to repurchase for cash all or any portion of their 2023 Notes at a repurchase price equal to 100% of the principal amount of the 2023 Notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date. In addition, following certain corporate events that occur prior to the maturity date or following our issuance of a notice of redemption, in each case as described in the Indenture, we will increase the conversion rate for a holder of the 2023 Notes who elects to convert its 2023 Notes in connection with such a corporate event or during the related redemption period in certain circumstances.

During the three months ended December 31, 2019, the conversion feature of the 2023 Notes was triggered as the last reported price of our common stock was more than or equal to 130% of the conversion price for at least 20 trading days in the period of 30 consecutive trading days ending on, and including, December 31, 2019, and therefore the 2023 Notes were convertible, in whole or in part, at the option of the holders between January 1, 2020 through March 31, 2020. However, no holders of the 2023 Notes elected to convert their 2023 Notes during the January 1, 2020 through March 31, 2020 period. As of March 31, 2020, the 2023 Notes are not convertible at the option of the holder.

We may not redeem the 2023 Notes prior to August 6, 2021. On or after August 6, 2021, we may redeem for cash all or any portion of the 2023 Notes, at our option, if the last reported sale price of our common stock has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading day period (including the last trading day of such period) ending on, and including the trading day immediately preceding, the date on which we provide the redemption notice at a redemption price equal to 100% principal amount of the 2023 Notes to be redeemed, plus accrued and unpaid interest to, but excluding, the redemption date.

The foregoing description is qualified in its entirety by reference to the text of the Indenture and the Form of the 2023 Notes, which were incorporated by reference as Exhibits 4.4 and 4.5 to our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 28, 2020.

In accounting for the transaction, the 2023 Notes have been separated into liability and equity components. The initial carrying amount of the liability component was calculated by measuring the fair value of a similar debt instrument that does not have an associated convertible feature. The initial carrying amount of the equity component representing the Conversion Option was $53.8 million and was determined by deducting the fair value of the liability component from the par value of the 2023 Notes. The equity component was recorded as an increase to additional paid-in capital and is not remeasured as long as it continues to meet the conditions for equity classification. The excess of the principal amount of the 2023 Notes over the initial carrying amount of the liability component, or the debt discount, is amortized to interest expense over the contractual term of the 2023 Notes at an effective interest rate of 7.36%.

In accounting for the debt issuance costs of $6.9 million related to the 2023 Notes, we allocated the total amount incurred to the liability and equity components of the 2023 Notes based on their relative values. Issuance costs attributable to the liability component were $5.3 million and will be amortized to interest expense using the effective interest method over the contractual term of the 2023 Notes. Issuance costs attributable to the equity component of $1.6 million were netted with the equity component in additional paid-in capital.

The net carrying amount of the liability component of the 2023 Notes was as follows:

	As of March 31, 2020	As of December 31, 2019
	(in thousands)	
Principal	$ 230,000	$ 230,000
Unamortized debt discount	(38,271)	(40,768)
Unamortized issuance costs	(3,785)	(4,032)
Net carrying amount	$ 187,944	$ 185,200

The net carrying amount of the equity component as March 31, 2020 and December 31, 2019 was as follows (in thousands):

Debt discount for conversion option	$ 53,820
Issuance costs	(1,626)
Net carrying amount	$ 52,194

Interest expense related to the 2023 Notes was as follows:

	Three Months Ended March 31,	
	2020	2019
	(in thousands)	
Contractual interest expense	$ 719	$ 719
Amortization of debt discount	2,496	2,284
Amortization of issuance costs	247	226
Total interest expense	$ 3,462	$ 3,229

In connection with the offering of the 2023 Notes, we entered into privately negotiated capped call transactions with certain counterparties, the (Capped Calls). The Capped Calls each have an initial strike price of $41.59 per share, subject to certain adjustments, which correspond to the initial conversion price of the 2023 Notes. The Capped Calls have initial cap prices of $63.98 per share, subject to certain adjustments. The Capped Calls are expected to offset potential dilution to our common stock upon conversion of the 2023 Notes, with such offset subject to a cap based on the cap price. The Capped Calls cover, subject to anti-dilution adjustments, approximately 5.5 million shares of our common stock. For accounting purposes, the Capped Calls are separate transactions, and not part of the terms of the 2023 Notes. The Capped Calls are recorded in stockholders' equity and are not accounted for as derivatives. Accordingly, the cost of $26.9 million incurred in connection with the Capped Calls was recorded as a reduction to additional paid-in capital.

The net impact to our stockholders' equity, included in additional paid-in capital, of the above components of the 2023 Notes was as follows (in thousands):

Conversion option	$ 53,820
Purchase of capped calls	(26,910)
Issuance costs	(1,626)
Total	$ 25,284

Note 8. Leases

Our leases primarily relate to office facilities that have remaining terms of up to 9.8 years, some of which include one or more options to renew with renewal terms of up to 5 years and some of which include options to terminate the leases within the next 6 years. All of our leases are classified as operating leases.

The components of lease expense were as follows:

	Three Months Ended March 31,	
	2020	2019
	(in thousands)	
Operating lease cost	$ 3,371	$ 1,967
Short-term lease costs	290	149
Variable lease costs	922	417
Total lease costs	$ 4,583	$ 2,533

Supplemental balance sheet information related to the operating leases was as follows:

	As of March 31, 2020	As of December 31, 2019
	(in thousands, except lease term and discount rate)	
Operating ROU assets	$ 62,942	$ 60,984
Operating lease liabilities, current portion	$ 8,866	$ 7,179
Operating lease liabilities, non-current portion	71,586	72,294
Total operating lease liabilities	$ 80,452	$ 79,473
Weighted average remaining lease term (in years) - operating leases	8.2	8.7
Weighted average discount rate - operating leases	7.3 %	7.6 %

Supplemental cash flow information related to leases was as follows:

	Three Months Ended March 31, 2020	Three Months Ended March 31, 2019
	(in thousands)	
Cash paid for amounts included in the measurement of lease liabilities	$ 3,836	$ 1,928
ROU assets obtained in exchange for new lease obligations	$ 3,990	$ 1,866

Maturities of operating lease liabilities as of March 31, 2020 were as follows (in thousands):

2020 (for the remaining nine months)	$ 10,029
2021	14,871
2022	12,238
2023	11,965
2024	11,249
2025 and thereafter	44,134
Total lease payments	$ 104,486
Less: imputed interest	(24,034)
Total	$ 80,452

Note 9. Stock-Based Compensation Expense

(a) General

Stock-based compensation expense for restricted stock units, stock options and issuances of common stock pursuant to our employee stock purchase plan was classified in the accompanying consolidated statements of operations as follows:

	Three Months Ended March 31,	
	2020	2019
	(in thousands)	
Stock-based compensation expense:		
Cost of revenue	$ 931	$ 573
Research and development	4,645	3,174
Sales and marketing	3,678	2,464
General and administrative	4,093	2,423
Total stock-based compensation expense	$ 13,347	$ 8,634

We recognize compensation cost of all awards on a straight-line basis over the applicable vesting period, which is generally four years.

In the first quarter of 2020, our Compensation Committee adopted and approved the performance goals, targets and payout formulas for 2020 under our bonus plans, including permitting our executive officers and other employees the opportunity to receive payment of their earned bonuses for fiscal year 2020 in the form of common stock (in lieu of cash). During the three months ended March 31, 2020, we recognized stock-based compensation expense related to such bonuses in the amount of $0.4 million based on the probable expected performance against the pre-established corporate financial objectives as of March 31, 2020. For employees who elected to receive their 2020 bonuses in the form of common stock (in lieu of cash), the payouts are expected to be made in the form of fully vested stock awards in the first quarter of 2021 pursuant to our 2015 Equity Incentive Plan, as amended. The number of shares underlying such awards shall be determined by dividing the dollar value of the actual bonus award payment by the closing price per share of our common stock on the date of grant.

(b) Restricted Stock Units

Restricted stock unit activity during the three months ended March 31, 2020 was as follows:

	Shares	Weighted-Average Grant Date Fair Value
Unvested balance as of December 31, 2019	2,936,924	$ 32.43
Granted	1,181,721	59.96
Vested	(308,333)	25.87
Forfeited	(94,970)	33.72
Unvested balance as of March 31, 2020	3,715,342	$ 41.71

As of March 31, 2020, the unrecognized compensation expense related to our unvested restricted stock units expected to vest was $143.7 million. This unrecognized compensation expense will be recognized over an estimated weighted-average amortization period of 2.8 years.

(c) Stock Options

Stock option activity during the three months ended March 31, 2020 was as follows:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of December 31, 2019	2,705,458	$ 10.18		
Granted	—	—		
Exercised	(125,432)	12.50		$ 4,519
Forfeited/cancelled	(11,250)	12.47		
Outstanding as of March 31, 2020	2,568,776	$ 10.06	4.8	$ 85,461
Vested and exercisable as of March 31, 2020	2,255,925	$ 9.34	4.6	$ 76,671

As of March 31, 2020, the unrecognized compensation expense related to our unvested stock options expected to vest was $2.0 million. This unrecognized compensation expense will be recognized over an estimated weighted-average amortization period of 1.0 years.

The total fair value of stock options vested in the three months ended March 31, 2020 was $0.7 million.

(d) Employee Stock Purchase Plan

Under the Rapid7, Inc. 2015 Employee Stock Purchase Plan (ESPP), employees may set aside up to 15% of their gross earnings, on an after-tax basis, to purchase our common stock at a discounted price, which is calculated at 85% of the lesser of: (i) the market value of our common stock at the beginning of each offering period and (ii) the market value of our common stock on the applicable purchase date.

On March 15, 2019, we issued 110,822 shares of common stock to employees for aggregate proceeds of $2.6 million. The purchase prices of the shares were $30.46 and $21.96 per share, which were discounted in accordance with the terms of the ESPP from the closing prices of our common stock on September 17, 2018 of $35.84 and on March 16, 2018 of $25.84, respectively.

On September 13, 2019, we issued 74,221 shares of common stock to employees for aggregate proceeds of $2.9 million. The purchase prices of the shares were $30.46 and $42.22 per share, which were discounted in accordance with the terms of the ESPP from the closing prices of our common stock on September 17, 2018 of $35.84 and on September 13, 2019 of $49.67, respectively.

On March 15, 2020, we issued 101,806 shares of common stock to employees for aggregate proceeds of $3.3 million. The purchase price of the shares was $32.87 per share, which was discounted in accordance with the terms of the ESPP from the closing price of our common stock on March 13, 2020 of $38.67.

Note 10. Net Loss per Share

The following table summarizes the computation of basic and diluted net loss per share of our common stock for the three months ended March 31, 2020 and 2019:

	Three Months Ended March 31,	
	2020	2019
	(in thousands, except share and per share data)	
Numerator:		
Net loss	$ (22,924)	$ (11,673)
Denominator:		
Weighted-average common shares outstanding, basic and diluted	50,127,310	47,827,939
Net loss per share attributable to common stockholders, basic and diluted	$ (0.46)	$ (0.24)

The following potentially dilutive securities outstanding, prior to the use of the treasury stock method or if-converted method, have been excluded from the computation of diluted weighted-average shares outstanding for the respective periods below because they would have been anti-dilutive:

	Three Months Ended March 31,	
	2020	2019
Options to purchase common stock	2,568,776	3,465,033
Unvested restricted stock	—	5,422
Unvested restricted stock units	3,715,342	3,752,506
Shares to be issued under ESPP	11,522	6,280
Total	6,295,640	7,229,241

The shares underlying the conversion option in the 2023 Notes were not considered in the calculation of diluted net loss per share as the effect would have been anti-dilutive. Based on the initial conversion price, the entire outstanding principal amount of the 2023 Notes as of March 31, 2020 would have been convertible into approximately 5.5 million shares. We expect to settle the principal amount of the 2023 Notes in cash. As a result, only the amount by which the conversion value exceeds the aggregated principal amount of the 2023 Notes is considered in the diluted earnings per share computation under the treasury stock method. The conversion spread has a dilutive impact on diluted net income per share when the average market price of our common stock for a given period of time exceeds the initial conversion price of $41.59 per share for the 2023 Notes. In connection with the issuance of the 2023 Notes, we entered into Capped Calls, which were not included for the purpose of calculating the number of diluted shares outstanding, as their effect would have been anti-dilutive.

Note 11. Commitments and Contingencies

(a) Warranty

We provide limited product warranties. Historically, any payments made under these provisions have been immaterial.

(b) Litigation and Claims

In October 2018, Finjan, Inc. (Finjan) filed a complaint against us and our wholly-owned subsidiary, Rapid7 LLC, in the United States District Court, District of Delaware, alleging patent infringement of seven patents held by them. In the complaint, Finjan sought unspecified damages, attorneys' fees and injunctive relief. We intend to vigorously contest Finjan's claims. This litigation is still in its early stages and the final outcome, including our liability, if any, with respect to Finjan's claims, is uncertain. 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.

In addition, from time to time, we are a party to litigation or subject to claims incident to the ordinary course of business. Although the results of litigation and claims cannot be predicted with certainty, we currently believe that the final outcome of these ordinary course matters will not have a material adverse effect on our business, financial condition or results of operations. 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.

(c) Indemnification Obligations

We agree to standard indemnification provisions in the ordinary course of business. Pursuant to these provisions, we agree to indemnify, hold harmless and reimburse the indemnified party for losses suffered or incurred by the indemnified party, generally our customers, in connection with any United States patent, copyright or other intellectual property infringement claim by any third party arising from the use of our products or services in accordance with the agreement or arising from our gross negligence, willful misconduct or violation of the law (provided that there is not gross or willful misconduct on the part of the other party) with respect to our products or services. The term of these indemnification provisions is generally perpetual from the time of execution of the agreement. We carry insurance that covers certain third-party claims relating to our services and limits our exposure. We have never incurred costs to defend lawsuits or settle claims related to these indemnification provisions.

As permitted under Delaware law, we have entered into indemnification agreements with our officers and directors, indemnifying them for certain events or occurrences while they serve as officers or directors of the company.

Note 12. Segment Information and Information about Geographic Areas

We operate in one segment. Our chief operating decision maker is our Chief Executive Officer, who makes operating decisions, assesses performance and allocates resources on a consolidated basis.

Net revenues by geographic area presented based upon the location of the customer were as follows:

	Three Months Ended March 31,	
	2020	2019
	(in thousands)	
United States	$ 75,837	$ 59,940
Other	18,503	13,245
Total	$ 94,340	$ 73,185

Property and equipment, net by geographic area was as follows:

	As of March 31, 2020	As of December 31, 2019
	(in thousands)	
United States	$ 44,424	$ 42,570
Other	5,651	8,100
Total	$ 50,075	$ 50,670

Note 13. Subsequent Events

Acquisition of Divvy Cloud Corporation

On May 1, 2020, we acquired Divvy Cloud Corporation (DivvyCloud), a Cloud Security Posture Management (CSPM) company, for consideration of approximately $130.8 million in cash paid at closing, an aggregate of 200,596 shares of Rapid7’s common stock to be issued to the founders of DivvyCloud in three equal annual installments beginning on the first anniversary of the closing date and $7.4 million in deferred cash payments. We also issued restricted stock units pursuant to our equity incentive plan with an aggregate fair market value of approximately $12.0 million to certain employees of DivvyCloud, subject to vesting conditions.

Convertible Senior Notes

On May 1, 2020, we issued $230.0 million aggregate principal amount of convertible senior notes due May 1, 2025 (collectively, the 2025 Notes). The total net proceeds from the offering, after deducting initial purchase discounts and estimated debt issuance costs, were approximately $223.2 million. The 2025 Notes are unsecured obligations and bear interest at a fixed rate of 2.25% per annum, payable semi-annually in arrears on May 1 and November 1 of each year, commencing on November 1, 2020. The 2025 Notes will mature on May 1, 2025, unless earlier converted, redeemed or repurchased. The Notes do not contain any financial covenants. The 2025 Notes are governed by an indenture between the Company, as issuer, and U.S. Bank National Association, as trustee (the 2025 Indenture).

In connection with the issuance of the 2025 Notes, we entered into capped call transactions with certain counterparties (the Capped Calls). We used $27.3 million of the net proceeds from the 2025 Notes to purchase the Capped Calls. The Capped Calls are expected to offset potential dilution to our common stock upon conversion of the 2025 Notes. The Capped Calls have an initial cap price of $93.88 per share (which initially represents a premium of 100% over the last reported sale price of our common stock on April 28, 2020), subject to certain adjustments.

Senior Secured Credit Facility

On April 23, 2020, we entered into a Credit and Security Agreement (the Credit Agreement), with KeyBank National Association, as administrative agent, and the lenders party thereto. The Credit Agreement provides for a three year $30.0 million revolving credit facility, with a letter of credit sublimit of $15.0 million, and an accordion feature under which we can increase the credit facility to up to $70.0 million. The new credit facility bears interest at 2.50% over the London Interbank Offered Rate (LIBOR) (subject to a 1.00% floor) or, at our option, an alternate base rate. We are required to pay a 0.20% per annum commitment fee on the unused portion of the credit facility. As of May 8, 2020, we did not have any outstanding borrowings under the credit facility.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with (1) our consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q and (2) the audited consolidated financial statements and the related notes and Management's Discussion and Analysis of Financial Condition and Results of Operations for the fiscal year ended December 31, 2019 included in our Annual Report on Form 10-K, filed with the SEC on February 28, 2020.

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, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These statements are often identified by the use of words such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "project," "will," "would" or the negative or plural of these words or similar expressions or variations and such forward-looking statements include, but are not limited to, statements with respect to our outlook; the impact of new accounting standards; deferred revenue; our business strategy, plans and objectives for future operations; our future financial and business performance and the uncertain negative impacts that COVID-19 may have on our business, financial condition, results of operations and changes in overall level of security software spending and volatility in the global economy. The events described in these forward-looking statements are subject to a number of risks, uncertainties, assumptions and other factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified herein, and those discussed in the section titled "Risk Factors," set forth in Part II, Item 1A of this Quarterly Report on Form 10-Q and in our other SEC filings. You should not rely upon forward-looking statements as predictions of future events. Furthermore, such forward-looking statements speak only as of the date of this report. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.

Overview

Rapid7 is a leading cyber security solutions provider, on a mission to make successful security tools and practices accessible to all. Rapid7 Insight Platform technology, expert services, and thought-leading research enables over 9,000 customers to improve their security programs so that they can safely advance and innovate.

In the nearly 20 years that Rapid7 has been in business, security companies and trends have come and gone, while broader technology innovation continues to advance rapidly. Every company is now a technology company, and rampant innovation inevitably creates security risk. The migration of businesses to the cloud and ubiquitous connected devices present security teams with an increasingly complex, ever-changing, and unpredictable attack surface.

We believe as cybersecurity challenges continue to rise exponentially, two key factors can prevent organizations from effectively managing their growing security exposure. First, the tools to manage complex security problems are often equally complicated to use. Second, there is a scarcity of cybersecurity professionals who are qualified to successfully manage these sophisticated tools. These two factors compound the difficulties that resource-constrained organizations face when attempting to minimize their security exposure, meet security compliance regulations and provide visibility to their leadership. The expanding divide between risk created through innovation and risk managed by security teams is called the Security Achievement Gap.

We believe Rapid7 is uniquely positioned to improve how customer security challenges are addressed. Our solutions simplify the complex, allowing teams to more effectively reduce vulnerabilities, monitor malicious behavior, investigate and shut down attacks, and automate routine tasks. All of our solutions and services are built with and supported by the expertise of our dedicated team of security researchers and consultants, who bring knowledge of attacker behavior and emerging vulnerabilities directly to customers. We also continue to invest in further simplifying our technology to improve usability, lowering the barrier to managing security for teams and organizations who lack resources.

While our security technology is the foundation of our mission to make successful security accessible to all, technology alone will not solve today's cybersecurity challenges. Our ongoing commitment to researching and partnering with the technology community helps to curb new security risks born through innovation. We are also investing in under-served, at risk communities, like non-profits and hospitals, to better understand their needs and make security technology and services accessible. By continuously improving our technology, stemming the creation of risk in the community, and making security more usable and accessible, Rapid7 aims to close the Security Achievement Gap.

We market and sell our products and professional services to organizations of all sizes globally, including mid-market businesses, enterprises, non-profits, educational institutions and government agencies. Our customers span a wide variety of industries such as technology, energy, financial services, healthcare and life sciences, manufacturing, media and entertainment, retail, education, real estate, transportation, government and professional services. As of March 31, 2020, we had over 9,000 customers in 141 countries, including 45% of the Fortune 100. Our revenue was not concentrated with any individual customer and no customer represented more than 1% of our revenue for the three months ended March 31, 2020 or 2019.

We sell our products and professional services through direct inside and field sales teams and indirect channel partner relationships. Our sales teams focus on both new customer acquisition as well as up-selling and cross-selling additional offerings to our existing customers. Our sales teams are organized by geography, consisting of the Americas; Europe, the Middle East and Africa (EMEA); and Asia Pacific (APAC), as well as by target organization size. Our highly technical sales engineers help define customer use cases, manage solution evaluations and train channel partners. In addition, we maintain a global channel partner network that complements our sales organization, particularly in EMEA, APAC and Latin America.

Recent Developments

Acquisition of Divvy Cloud Corporation

On May 1, 2020, we acquired Divvy Cloud Corporation (DivvyCloud), a Cloud Security Posture Management (CSPM) company, for consideration of approximately $130.8 million in cash paid at closing, an aggregate of 200,596 shares of Rapid7's common stock to be issued to the founders of DivvyCloud in three equal annual installments beginning on the first anniversary of the closing date and $7.4 million in deferred cash payments. We also issued restricted stock units pursuant to our equity incentive plan with an aggregate fair market value of approximately $12.0 million to certain employees of DivvyCloud, subject to vesting conditions.

Convertible Senior Notes

On May 1, 2020, we issued $230.0 million aggregate principal amount of convertible senior notes due May 1, 2025 (collectively, the 2025 Notes). The total net proceeds from the offering, after deducting initial purchase discounts and estimated debt issuance costs, were approximately $223.2 million. The 2025 Notes are unsecured obligations and bear interest at a fixed rate of 2.25% per annum, payable semi-annually in arrears on May 1 and November 1 of each year, commencing on November 1, 2020. The 2025 Notes will mature on May 1, 2025, unless earlier converted, redeemed or repurchased. The Notes do not contain any financial covenants. The 2025 Notes are governed by an indenture between the Company, as issuer, and U.S. Bank National Association, as trustee (the 2025 Indenture).

In connection with the issuance of the 2025 Notes, we entered into capped call transactions with certain counterparties (the Capped Calls). We used $27.3 million of the net proceeds from the 2025 Notes to purchase the Capped Calls. The Capped Calls are expected to offset potential dilution to our common stock upon conversion of the 2025 Notes. The Capped Calls have an initial cap price of $93.88 per share (which initially represents a premium of 100% over the last reported sale price of our common stock on April 28, 2020), subject to certain adjustments.

Senior Secured Credit Facility

On April 23, 2020, we entered into a Credit and Security Agreement (the Credit Agreement), with KeyBank National Association, as administrative agent, and the lenders party thereto. The Credit Agreement provides for a three year $30.0 million revolving credit facility (our Senior Secured Credit Facility), with a letter of credit sublimit of $15.0 million, and an accordion feature under which we can increase our senior secured credit facility to up to $70.0 million. The new Senior Secured Credit Facility bears interest at 2.50% over the London Interbank Offered Rate (LIBOR) (subject to a 1.00% floor) or, at our option, an alternate base rate. We are required to pay a 0.20% per annum commitment fee on the unused portion of the credit facility. As of May 8, 2020, we did not have any outstanding borrowings under the credit facility.

COVID-19 Response

Rapid7 remains focused on supporting its customers, partners, employees and communities during the COVID-19 pandemic. The impact of COVID-19 on the global economy and on our business continues to be a fluid situation. We responded quickly to adopt a virtual sales strategy to enable most of our employees to work productively from home, continued our focus on customers and new customers and worked to guard the health and safety of our team, support our customers and partners, mitigate risk, and maximize our financial performance. We are focused on ensuring continuity for our customers and partners. To ensure our financial stability, we are slowing hiring and reducing discretionary spending in addition to savings that naturally accrue from less travel and virtual rather than in-person events.

The COVID-19 pandemic is expected to result in a global slowdown of economic activity that is likely to decrease demand for a broad variety of goods and services, including from our customers. We currently expect our operational and financial performance to be negatively impacted by the slowdown in activity associated with the COVID-19 pandemic for the year ending December 31, 2020 and beyond. The extent of the impact of the COVID-19 on our operational and financial performance will depend on certain developments, including the duration and spread of the outbreak, its impact on industry events, and its effect on our customers, partners, suppliers and vendors and other parties with whom we do business, all of which are uncertain and cannot be predicted at this time. To the extent possible, we are conducting business as usual, with necessary or advisable modifications to employee travel, employee work locations, and cancellation of Rapid7 marketing events. We will continue to actively monitor the rapidly evolving situation related to COVID-19 and may take further actions that alter our business operations, including those that may be required by federal, foreign, state or local authorities, or that we determine are in the best interests of our employees, customers, partners, suppliers, vendors and stockholders. At this point, the extent to which the COVID-19 pandemic may impact our business, results of operations and financial condition is uncertain. Furthermore, due to our subscription model, the effect of the COVID-19 pandemic may not be fully reflected in our results of operations until future periods.

Our Business Model

We have offerings in four key areas: (1) Vulnerability Risk Management, (2) Incident Detection and Response, (3) Application Security and (4) Security Orchestration and Automation Response.

We offer our products through a variety of delivery models to meet the needs of our diverse customer base, including:

- Cloud-based subscriptions, which provide our software capabilities to our customers through cloud access and on a SaaS basis. Our InsightIDR, InsightVM, InsightAppSec and InsightConnect products are offered as cloud-based subscriptions, generally with a one-year term.

- Managed services, through which we operate our products and provide our capabilities on behalf of our customers. Our Managed Vulnerability Management, Managed Application Security and Managed Detection and Response products are offered on a managed service basis, generally pursuant to one-year agreements.

- Licensed software, including both term and perpetual licenses, and the simultaneous sale of maintenance and support. Our Nexpose, Metasploit and AppSpider products are offered through term or perpetual software licenses. Our customers who purchase software licenses also purchase maintenance and support, which provides our customers with telephone and web-based support and ongoing bug fixes and repairs during the term of the maintenance and support agreement, and our customers who purchase our Nexpose and Metasploit products also purchase content subscriptions, which provide them with real-time access to the latest vulnerabilities and exploits. Our maintenance and support and content subscription agreements are typically for one-year terms.

We also offer various professional services across all of our offerings, including deployment and training services related to our software and cloud-based products, incident response services, penetration testing and security advisory services. Customers can purchase our professional services together with our product offerings or on a stand-alone basis pursuant to fixed fee or time-and-materials agreements.

An important component of our revenue growth strategy is to have our existing customers renew their agreements with us and purchase additional products from us. To assess our performance against this objective, we monitor the renewal rates of our existing customers. We calculate our renewal rate by dividing the dollar value of renewed customer agreements, including upsells and cross-sells of additional products, but excluding professional services, in a trailing 12-month period by the dollar value of the corresponding customer agreements. Our renewal rate was 106% and 117% for the three months ended March 31, 2020 and 2019, respectively. For the three months ended March 31, 2019, our renewal rate was adjusted from the previously disclosed 120% to 117% based on a reclassification of certain upsells and cross-sells. Our goal is to maintain strong renewal rates and continue to increase our renewal rates over time however, our renewal rates may decline or fluctuate as a result of a number of factors, including customers' satisfaction or dissatisfaction with our products and professional services, pricing, competitive offerings, economic conditions, overall changes in our customers' spending levels or our sales mix between new and upsell or cross-sell.

For the three months ended March 31, 2020 and 2019, recurring revenue, defined as revenue from term software licenses, content subscriptions, managed services, cloud-based subscriptions and maintenance and support, was 90% and 85%, respectively, of total revenue.

Key Metrics

We monitor the following key metrics to help us measure and evaluate the effectiveness of our operations:

	Three Months Ended March 31,	
	2020	2019
	(dollars in thousands)	
Total revenue	$ 94,340	$ 73,185
Year-over-year revenue growth	28.9 %	34.2 %
Non-GAAP (loss) income from operations	$ (3,933)	$ 577
Operating cash flow	$ (7,215)	$ (13,566)

	As of March 31,	
	2020	2019
	(dollars in thousands)	
Number of customers	9,024	7,934
Year-over-year customer growth	14 %	12 %
Annualized recurring revenue (ARR)	$ 350,884	$ 268,194
Year-over-year ARR growth	30.8 %	51.0 %

Total Revenue and Growth. We are focused on driving continued revenue growth through increased sales of our products and professional services to new and existing customers.

Non-GAAP (Loss) Income from Operations. We monitor non-GAAP (loss) income from operations, a non-GAAP financial measure, to analyze our financial results. We believe non-GAAP (loss) income from operations is useful to investors, as a supplement to U.S. GAAP measures, in evaluating our ongoing operational performance and enhancing an overall understanding of our past financial performance and allowing for greater transparency with respect to metrics used by our management in its financial and operational decision-making. See Non-GAAP Financial Results below for further information on non-GAAP (loss) income from operations and a reconciliation of non-GAAP (loss) income from operations to the comparable GAAP financial measure.

Operating Cash Flow. We monitor our operating cash flow as a measure of our overall business performance, which enables us to analyze our financial performance without the effects of certain non-cash items such as stock-based compensation expenses and depreciation and amortization. Additionally, operating cash flow takes into account the increase in deferred revenue as a result of increases in sales of products and services, which reflects the receipt of cash payment for products before they are recognized into revenue. Our operating cash flow is impacted by the timing of commission and bonus payments, accounts payable payments and collections of accounts receivable.

Number of Customers. We believe that the size of our customer base is an indicator of our global market penetration and that our net customer additions are an indicator of the growth of our business. We define a customer as any entity that has (1) an active Rapid7 contract or a contract that expired within 90 days or less of the applicable measurement date; and for Logentries products, those customers with a contract value equal to or greater than $2,400 per year, or (2) purchased Rapid7 professional services within the 12 months preceding the applicable measurement date.

Annualized Recurring Revenue and Growth. Annualized Recurring Revenue **(**ARR) is defined as the annual value of all recurring revenue related to contracts in place at the end of the quarter. ARR should be viewed independently of revenue and deferred revenue as ARR is an operating metric and is not intended to be combined with or replace these items. ARR is not a forecast of future revenue, which can be impacted by contract start and end dates and renewal rates and does not include revenue reported as perpetual license or professional services revenue in our consolidated statement of operations.

Non-GAAP Financial Results

To supplement our consolidated financial statements, which are prepared and presented in accordance with GAAP, we provide investors with certain non-GAAP financial measures and key metrics, including non-GAAP gross profit, non-GAAP income (loss) from operations, non-GAAP net income (loss), non-GAAP net income (loss) per share and adjusted EBITDA. The presentation of the non-GAAP financial measures is not intended to be considered in isolation or as a substitute for, or superior to, the financial information prepared and presented in accordance with GAAP. We use these non-GAAP financial measures and key metrics for financial and operational decision-making purposes and as a means to evaluate period-to-period comparisons, and use certain non-GAAP financial measures as performance measures under our executive bonus plan. We believe that these non-GAAP financial measures and key metrics provide useful information about our operating results, enhance the overall understanding of past financial performance and future prospects and allow for greater transparency with respect to metrics used by our management in its financial and operational decision-making. While our non-GAAP financial measures are an important tool for financial and operational decision-making and for evaluating our own operating results over different periods of time, you should review the reconciliation of our non-GAAP financial measures to the comparable GAAP financial measures included below, and not rely on any single financial measure to evaluate our business.

We define non-GAAP gross profit, non-GAAP income (loss) from operations, non-GAAP net income (loss) and non-GAAP net income (loss) per share as the respective GAAP balances excluding the effect of stock-based compensation expense, amortization of acquired intangible assets, amortization of debt discount and issuance costs, and certain other items such as acquisition-related expenses and litigation-related expenses. Non-GAAP net income (loss) per basic and dilutive share is calculated as Non-GAAP net income (loss) divided by the weighted average shares used to compute net income (loss) per share, with the number of weighted average shares decreased to reflect the anti-dilutive impact of the capped call transactions (Capped Calls) entered into in connection with the 1.25% convertible senior note issued in August 2018 (Notes).

We believe these non-GAAP financial measures are useful to investors in assessing our operating performance due to the following factors:

Stock-based compensation expense. We exclude stock-based compensation expense because of varying available valuation methodologies, subjective assumptions and the variety of equity instruments that can impact our non-cash expense. We believe that providing non-GAAP financial measures that exclude stock-based compensation expense allows for more meaningful comparisons between our operating results from period to period.

Amortization of acquired intangible assets. We believe that excluding the impact of amortization of acquired intangible assets allows for more meaningful comparisons between operating results from period to period as the intangible assets are valued at the time of acquisition and are amortized over several years after the acquisition.

Amortization of debt discount and issuance costs. In August 2018, we issued $230 million of 2023 Notes, which bear interest at an annual fixed rate of 1.25%. The imputed interest rate of the 2023 Notes was approximately 7.36%. This is a result of the debt discount recorded for the conversion feature that is required to be separately accounted for as equity, and debt issuance costs, which reduce the carrying value of the convertible debt instrument. The debt discount is amortized as interest expense together with the issuance costs of the debt. The expense for the amortization of debt discount and debt issuance costs is a non-cash item, and we believe the exclusion of this interest expense provides a more useful comparison of our operational performance in different periods.

Litigation-related expenses. We exclude certain litigation-related expenses consisting of professional fees and related costs incurred by us related to significant litigation outside the ordinary course of business. We believe it is useful to exclude such expenses because we do not consider such amounts to be part of our ongoing operations.

Acquisition-related expenses. We exclude acquisition-related expenses as costs that are unrelated to the current operations and neither are comparable to the prior period nor predictive of future results.

Anti-dilutive impact of capped call transaction. In connection with the issuance of the 2023 Notes, we entered into capped call transactions to offset potential dilution from the embedded conversion feature in the 2023 Notes. Although we cannot reflect the anti-dilutive impact of the capped call transactions under GAAP, we do reflect the anti-dilutive impact of the capped call transactions in non-GAAP net income (loss) per basic and diluted share to provide investors with useful information in evaluating the financial performance of the Company on a per share basis.

Adjusted EBITDA. We define adjusted EBITDA as net loss before (1) interest income, (2) interest expense, (3) other income (expense), net, (4) provision for (benefit from) income taxes, (5) depreciation expense, (6) amortization of intangible assets, (7) stock-based compensation expense, and (8) certain other items. We believe that the use of adjusted EBITDA is useful to investors and other users of our financial statements in evaluating our operating performance because it provides them with an additional tool to compare business performance across companies and across periods. Adjusted EBITDA should not be considered as a substitute for other measures of financial performance reported in accordance with GAAP. There are limitations to using this non-GAAP financial measure, including that other companies may calculate this measure differently than we do, that it does not reflect our capital expenditures or future requirements for capital expenditures and that it does not reflect changes in, or cash requirements for, our working capital and excludes some items that are cash based.

Our non-GAAP financial measures may not provide information that is directly comparable to that provided by other companies in our industry, as other companies in our industry may calculate non-GAAP financial results differently, particularly related to non-recurring, unusual items. In addition, there are limitations in using non-GAAP financial measures because the non-GAAP financial measures are not prepared in accordance with GAAP, may be different from non-GAAP financial measures used by other companies and exclude expenses that may have a material impact upon our reported financial results. Further, stock-based compensation expense has been and will continue to be for the foreseeable future a significant recurring expense in our business and an important part of the compensation provided to our employees.

The following tables reconcile GAAP gross profit to non-GAAP gross profit for the three months ended March 31, 2020 and 2019:

	Three Months Ended March 31,	
	2020	2019
	(in thousands)	
GAAP total gross profit	$ 66,626	$ 53,212
Stock-based compensation expense	931	573
Amortization of acquired intangible assets	1,658	1,358
Non-GAAP total gross profit	$ 69,215	$ 55,143

	Three Months Ended March 31,	
	2020	2019
	(in thousands)	
GAAP gross profit – products	$ 66,293	$ 51,476
Stock-based compensation expense	573	277
Amortization of acquired intangible assets	1,658	1,358
Non-GAAP gross profit – products	$ 68,524	$ 53,111

	Three Months Ended March 31,	
	2020	2019
	(in thousands)	
GAAP gross profit – professional services	$ 333	$ 1,736
Stock-based compensation expense	358	296
Non-GAAP gross profit – professional services	$ 691	$ 2,032

The following table reconciles GAAP loss from operations to non-GAAP (loss) income from operations for the three months ended March 31, 2020 and 2019:

	Three Months Ended March 31,	
	2020	2019
	(in thousands)	
GAAP loss from operations	$ (19,820)	$ (9,744)
Stock-based compensation expense	13,347	8,634
Amortization of acquired intangible assets	1,690	1,397
Acquisition-related expenses	307	217
Litigation-related expenses	543	73
Non-GAAP (loss) income from operations	$ (3,933)	$ 577

The following table reconciles GAAP net loss to non-GAAP net (loss) income for the three months ended March 31, 2020 and 2019:

	Three Months Ended March 31,	
	2020	2019
	(in thousands, except share and per share data)	
GAAP net loss	$ (22,924)	$ (11,673)
Stock-based compensation expense	13,347	8,634
Amortization of acquired intangible assets	1,690	1,397
Acquisition-related expenses	307	217
Litigation-related expenses	543	73
Amortization of debt discount and issuance costs	2,743	2,510
Non-GAAP net (loss) income	$ (4,294)	$ 1,158
Reconciliation of net (loss) income per share, basic:		
GAAP net loss per share, basic	$ (0.46)	$ (0.24)
Non-GAAP adjustments to net loss	0.37	0.26
Non-GAAP net (loss) income per share, basic	$ (0.09)	$ 0.02
Reconciliation of net (loss) income per share, diluted:		
GAAP net loss per share, diluted	$ (0.46)	$ (0.24)
Non-GAAP adjustments to net loss	0.37	0.26
Non-GAAP net (loss) income per share, diluted	$ (0.09)	$ 0.02
Weighted average shares used in GAAP per share calculation, basic and diluted	50,127,310	47,827,939
Weighted average shares used in non-GAAP per share calculation:		
Basic	50,127,310	47,827,939
Diluted	50,127,310	51,184,402

The following table reconciles GAAP net loss to adjusted EBITDA for the three months ended March 31, 2020 and 2019:

	Three Months Ended March 31,	
	2020	2019
	(in thousands)	
GAAP net loss	$ (22,924)	$ (11,673)
Interest income	(1,048)	(1,731)
Interest expense	3,462	3,229
Other (income) expense, net	447	206
Provision for income taxes	243	225
Depreciation expense	2,675	1,850
Amortization of intangible assets	2,168	1,577
Stock-based compensation expense	13,347	8,634
Acquisition-related expenses	307	217
Litigation-related expenses	543	73
Adjusted EBITDA	$ (780)	$ 2,607

Components of Results of Operations

Revenue

We generate revenue primarily from selling products and professional services through a variety of delivery models to meet the needs of our diverse customer base. We generally bill customers and collect payment for both our products and services at the beginning of a contractual period.

Products

We generate products revenue from the sale of (1) cloud-based subscriptions for our InsightVM, InsightIDR, InsightAppSec and InsightConnect products, (2) managed services offerings, which utilize our products and (3) term or perpetual software licenses for our Nexpose, Metasploit and AppSpider products, as well as associated content subscriptions for our Nexpose and Metasploit products. We also generate revenue when customers purchase or renew agreements for maintenance and support of their Nexpose, Metasploit and AppSpider software licenses. Substantially all of our customers purchase an agreement for maintenance and support in connection with their purchase of a Nexpose, Metasploit or AppSpider software license. Lastly, we also generate appliance revenue that is included in our products revenue and is associated with hardware sold with our Nexpose product to certain customers.

Professional Services

We generate professional service revenue from the sale of deployment and training services related to our products, incident response services and security advisory services.

Cost of Revenue

Our total cost of revenue consists of the costs of products and professional services. Cost of revenue include overhead costs for depreciation, facilities, IT, information security, and recruiting. Our IT overhead costs include IT personnel compensation costs and costs associated with our IT infrastructure. All overhead costs are allocated based on relative headcount.

Cost of Products

Cost of products consists of personnel and related costs for our content, support, managed service and cloud operations teams, including salaries and other payroll related costs, bonuses, stock-based compensation and allocated overhead costs. Also included in cost of products are software license fees, hardware, cloud computing costs and internet connectivity expenses directly related to delivering our products, amortization of contract fulfillment costs, as well as amortization of certain intangible assets including internally developed software.

Cost of Professional Services

Cost of professional services consists of personnel and related costs for our professional services team, including salaries and other payroll related costs, bonuses, stock-based compensation, costs of contracted third-party vendors, travel and entertainment expenses and allocated overhead costs.

We expect our cost of revenue to increase on an absolute dollar basis as we continue to grow our revenue.

Gross Margin

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 average sales price of our products and services, transaction volume growth, the mix of revenue between software licenses, cloud-based subscriptions, managed services and professional services and changes in cloud computing costs. We expect our gross margins to fluctuate over time depending on the factors described above.

Operating Expenses

Operating expenses consist of research and development, sales and marketing, and general and administrative expenses. Operating expenses include overhead costs for depreciation, facilities, IT, information security and recruiting. Our IT overhead costs include IT personnel compensation costs and costs associated with our IT infrastructure. All overhead costs are allocated based on relative headcount.

Research and Development Expense

Research and development expense consists of personnel costs for our research and development team, including salaries and other payroll related costs, bonuses and stock-based compensation. Additional expenses include travel and entertainment, consulting and professional fees for third-party development resources as well as allocated overhead costs.

We expect research and development expense to increase on an absolute dollar basis in the near term as we continue to increase investments in our products and technology platform innovation, but to remain relatively consistent as a percentage of total revenue.

Sales and Marketing Expense

Sales and marketing expense consists of personnel costs for our sales and marketing team, including salaries and other payroll related costs, commissions, including amortization of deferred commissions, bonuses and stock-based compensation. Additional expenses include marketing activities and promotional events, travel and entertainment, training costs, amortization of certain intangible assets and allocated overhead costs.

We expect sales and marketing expense to increase on an absolute dollar basis in the near term as we continue to increase investments to drive our revenue growth, but to decrease as a percentage of total revenue.

General and Administrative Expense

General and administrative expense consists of personnel costs for our executive, legal, human resources, and finance and accounting departments, including salaries and other payroll related costs, bonuses and stock-based compensation. Additional expenses include travel and entertainment, professional fees, litigation-related expenses, insurance, acquisition-related expenses, amortization of certain intangible assets and allocated overhead costs.

We expect general and administrative expense to increase on an absolute dollar basis in the near term as we continue to increase investments to support our growth, but to remain relatively consistent as a percentage of total revenue.

Interest Income

Interest income consists primarily of interest income on our cash and cash equivalents and our short and long-term investments.

Interest Expense

Interest expense consists primarily of contractual interest expense, as well as amortization of debt discount and issuance costs related to our 2023 Notes.

Other Income (Expense), Net

Other income (expense), net consists primarily of unrealized and realized gains and losses related to changes in foreign currency exchange rates and realized gains and losses on the sale of investments.

Provision for Income Taxes

Provision for income taxes relates to U.S. federal and state, as well as certain foreign jurisdiction, income taxes. Historically, we have generated net losses in the U.S., U.K and Ireland and recorded a full valuation allowance against our U.S., U.K. and Ireland deferred tax assets. We expect to maintain a full valuation allowance on our U.S., Ireland and U.K. deferred tax assets in the near term. Realization of our U.S., Ireland and U.K. deferred tax assets depends upon future earnings, the timing and amount of which are uncertain.

Results of Operations

The following table sets forth our selected consolidated statements of operations data:

	Three Months Ended March 31, 2020	Three Months Ended March 31, 2019
	(in thousands)	
Consolidated Statement of Operations Data:		
Revenue:		
Products	$ 87,549	$ 65,845
Professional services	6,791	7,340
Total revenue	94,340	73,185
Cost of revenue:(1)		
Products	21,256	14,369
Professional services	6,458	5,604
Total cost of revenue	27,714	19,973
Operating expenses:(1)		
Research and development	24,202	17,865
Sales and marketing	48,145	35,138
General and administrative	14,099	9,953
Total operating expenses	86,446	62,956
Loss from operations	(19,820)	(9,744)
Interest income	1,048	1,731
Interest expense	(3,462)	(3,229)
Other income (expense), net	(447)	(206)
Loss before income taxes	(22,681)	(11,448)
Provision for income taxes	243	225
Net loss	$ (22,924)	$ (11,673)

(1) Cost of revenue and operating expenses include stock-based compensation expense and depreciation and amortization expense as follows:

	Three Months Ended March 31, 2020	Three Months Ended March 31, 2019
	(in thousands)	
Stock-based compensation expense:		
Cost of revenue	$ 931	$ 573
Research and development	4,645	3,174
Sales and marketing	3,678	2,464
General and administrative	4,093	2,423
Total stock-based compensation expense	$ 13,347	$ 8,634

	Three Months Ended March 31, 2020	Three Months Ended March 31, 2019
	(in thousands)	
Depreciation and amortization expense:		
Cost of revenue	$ 2,623	$ 1,907
Research and development	659	430
Sales and marketing	1,166	810
General and administrative	395	280
Total depreciation and amortization expense	$ 4,843	$ 3,427

The following table sets forth our selected consolidated statements of operations data expressed as a percentage of revenue:

	Three Months Ended March 31,	
	2020	2019
Consolidated Statement of Operations Data:		
Revenue:		
Products	92.8 %	90.0 %
Professional services	7.2	10.0
Total revenue	100.0	100.0
Cost of revenue:		
Products	22.5	19.7
Professional services	6.9	7.7
Total cost of revenue	29.4	27.4
Operating expenses:		
Research and development	25.7	24.4
Sales and marketing	51.0	47.9
General and administrative	14.9	13.6
Total operating expenses	91.6	85.9
Loss from operations	(21.0)	(13.3)
Interest income	1.1	2.4
Interest expense	(3.7)	(4.4)
Other income (expense), net	(0.5)	(0.3)
Loss before income taxes	(24.0)	(15.6)
Provision for income taxes	0.3	0.3
Net loss	(24.3)%	(15.9)%

Comparison of the Three Months Ended March 31, 2020 and 2019

Revenue

	Three Months Ended March 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
Revenue:				
Products	$ 87,549	$ 65,845	$ 21,704	33.0 %
Professional services	6,791	7,340	(549)	(7.5)
Total revenue	$ 94,340	$ 73,185	$ 21,155	28.9 %

Total revenue increased by $21.2 million in the three months ended March 31, 2020 compared to the same period in 2019. The $21.2 million increase in revenue consisted of a $1.1 million increase in revenue from new customers and a $20.1 million increase in revenue from existing customers. The $20.1 million increase in revenue from existing customers was due to an increase in revenue from renewals, upsells and cross-sells as a result of the continued growth of our customer base. Revenue from new customers represents the revenue recognized from the customer's initial purchase. All renewals, upsells and cross-sells are considered revenue from existing customers.

The increase in total revenue in the three months ended March 31, 2020 compared to the same period in 2019 was comprised of $16.7 million generated from sales in North America and $4.5 million generated from sales from the rest of the world.

The $0.5 million decrease in professional services revenue in the three months ended March 31, 2020 compared to the same period in 2019 was primarily due to a decline in services as customers rescheduled services in response to the COVID-19 pandemic.

Cost of Revenue

	Three Months Ended March 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
Cost of revenue:				
Products	$ 21,256	$ 14,369	$ 6,887	47.9 %
Professional services	6,458	5,604	854	15.2
Total cost of revenue	$ 27,714	$ 19,973	$ 7,741	38.8 %
Gross margin %:				
Products	75.7 %	78.2 %		
Professional services	4.9	23.7		
Total gross margin %	70.6 %	72.7 %		

Total cost of revenue increased by $7.7 million in the three months ended March 31, 2020 compared to the same period in 2019, primarily due to a $2.6 million increase in cloud computing costs related to growing cloud-based subscription revenue and a $2.5 million increase in personnel costs, inclusive of a $0.4 million increase in stock-based compensation expense, resulting from an increase in headcount to support our growing customer base. Our increase in total cost of revenue also included a $1.8 million increase in allocated overhead driven by costs related to our global kick-off meeting as well as an increase in IT and facilities costs, a $0.3 million increase in amortization expense for acquired intangible assets, a $0.4 million increase in third-party professional service consulting costs and a $0.3 million increase in amortization expense for capitalized internally-developed software. These increases were partially offset by a $0.2 million decrease in other expenses.

Total gross margin percentage decreased for the three months ended March 31, 2020 compared to the same period in 2019. The decrease in products gross margin for the three months ended March 31, 2020 was primarily due to an increase in revenue from cloud-based subscriptions and managed services, which have lower gross margins than our licensed software products. The decrease in professional services gross margin for the three months ended March 31, 2020 was primarily due to a reduction in professional services revenue as customers rescheduled services in response to the COVID-19 pandemic.

Operating Expenses

Research and Development Expense

	Three Months Ended March 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
Research and development	$ 24,202	$ 17,865	$ 6,337	35.5 %
% of revenue	25.7 %	24.4 %		

Research and development expense increased by $6.3 million in the three months ended March 31, 2020 compared to the same period in 2019, primarily due to a $3.6 million increase in personnel costs and an increase of $3.0 million in allocated overhead driven by costs related to our global kick-off meeting as well as an increase in IT and facilities costs, partially offset by a decrease of $0.3 million in other expenses. The $3.6 million increase in personnel costs was primarily due to a $2.1 million increase in salaries and related costs driven by growth in headcount, including employees acquired in the acquisition of NetFort Technologies Limited in April 2019, and a $1.5 million increase in stock-based compensation expense.

Sales and Marketing Expense

	Three Months Ended March 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
Sales and marketing	$ 48,145	$ 35,138	$ 13,007	37.0 %
% of revenue	51.0 %	47.9 %		

Sales and marketing expense increased by $13.0 million in the three months ended March 31, 2020 compared to the same period in 2019, primarily due to a $6.4 million increase in personnel costs due to an increase in headcount, inclusive of a $1.2 million increase in stock-based compensation expense, and a $4.8 million increase in allocated overhead driven by costs related to our global kick-off meeting as well as an increase in IT and facilities costs. Our increase in sales and marketing expense also included a $1.5 million increase in commission expense and a $1.0 million increase in marketing and advertising costs. These increases were partially offset by a $0.7 million decrease in other expenses.

General and Administrative Expense

	Three Months Ended March 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
General and administrative	$ 14,099	$ 9,953	$ 4,146	41.7 %
% of revenue	14.9 %	13.6 %		

General and administrative expense increased by $4.1 million in the three months ended March 31, 2020 compared to the same period in 2019, primarily due to a $2.5 million increase in personnel costs due to an increase in headcount, inclusive of a $1.8 million increase in stock-based compensation expense, a $1.0 million increase in professional fees primarily due to litigation and acquisition-related expenses and other professional consulting fees, a $0.5 million increase in allocated overhead driven by costs related to our global kick-off meeting as well as an increase in IT and facilities costs, and a $0.1 million increase in other expenses.

Interest Income

	Three Months Ended March 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
Interest income	$ 1,048	$ 1,731	$ (683)	(39.5)%
% of revenue	1.1 %	2.4 %		

Interest income decreased by $0.7 million in the three months ended March 31, 2020 compared to the same period in 2019 primarily due a decrease in interest rates.

Interest Expense

	Three Months Ended March 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
Interest expense	$ (3,462)	$ (3,229)	$ (233)	7.2 %
% of revenue	(3.7)%	(4.4)%		

Interest expense increased by $0.2 million in the three months ended March 31, 2020 compared to the same period in 2019 primarily due to an increase in amortization of debt discount and issuance costs related to the 2023 Notes.

Other Income (Expense), Net

	Three Months Ended March 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
Other income (expense), net	$ (447)	$ (206)	$ (241)	117.0 %
% of revenue	(0.5)%	(0.3)%		

Other income (expense), net increased by $0.2 million in the three months ended March 31, 2020 compared to the same period in 2019 due to realized and unrealized foreign currency losses, primarily related to the euro and British pound sterling and realized losses on the sale of investments.

Provision for Income Taxes

	Three Months Ended March 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
Provision for income taxes	$ 243	$ 225	$ 18	8.0 %
% of revenue	0.3 %	0.3 %		

Provision for income taxes remained consistent in the three months ended March 31, 2020 compared to the same period in 2019.

Liquidity and Capital Resources

As of March 31, 2020, we had $204.4 million in cash and cash equivalents, $49.2 million in short- and long-term investments that have maturities ranging from two to nineteen months and an accumulated deficit of $541.4 million. Since our inception, we have generated significant losses and expect to continue to generate losses for the foreseeable future. Our principal sources of liquidity are cash and cash equivalents, short and long-term investments and our senior secured credit facility. To date, we have financed our operations primarily through private and public equity financings, issuance of convertible senior notes and through cash generated by operating activities.

On May 1, 2020, we acquired DivvyCloud, a CSPM company, for consideration of approximately $130.8 million in cash paid at closing, an aggregate of 200,596 shares of Rapid7's common stock to be issued to the founders of DivvyCloud in three equal annual installments beginning on the first anniversary of the closing date and $7.4 million in deferred cash payments.

We believe that our existing cash and cash equivalents, our short and long-term investments and our available borrowings under our senior secured credit facility will be sufficient to meet our working capital expenditure requirements for at least the next 12 months. Our future capital requirements will depend on many factors, including our growth rate, the timing and extent of spending to support research and development efforts, the expansion of sales and marketing activities, particularly internationally, the introduction of new and enhanced products and professional service offerings and the cost of any future acquisitions of technology or businesses. In the event that additional financing is required from outside sources, we may be unable to raise the funds on acceptable terms, if at all. If we are unable to raise additional capital on terms satisfactory to us when we require it, our business, operating results and financial condition could be adversely affected.

Cash Flows

The following table shows a summary of our cash flows for the three months ended March 31, 2020 and 2019:

	Three Months Ended March 31,	
	2020	2019
	(in thousands)	
Cash, cash equivalents and restricted cash at beginning of period	$ 123,413	$ 99,565
Net cash used in operating activities	(7,215)	(13,566)
Net cash provided by (used in) investing activities	85,422	(355)
Net cash provided by financing activities	3,374	4,373
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(560)	(148)
Cash, cash equivalents and restricted cash at end of period	$ 204,434	$ 89,869

Senior Secured Credit Facility

On April 23, 2020, we entered into a Credit and Security Agreement (the Credit Agreement), with KeyBank National Association, as administrative agent, and the lenders party thereto. The Credit Agreement provides for a three year $30.0 million revolving credit facility (our Senior Secured Credit Facility), with a letter of credit sublimit of $15.0 million, and an accordion feature under which we can increase our senior secured credit facility to up to $70.0 million. The new Senior Secured Credit Facility bears interest at 2.50% over the London Interbank Offered Rate (LIBOR) (subject to a 1.00% floor) or, at our option, an alternate base rate. We are required to pay a 0.20% per annum commitment fee on the unused portion of the credit facility. As of May 8, 2020, we did not have any outstanding borrowings under the credit facility.

The Credit Agreement contains customary representations and warranties and customary affirmative and negative covenants, including, among other things, restrictions on indebtedness, liens, investments, mergers, dispositions, dividends and other distributions. These covenants prohibit settlement payments in cash or a combination of cash and shares of our common stock upon any conversion of our convertible debt securities at any time when a default or event of default has occurred and is continuing under the Credit Agreement. The Credit Agreement contains financial covenants that require us to maintain specified minimum recurring revenue and, following the issuance of any additional convertible debt securities (including the convertible notes described below), minimum liquidity of $30.0 million. In addition, the Credit Agreement contains certain customary events of default including, but not limited to, failure to pay interest, principal and fees or other amounts when due, material misrepresentations or misstatements in any representation or warranty, covenant defaults, certain cross defaults to other material indebtedness, certain judgment defaults and events of bankruptcy.

Convertible Senior Notes

On May 1, 2020, we issued $230.0 million aggregate principal amount of convertible senior notes due May 1, 2025 (collectively, the 2025 Notes). The total net proceeds from the offering, after deducting initial purchase discounts and estimated debt issuance costs, were approximately $223.2 million. The 2025 Notes are unsecured obligations and bear interest at a fixed rate of 2.25% per annum, payable semi-annually in arrears on May 1 and November 1 of each year, commencing on November 1, 2020. The 2025 Notes will mature on May 1, 2025, unless earlier converted, redeemed or repurchased. The Notes do not contain any financial covenants. The 2025 Notes are governed by an indenture between the Company, as issuer, and U.S. Bank National Association, as trustee (the 2025 Indenture).

In connection with the issuance of the 2025 Notes, we entered into capped call transactions with certain counterparties (the Capped Calls). We used $27.3 million of the net proceeds from the 2025 Notes to purchase the Capped Calls. The Capped Calls are expected to offset potential dilution to our common stock upon conversion of the 2025 Notes. The Capped Calls have an initial cap price of $93.88 per share (which initially represents a premium of 100% over the last reported sale price of our common stock on April 28, 2020), subject to certain adjustments.

Uses of Funds

Our historical uses of cash have primarily consisted of cash used for operating activities such as expansion of our sales and marketing operations, research and development activities and other working capital needs, as well as cash used for business acquisitions and purchases of property and equipment including leasehold improvements for our facilities.

Operating Activities

Operating activities used $7.2 million of cash and cash equivalents in the three months ended March 31, 2020, which reflects our continued growth in revenue offset by continued investments in our operations and impact of the timing of working capital items. Cash used in operating activities reflected our net loss of $22.9 million and an increase in our net operating assets and liabilities of $6.1 million, offset by $21.8 million of non-cash charges related primarily to depreciation and amortization, stock-based compensation expense, amortization of debt discount and debt issuance costs, provision for doubtful accounts and other non-cash charges. The increase in our net operating assets and liabilities was primarily due to a $16.7 million decrease in deferred revenue as a result of our seasonal decrease in billings compared to the fourth quarter of 2019, a $14.6 million decrease in accrued expenses, primarily as a result of the payout of annual bonuses and year-end commissions, a $1.1 million decrease in other liabilities, a $0.5 million increase in deferred contract acquisition and fulfillment costs, which each had a negative impact on operating cash flow. These factors were partially offset by a $22.6 million decrease in accounts receivable due to collections, and a $4.0 million increase in accounts payable and a $0.2 million decrease in prepaid expenses and other assets, which each had a positive impact on operating cash flow.

Operating activities used $13.6 million of cash and cash equivalents in the three months ended March 31, 2019, which reflects our continued growth in revenue offset by continued investments in our operations and impact of the timing of working capital items. Cash used in operating activities reflected our net loss of $11.7 million and an increase in our net operating assets and liabilities of $16.4 million, offset by $14.5 million of non-cash charges related primarily to depreciation and amortization, stock-based compensation expense, amortization of debt discount and debt issuance costs, provision for doubtful accounts and other non-cash charges. The increase in our net operating assets and liabilities was primarily due to a $13.7 million decrease in accrued expenses primarily as a result of the payout of annual bonuses and year-end commissions, a $12.1 million decrease in deferred revenue as a result of our seasonal decrease in billings compared to the fourth quarter of 2018, a $1.1 million increase in deferred contract acquisition and fulfillment costs, a $5.9 million increase in prepaid expenses and other assets, which each had a negative impact on operating cash flow. These factors were partially offset by a $14.7 million decrease in accounts receivable due to collections of our fourth quarter of 2018 billings and a $1.6 million increase in other liabilities and a $0.1 million increase in accounts payable, which each had a positive impact on operating cash flow.

Investing Activities

Investing activities provided $85.4 million of cash in the three months ended March 31, 2020, consisting of $113.9 million of investment sales and maturities, offset by $24.2 million for purchases of investments, $2.8 million in capital expenditures to purchase leasehold improvements furniture and fixtures and computer equipment and $1.5 million for capitalization of internal-use software costs.

Investing activities used $0.4 million of cash in the three months ended March 31, 2019, consisting of $72.7 million of investment sales and maturities, offset by $63.0 million for purchases of investments, $8.5 million in capital expenditures to purchase leasehold improvements, primarily related to office space build-outs and computer equipment and $1.6 million for capitalization of internal-use software costs.

Financing Activities

Financing activities provided $3.4 million of cash in the three months ended March 31, 2020, which consisted primarily of $1.6 million in proceeds from the exercise of stock options and $3.3 million in proceeds from the issuance of common stock purchased by employees under the Rapid7, Inc. 2015 Employee Stock Purchase Plan (ESPP), partially offset by $1.5 million in withholding taxes paid for the net share settlement of equity awards.

Financing activities provided $4.4 million of cash in the three months ended March 31, 2019, which consisted primarily of $2.7 million in proceeds from the exercise of stock options and $2.6 million in proceeds from the issuance of common stock purchased by employees under the ESPP, partially offset by $1.0 million in withholding taxes paid for the net share settlement of equity awards.

Contractual Obligations and Commitments

In January 2020, we amended our contract with Amazon Web Services (AWS) which increased our total purchase obligation by $15.0 million, $40.0 million and $50.0 million in 2021, 2022 and 2023, respectively, for a total additional obligation of $105.0 million.

As of March 31, 2020, other than that noted above, there were no material changes in our contractual obligations and commitments from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on February 28, 2020.

Off-Balance Sheet Arrangements

We do not have any relationships with unconsolidated entities or financial partnerships, including entities sometimes referred to as structured finance or special purpose entities that were established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. We do not engage in off-balance sheet financing arrangements.

Recent Accounting Pronouncements

See Note 1 in the notes to the consolidated financial statements for a discussion of recent accounting pronouncements.

Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with generally accepted accounting principles in the United States (GAAP). The preparation of our consolidated financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, revenue, costs and expenses. We base our estimates and assumptions on historical experience and other factors that we believe to be reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates. There have been no material changes in our critical accounting policies from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on February 28, 2020.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Foreign Currency Exchange Risk

Our results of operations and cash flows are subject to fluctuations due to changes in foreign currency exchange rates. A majority of our customers enter into contracts that are denominated in U.S. dollars. Our expenses are generally denominated in the currencies of the countries where our operations are located, which is primarily in the United States and to a lesser extent in the United Kingdom, other Euro-zone countries within mainland Europe, Canada, Australia, Singapore and Japan. Our results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates and may be adversely affected in the future due to changes in foreign currency exchange rates. The effect of a hypothetical 10% adverse change in foreign currency exchange rates on monetary assets and liabilities at March 31, 2020 would not have been material to our financial condition or results of operations. To date, we have not engaged in any hedging strategies. As our international operations grow, we will continue to reassess our approach to manage our risk relating to fluctuations in foreign currency rates.

Interest Rate Risk

As of March 31, 2020, we had cash and cash equivalents of $204.4 million consisting of bank deposits and money market funds and short- and long-term investments of $49.2 million consisting of corporate bonds, commercial paper, agency bonds and asset-backed securities. Our investments are made for capital preservation purposes. We do not enter into investments for trading or speculative purposes.

Our cash and cash equivalents and short- and long-term investments are subject to market risk due to changes in interest rates, which may affect our interest income and the fair value of our investments. Due in part to these factors, our future investment income may fluctuate due to changes in interest rates or we may suffer losses in principal if we are forced to sell securities that decline in market value due to changes in interest rates. However, because we classify our investments as available-for-sale securities, no gains or losses are recognized due to the changes in interest rates unless securities are sold prior to maturity or declines in fair value are determined to be other-than-temporary.

In August 2018, we issued $230.0 million aggregate principal amount of 2023 Notes. The fair value of the 2023 Notes is subject to interest rate risk, market risk and other factors due to the conversion feature. The fair value of the 2023 Notes may increase or decrease for various reasons, including fluctuations in the market price of our common stock, fluctuations in market interest rates and fluctuations in general economic conditions. The interest and market value changes affect the fair value of the 2023 Notes but do not impact our financial position, cash flows or results of operations due to the fixed nature of the debt obligation. Based upon the quoted market price as of March 31, 2020, the fair value of our 2023 Notes was $278.7 million.

As of March 31, 2020, the effect of a hypothetical 10% increase or decrease in interest rates would not have had a material impact on our financial statements.

Inflation Risk

We do not believe that inflation had a material effect on our business, financial condition or results of operations. If our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, financial condition and results of operations.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act of 1934, as amended, that are 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 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 the company's management, including its 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, evaluated the effectiveness of the design and operations of our disclosure controls and procedures as of March 31, 2020. Based on the evaluation of our disclosure controls and procedures as of March 31, 2020, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Inherent Limitations of Internal Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal controls 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. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. 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 control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Changes in Internal Control over Financial Reporting

There was no change 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 has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

In October 2018, Finjan, Inc. (Finjan) filed a complaint against us and our wholly-owned subsidiary, Rapid7 LLC, in the United States District Court, District of Delaware, alleging patent infringement of seven patents held by them. In the complaint, Finjan sought unspecified damages, attorneys' fees and injunctive relief. We intend to vigorously contest Finjan's claims. This litigation is still in its early stages and the final outcome, including our liability, if any, with respect to Finjan's claims, is uncertain. 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.

In addition, from time to time, we are a party to litigation or subject to claims incident to the ordinary course of business. Although the results of litigation and claims cannot be predicted with certainty, we currently believe that the final outcome of these ordinary course matters will not have a material adverse effect on our business, financial condition or results of operations. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Item 1A. Risk Factors.

Our operations and financial results are subject to various risks and uncertainties including those described below. You should consider carefully the risks and uncertainties described below, in addition to other information contained in this Quarterly Report on Form 10-Q as well as our other public filings with the Securities and Exchange Commission, or the SEC, including our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 28, 2020. 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 adversely affect our business. . Furthermore, the COVID-19 pandemic (including federal, state and local governmental responses, broad economic impacts and market disruptions) has heightened risks discussed in the risk factors described below. Furthermore, the COVID-19 pandemic (including federal, state and local governmental responses, broad economic impacts and market disruptions) has heightened risks discussed in the risk factors described below. If any of the following risks or others not specified below materialize, our business, financial condition and results of operations could be materially adversely affected. In that event, the trading price of our common stock could decline.

Risks Related to Our Business and Industry

The ongoing COVID-19 pandemic could materially and adversely affect our business, results of operations and financial condition.

In March 2020, the World Health Organization declared the outbreak of COVID-19 a pandemic, which continues to spread throughout the United States and the world and has resulted in authorities implementing numerous measures to contain the virus, including travel bans and restrictions, quarantines, shelter-in-place orders, and business limitations and shutdowns. We are unable to accurately predict the full impact that COVID-19 will have on our results from operations, financial condition, liquidity and cash flows due to numerous uncertainties, including the duration and severity of the pandemic and containment measures. Our compliance with these measures has impacted our day-to-day operations and could disrupt our business and operations, as well as that of our customers, partners, suppliers and others with whom we work, for an indefinite period of time. To support the health and well-being of our employees, customers, partners and communities, a vast majority of our employees began working remotely as of late March 2020. In addition, many of our customers and prospective customers are working remotely, which may delay the timing of subscriptions. The disruptions to our operations caused by the COVID-19 pandemic may result in inefficiencies, delays and additional costs in our sales and marketing, professional service and research and development efforts, which cannot be predicted or quantified at this time. To the extent that disruptions occur, we may not be able to fully mitigate any such inefficiencies, delays and additional costs through remote or other alternative work arrangements. In addition, given the economic uncertainty created by COVID-19, we have and may continue to see delays in our sales cycle, failures of customers to renew at all or to renew the anticipated scope their subscriptions with us, requests from customers for payment term deferrals as well as pricing or bundling concessions, which, if significant, could materially and adversely affect our business, results of operations and financial condition. Although such events did not have a material adverse impact on our financial results for the first quarter of fiscal year 2020, we currently expect that our annualized recurring revenue (ARR) related to contracts in place at the end of a quarter for the second quarter of fiscal year 2020 will be lower than initially anticipated at the beginning of fiscal year 2020 as a result of the pull back on customer spending, including renewals, in light of the economic uncertainty caused by the COVID-19 pandemic.

Negative conditions in the general economy both in the United States and abroad, including conditions resulting from the COVID-19 pandemic, changes in gross domestic product growth, financial and credit market fluctuations, energy costs, international trade relations and other geopolitical issues, the availability and cost of credit and the global housing and mortgage markets could cause a decrease in consumer discretionary spending and business investment and diminish growth expectations in the U.S. economy and abroad. More generally, the COVID-19 pandemic raises the possibility of an extended global economic downturn and has caused volatility in financial markets, which could materially and adversely affect demand for our products and professional services and could materially and adversely impact our results and financial condition even after the pandemic is contained and the shelter-in-place orders are lifted. For example, we may be unable to collect receivables from those customers significantly impacted by COVID-19, which may be more pronounced in industry verticals more directly impacted by the COVID-19 pandemic. Also, a decrease in subscriptions and/or renewals in a given period could negatively affect our ARR as well as our revenues in future periods, particularly if experienced on a sustained basis, because a substantial proportion of our software subscriptions yield revenue recognized over time. The pandemic may also have the effect of heightening many of the other risks described in this “Risk Factors” section, including risks associated with our guidance, our customers, our potential customers, our market opportunity, renewals and sales cycle, among others. We will continue to evaluate the nature and extent of the impact of the COVID-19 pandemic on our business.

Although we expect that current cash and cash equivalent balances, including the proceeds of our recently completed convertible senior notes offering, together with cash flows that are generated from operations and availability under our new revolving credit facility will be sufficient to meet our domestic and international working capital needs and other capital and liquidity requirements for at least the next 12 months, if our access to capital is restricted or our borrowing costs increase, our operations and financial condition could be adversely impacted.

The full extent of the COVID-19 pandemic’s impact on our operations and financial performance depends on future developments that are uncertain and unpredictable, including the duration and spread of the pandemic, its impact on capital and financial markets, the timing of economic recovery and any new information that may emerge concerning the severity of the virus, its spread to other regions as well as the actions taken to contain it, among others. Any of these impacts could have a material adverse impact on our business, results of operations and financial condition and ability to execute and capitalize on our strategies. Due to the current uncertainty regarding the severity and duration of the COVID-19 pandemic, we cannot predict whether our response to date or the actions we may take in the future will be effective in mitigating the effects of COVID-19 pandemic on our business, results of operations or financial condition. Accordingly, we are unable at this time to predict the impact of the COVID-19 pandemic on our operations, liquidity, and financial results, and, depending on the magnitude and duration of the COVID-19 pandemic, such impact may be material.

Our quarterly operating results may vary from period to period, which could result in our failure to meet expectations with respect to operating results and cause the trading price of our stock to decline.

Our operating results, including the levels of our revenue, ARR, renewal rates, cash flow, deferred revenue and gross margins, have historically varied from period to period, and we expect that they will continue to do so as a result of a number of factors, many of which are outside of our control, including:

- the level of demand for our products and professional services;
- customer renewal rates and ability to attract new customers;
- the extent to which customers purchase additional products or professional services;
- the mix of our products, as well as professional services, sold during a period;
- the ability to successfully grow our sales of our cloud-based solutions;
- the level of perceived threats to organizations’ cyber security;
- network outages, security breaches, technical difficulties or interruptions with our products;
- changes in the growth rate of the markets in which we compete;
- sales of our products and professional services due to seasonality and customer demand;
- the timing and success of new product or service introductions by us or our competitors or any other changes in the competitive landscape of our industry, including consolidation among our competitors;
- the introduction or adoption of new technologies that compete with our offerings;

- decisions by potential customers to purchase cyber security products or professional services from other vendors;
- the amount and timing of operating costs and capital expenditures related to the operations and expansion of our business;
- price competition;
- our ability to successfully manage and integrate any future acquisitions of businesses, including Divvy Cloud Corporation (DivvyCloud) and including without limitation the amount and timing of expenses and potential future charges for impairment of goodwill from acquired companies;
- our ability to increase, retain and incentivize the channel partners that market and sell our products and professional services;
- our continued international expansion and associated exposure to changes in foreign currency exchange rates, including any fluctuations caused by uncertainties relating to United Kingdom's exit from the European Union, commonly referred to as "Brexit";
- the amount and timing of operating expenses related to the maintenance and expansion of our business, operations and infrastructure;
- the announcement or adoption of new regulations and policy mandates or changes to existing regulations and policy mandates;
- the cost or results of existing or unforeseen litigation and intellectual property infringement;
- the strength of regional, national and global economies;
- quarantine, private travel limitation, or business disruption in regions affecting our operations, stemming from actual, imminent or perceived outbreak of contagious disease, including the COVID-19 pandemic;
- the impact of natural disasters or manmade problems such as terrorism or war; and
- future accounting pronouncements or changes in our accounting policies.

Fluctuations in our quarterly operating results, key metrics, non-GAAP metrics and the price of our common stock may be particularly pronounced in the current economic environment due to the uncertainty caused by and the unprecedented nature of the current COVID-19 pandemic. Each factor above or discussed elsewhere herein or the cumulative effect of some of these factors may result in fluctuations in our operating results. This variability and unpredictability could result in our failure to meet expectations with respect to operating results, or those of securities analysts or investors, for a particular period. If we fail to meet or exceed expectations for our operating results for these or any other reasons, the market price of our stock could fall and we could face costly lawsuits, including securities class action suits.

We are a rapidly growing company, which makes it difficult to evaluate our future operating and financial results and may increase the risk that we will not be successful.

We are a rapidly growing company. Our ability to forecast our future operating and financial results is subject to a number of uncertainties, including our ability to plan for and model future growth. We have encountered and will continue to encounter risks and uncertainties frequently experienced by growing companies in rapidly evolving industries. If our assumptions regarding these uncertainties, which we use to plan our business, are incorrect or change in reaction to changes in our markets, or if we do not address these risks successfully, our operating and financial results could differ materially from our expectations, our business could suffer and the trading price of our common stock may decline.

If we are unable to sustain our revenue growth rate, we may not achieve or maintain profitability in the future.

From the year ended December 31, 2015 to the year ended December 31, 2019, our revenue grew from $110.5 million to $326.9 million. Although we have experienced rapid growth historically and currently have high renewal rates, we may not continue to grow as rapidly in the future and our renewal rates may decline. Any success that we may experience in the future will depend, in large part, on our ability to, among other things:

- maintain and expand our customer base;

- increase revenues from existing customers through increased or broader use of our products and professional services within their organizations;
- improve the performance and capabilities of our products through research and development;
- continue to develop our cloud-based solutions;
- maintain the rate at which customers purchase and renew subscriptions to our cloud-based solutions, content subscriptions, maintenance and support and managed services;
- continue to successfully expand our business domestically and internationally;
- continue to effectively grow and improve the productivity of our sales teams; and
- successfully compete with other companies.

If we are unable to maintain consistent revenue or revenue growth, our stock price could be volatile, and it may be difficult to achieve and maintain profitability. You should not rely on our revenue for any prior quarterly or annual periods as any indication of our future revenue or revenue growth.

We have not been profitable historically and may not achieve or maintain profitability in the future.

We have posted a net loss in each year since inception, including net losses of $53.8 million, $55.5 million and $45.5 million in the years ended December 31, 2019, 2018 and 2017, respectively. As of March 31, 2020, we had an accumulated deficit of $541.4 million. While we have experienced significant revenue growth in recent periods, we may not obtain a high enough volume of sales of our products and professional services to sustain or increase our growth or achieve or maintain profitability in the future. We also expect our costs to increase in future periods, which could negatively affect our future operating results if our revenue does not increase. In particular, we expect to continue to expend financial and other resources on:

- research and development related to our offerings, including investments in our research and development team;
- sales and marketing, including a continued expansion of our sales organization, both domestically and internationally;
- continued international expansion of our business;
- strategic acquisitions and expansion of our partner ecosystem; and
- general and administrative expenses as we continue to implement and enhance our administrative, financial and operational systems, procedures and controls.

These investments may not result in increased revenue or growth in our business. If we are unable to increase our revenue at a rate sufficient to offset the expected increase in our costs, our business, financial position and results of operations will be harmed, and we may not be able to achieve or maintain profitability over the long term. Additionally, we may encounter unforeseen operating expenses, difficulties, complications, delays and other unknown factors that may result in losses in future periods. If our revenue growth does not meet our expectations in future periods, our financial performance may be harmed, and we may not achieve or maintain profitability in the future.

If our products or professional services fail to detect vulnerabilities or identify and respond to cyber security incidents, or if our products contain undetected errors or defects, our brand and reputation could be harmed, which could have an adverse effect on our business and results of operations.

If our products or professional services fail to detect vulnerabilities in our customers' cyber security infrastructure, or if our products or professional services fail to identify and respond to new and increasingly complex methods of cyber attacks, our business and reputation may suffer. There is no guarantee that our products or professional services will detect all vulnerabilities, especially in light of the rapidly changing security landscape to which we must respond. Additionally, our products may falsely detect vulnerabilities or threats that do not actually exist. For example, our Metasploit offering relies on information provided by an active community of security researchers who contribute new exploits, attacks and vulnerabilities. If the information from these third parties is inaccurate, the potential for false indications of security vulnerabilities increases. These false positives, while typical in the industry, may impair the perceived reliability of our offerings and may therefore adversely impact market acceptance of our products and professional services and could result in negative publicity, loss of customers and sales and increased costs to remedy any problem.

Our products may also contain undetected errors or defects. Errors or defects may be more likely when a product is first introduced or as new versions are released, or when we introduce an acquired company's products. We have experienced these errors or defects in the past in connection with new products, acquired products and product upgrades and we expect that these errors or defects will be found from time to time in the future in new, acquired or enhanced products after commercial release. Defects may cause our products to be vulnerable to attacks, cause them to fail to detect vulnerabilities, or temporarily interrupt customers' networking traffic. Any errors, defects, disruptions in service or other performance problems with our products may damage our customers' businesses and could hurt our reputation. If our products or professional services fail to detect vulnerabilities for any reason, we may incur significant costs, the attention of our key personnel could be diverted, our customers may delay or withhold payment to us or elect not to renew or other significant customer relations problems may arise. We may also be subject to liability claims for damages related to errors or defects in our products. A material liability claim or other occurrence that harms our reputation or decreases market acceptance of our products may harm our business and operating results.

Many federal, state and foreign governments have enacted laws requiring companies to notify individuals of data security breaches involving their personal data. These mandatory disclosures regarding a security breach often lead to widespread negative publicity, and any association of us with such publicity may cause our customers to lose confidence in the effectiveness of our data security solutions. An actual or perceived security breach or theft of the sensitive data of one of our customers, regardless of whether the breach is attributable to the failure of our products or professional services, could adversely affect the market's perception of our offerings and subject us to legal claims.

Our brand, reputation and ability to attract, retain and serve our customers are dependent in part upon the reliable performance of our products and network infrastructure.

Our brand, reputation and ability to attract, retain and serve our customers are dependent in part upon the reliable performance of our products and network infrastructure. We have experienced, and may in the future experience, disruptions, outages and other performance problems due to a variety of factors, including infrastructure changes, human or software errors, capacity constraints and fraud or security attacks. In some instances, we may not be able to identify the cause or causes of these performance problems within an acceptable period of time.

We utilize third-party data centers located in North America, in addition to operating and maintaining certain elements of our own network infrastructure. We also utilize other cloud providers, such as Amazon Web Services, for our Insight Platform infrastructure. Some elements of our complex infrastructure are operated by third parties that we do not control and that could require significant time to replace. We expect this dependence on third parties to continue. More specifically, certain of our products, in particular our cloud-based products, are hosted on cloud providers such as Amazon Web Services, which provides us with computing and storage capacity. Interruptions in our systems or the third-party systems on which we rely, whether due to system failures, computer viruses, physical or electronic break-ins, or other factors, could affect the security or availability of our products, network infrastructure and website.

Prolonged delays or unforeseen difficulties in connection with adding capacity or upgrading our network architecture when required may cause our service quality to suffer. Problems with the reliability or security of our systems could harm our reputation. Damage to our reputation and the cost of remedying these problems could negatively affect our business, financial condition, and operating results.

Additionally, our existing data center facilities and third-party hosting providers have no obligations to renew their agreements with us on commercially reasonable terms or at all, and certain of the agreements governing these relationships may be terminated by either party at any time. If we are unable to maintain or renew our agreements with these providers on commercially reasonable terms or if in the future we add additional data center facilities or third-party hosting providers, we may experience additional costs or downtime or delays as we transition our operations.

Any disruptions or other performance problems with our products could harm our reputation and business and may damage our customers' businesses. Interruptions in our service delivery might reduce our revenue, cause us to issue credits to customers, subject us to potential liability and cause customers to not renew their purchases or our products.

If we fail to manage our operations infrastructure, our customers may experience service outages and/or delays.

Our future growth is dependent upon our ability to continue to meet the expanding needs of our customers and to attract new customers. As existing customers gain more experience with our products, they may broaden their reliance on our products, which will require that we expand our operations infrastructure. We also seek to maintain excess capacity in our operations infrastructure to facilitate the rapid provision of new customer deployments. In addition, we need to properly manage our technological operations infrastructure in order to support changes in hardware and software parameters and the evolution of our products, all of which require significant lead time. If we do not accurately predict our infrastructure requirements, our existing customers may experience service outages that may subject us to financial penalties, financial liabilities and customer losses. If our operations infrastructure fails to keep pace with increased sales, customers may experience delays as we seek to obtain additional capacity, which could adversely affect our reputation and our revenue.

Our business and growth depend substantially on customers renewing their subscriptions with us. Any decline in our customer renewals or failure to convince customers to expand their use of our subscription offerings could adversely affect our future operating results.

Our subscription offerings are sold on a term basis. In order for us to improve our operating results, it is important that our existing customers renew their subscriptions with us when the existing subscription term expires, and renew on the same or more favorable terms. Our customers have no obligation to renew their subscriptions with us and we may not be able to accurately predict customer renewal rates. Our customers' renewal rates may decline or fluctuate as a result of a number of factors, including their satisfaction or dissatisfaction with our new or current product offerings, our pricing, the effects of economic conditions, including due to the global economic uncertainty and financial market conditions caused by the COVID-19 pandemic, competitive offerings, our customers' perception of their exposure, or alterations or reductions in their spending levels. If our customers do not renew their agreements with us or renew on terms less favorable to us, our revenues and results of operations may be adversely impacted.

Our future growth is also affected by our ability to sell additional offerings to our existing customers, which depends on a number of factors, including customers' satisfaction with our products and services and general economic conditions. If our efforts to cross-sell and upsell to our customers are unsuccessful, the rate at which our business grows might decline.

The market for S*ec*urity Operations is new and unproven and may not grow.

We believe our future success will depend in large part on the growth, if any, in the market for Security Operations (SecOps). This market is nascent, and as such, it is difficult to predict important market trends, including the potential growth, if any. To date, the majority of enterprise spend on cyber security has been on threat protection products, such as network, endpoint and web security that are designed to stop threats from penetrating corporate networks. Organizations that use these security products may believe that their existing security solutions sufficiently protect access to their sensitive business data. Therefore, they may continue allocating their cyber security budgets to these products and may not adopt our products and professional services in addition to, or in lieu of, such traditional products. Further, sophisticated cyber attackers are skilled at adapting to new technologies and developing new methods of gaining access to organizations' sensitive business data, and changes in the nature of advanced cyber threats could result in a shift in IT budgets away from products and professional services such as ours. In addition, while recent high visibility attacks on prominent enterprises and governments have increased market awareness of the problem of cyber attacks, if cyber attacks were to decline, or enterprises or governments perceived that the general level of cyber attacks have declined, our ability to attract new customers and expand our sale to existing customers could be materially and adversely affected. If products and professional services such as ours are not viewed by organizations as necessary, or if customers do not recognize the benefit of our offerings as a critical layer of an effective cyber security strategy, our revenue may not grow as quickly as expected, or may decline, and the trading price of our stock could suffer. It is therefore difficult to predict how large the market will be for our solutions.

In addition, it is difficult to predict customer adoption and renewal rates, as well as customer demand for our products and professional services, particularly in light of the ongoing COVID-19 pandemic. As a result of the pandemic, customers may not renew when or as we expect, including electing to reduce the anticipated scope of their subscriptions with us, or requesting payment term deferrals as well as pricing or bundling concessions, which, if significant, could materially and adversely affect our business, results of operations and financial condition. It is also difficult to predict the size and growth rate of the market for SecOps, the entry of competitive products or the success of existing competitive products. Any expansion in our market depends on a number of factors, including the cost, performance and perceived value associated with our offerings and those of our competitors, as well as broader economic conditions. If these offerings do not achieve widespread adoption or there is a reduction in demand for solutions in our market caused by a lack of customer acceptance, technological challenges, competing technologies and products, decreases in corporate spending, weakening economic conditions, or otherwise, it could result in reduced customer orders, early terminations, reduced renewal rates or decreased revenue, any of which would adversely affect our business operations and financial results. You should consider our business and prospects in light of the risks and difficulties we face in this new and unproven market.

We face intense competition in our market.

The market for SecOps solutions is highly fragmented, intensely competitive and constantly evolving. We compete with an array of established and emerging security software and services vendors. With the introduction of new technologies and market entrants, we expect the competitive environment to remain intense going forward. Our primary competitors in Vulnerability Risk Management include Qualys and Tenable; in Incident Detection and Response (SIEM) include Splunk, Micro Focus and LogRhythm; in Application Security include Micro Focus and IBM; in Security Orchestration and Automation Response include Phantom (Splunk) and Demisto (Palo Alto Networks); and finally, while the competition in our professional services business is diverse, our competitors include FireEye's Mandiant, SecureWorks and NCC Group.

Some of our actual and potential competitors have advantages over us, such as longer operating histories, significantly greater financial, technical, marketing or other resources, stronger brand and business user recognition, larger and more mature intellectual property portfolios and broader global distribution and presence. In addition, our industry is evolving rapidly and is becoming increasingly competitive. Larger and more established companies may focus on security operations and could directly compete with us. Smaller companies could also launch new products and services that we do not offer and that could gain market acceptance quickly.

Our competitors may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards or customer requirements. With the introduction of new technologies, the evolution of our offerings and new market entrants, we expect competition to intensify in the future. In addition, some of our larger competitors have substantially broader product offerings and can bundle competing products and services with other software offerings. As a result, customers may choose a bundled product offering from our competitors, even if individual products have more limited functionality than our solutions. These competitors may also offer their products at a lower price as part of this larger sale, which could increase pricing pressure on our offerings and cause the average sales price for our offerings to decline. These larger competitors are also often in a better position to withstand any significant reduction in spending by customers, and will therefore not be as susceptible to economic downturns.

Furthermore, our current and potential competitors may establish cooperative relationships among themselves or with third parties that may further enhance their resources and product and services offerings in the markets we address. In addition, current or potential competitors may be acquired by third parties with greater available resources. As a result of such relationships and acquisitions, our current or potential competitors might be able to adapt more quickly to new technologies and customer needs, devote greater resources to the promotion or sale of their products and services, initiate or withstand substantial price competition, take advantage of other opportunities more readily or develop and expand their product and service offerings more quickly than we do. For all of these reasons, we may not be able to compete successfully against our current or future competitors, or we may be required to expend significant resources in order to remain competitive. If our competitors are more successful than we are in developing new product and service offerings or in attracting and retaining customers, our business, financial condition and results of operations could be adversely affected.

Our sales cycle may be unpredictable.

The timing of sales of our offerings is difficult to forecast because of the length and unpredictability of our sales cycle, particularly with large enterprises and with respect to certain of our products. We sell our products primarily to IT departments that are managing a growing set of user and compliance demands, which has increased the complexity of customer requirements to be met and confirmed during the sales cycle and prolonged our sales cycle. Further, the length of time that potential customers devote to their testing and evaluation, contract negotiation and budgeting processes varies significantly, depending on the size of the organization and nature of the product or service under consideration. In addition, we might devote substantial time and effort to a particular unsuccessful sales effort, and as a result, we could lose other sales opportunities or incur expenses that are not offset by an increase in revenue, which could harm our business.

If we do not continue to innovate and offer products and professional services that address the dynamic threat landscape, we may not remain competitive, and our revenue and operating results could suffer.

The market for SecOps solutions is characterized by rapid technological advances, changes in customer requirements, frequent new product introductions and enhancements and evolving industry standards. Our success also depends, in part, upon our ability to anticipate industry evolution and introduce or acquire new products and professional services to keep pace with technological developments and market requirements both within our industry and in related industries. While we continue to invest significant resources in research and development in order to ensure that our products continue to address the cyber security risks that our customers face, the introduction of products and professional services embodying new technologies could render our existing products or professional services obsolete or less attractive to customers. In addition, developing new products and product enhancements is expensive and time consuming, and there is no assurance that such activities will result in significant cost savings, revenue or other expected benefits. If we spend significant time and effort on research and development and are unable to generate an adequate return on our investment, our business and results of operations may be materially and adversely affected. Further, we may not be able to successfully anticipate or adapt to changing technology or customer requirements or the dynamic threat landscape on a timely basis, in a way that sufficiently differentiates us from competing solutions such that customers choose to purchase our solutions. If any of our competitors implement new technologies before we are able to implement them or better anticipate the innovation opportunities in related industries, those competitors may be able to provide more effective or more cost-effective solutions than ours. In addition, we may experience technical problems and additional costs as we introduce new products and product enhancements, deploy future iterations of our products and integrate new products with existing customer systems. If any of these problems were to arise, our business, financial condition and results of operations could be adversely affected.

To date, we have derived a majority of our revenue from customers using our vulnerability management offerings. If we are unable to renew or increase sales of our vulnerability management offerings, or if we are unable to increase sales of our other offerings, our business and operating results could be adversely affected.

Although we continue to introduce and acquire new products and professional services, we derive and expect to continue to derive a majority of our revenue from customers using certain of our vulnerability management offerings, InsightVM, Nexpose and Metasploit. Greater than half of our revenue was attributable to InsightVM, Nexpose and Metasploit in each of our last three fiscal years. As a result, our operating results could suffer due to:

- any decline in demand for our vulnerability management offerings;
- failure of our vulnerability management offerings to detect vulnerabilities in our customers' IT environments;
- the introduction of products and technologies that serve as a replacement or substitute for, or represent an improvement over, our vulnerability management offerings;
- technological innovations or new standards that our vulnerability management offerings do not address;
- sensitivity to current or future prices offered by us or competing solutions;
- our inability to release enhanced versions of our vulnerability management offerings on a timely basis in response to the dynamic threat landscape; and
- a decline in overall IT spending due to the global economic uncertainty and financial market conditions caused by the COVID-19 pandemic.

Our inability to renew or increase sales of our vulnerability management offerings, including cloud-based subscriptions, content subscriptions, managed services and content and maintenance and support subscriptions, or a decline in prices of our vulnerability management offerings would harm our business and operating results more seriously than if we derived significant revenues from a variety of offerings. In addition, we have introduced several non-VM subscription products, including InsightIDR, InsightAppSec, and InsightConnect. These products are relatively new, and it is uncertain whether they will gain the market acceptance we expect. Any factor adversely affecting sales of our non-VM products or professional services, including release cycles, market acceptance, competition, performance and reliability, reputation and economic and market conditions, could adversely affect our business and operating results.

If we are unable to successfully hire, train, manage and retain qualified personnel, especially those in sales and marketing and research and development, our business may suffer.

We continue to be substantially dependent on our sales force to obtain new customers and increase sales with existing customers. Our ability to successfully pursue our growth strategy will also depend on our ability to attract, motivate and retain our personnel, especially those in sales, marketing and research and development. We face intense competition for these employees from numerous technology, software and other companies, especially in certain geographic areas in which we operate, and we cannot ensure that we will be able to attract, motivate and/or retain sufficient qualified employees in the future. If we are unable to attract new employees and retain our current employees, we may not be able to adequately develop and maintain new products or professional services or market our existing products or professional services at the same levels as our competitors and we may, therefore, lose customers and market share. Our failure to attract and retain personnel, especially those in sales and marketing and research and development positions for which we have historically had a high turnover rate, could have an adverse effect on our ability to execute our business objectives and, as a result, our ability to compete could decrease, our operating results could suffer and our revenue could decrease. Even if we are able to identify and recruit a sufficient number of new hires, these new hires will require significant training before they achieve full productivity and they may not become productive as quickly as we would like or at all.

We believe that our corporate culture has been a critical component to our success. We have invested substantial time and resources in building our team. As we grow and mature as a public company, we may find it difficult to maintain our corporate culture. Any failure to preserve our culture could negatively affect our future success, including our ability to attract, motivate and retain personnel and effectively focus on and pursue our business strategy.

If Metasploit were to be used by attackers to exploit vulnerabilities in the cyber security infrastructures of third parties, our reputation and business could be harmed.

Although Metasploit is a penetration testing tool that is intended to allow organizations to test the effectiveness of their cyber security programs, Metasploit has in the past and may in the future be used to exploit vulnerabilities in the cyber security infrastructures of third parties. While we have incorporated certain features into Metasploit to deter misuse, there is no guarantee that these controls will not be circumvented or that Metasploit will only be used defensively or for research purposes. Any actual or perceived security breach, malicious intrusion or theft of sensitive data in which Metasploit is believed to have been used could adversely affect perception of, and demand for, our offerings. Further, the identification of new exploits and vulnerabilities by the Metasploit community may enhance the knowledge base of cyber attackers or enable them to undertake new forms of attacks. If any of the foregoing were to occur, we could suffer negative publicity and loss of customers and sales, as well as possible legal claims.

A component of our growth strategy is dependent on our continued international expansion, which adds complexity to our operations.

We market and sell our products and professional services throughout the world and have personnel in many parts of the world. For the three months ended March 31, 2020 and 2019, operations located outside of North America generated 17% and 15%, respectively, of our revenue. Our growth strategy is dependent, in part, on our continued international expansion. We expect to conduct a significant amount of our business with organizations that are located outside the United States, particularly in Europe and Asia. We cannot assure you that our expansion efforts into international markets will be successful in creating further demand for our products and professional services or in effectively selling our products and professional services in the international markets that we enter. Our current international operations and future initiatives will involve a variety of risks, including:

- increased management, infrastructure and legal costs associated with having international operations;
- reliance on channel partners;
- trade and foreign exchange restrictions;
- economic or political instability or uncertainty in foreign markets and around the world, such as related to Brexit;
- foreign currency exchange rate fluctuations;
- greater difficulty in enforcing contracts, accounts receivable collection and longer collection periods;
- changes in regulatory requirements, including, but not limited to data privacy, data protection and data security regulations;
- difficulties and costs of staffing and managing foreign operations;
- the uncertainty and limitation of protection for intellectual property rights in some countries;
- costs of compliance with foreign laws and regulations and the risks and costs of non-compliance with such laws and regulations;
- costs of compliance with U.S. laws and regulations for foreign operations, including the U.S. Foreign Corrupt Practices Act, import and export control laws, tariffs, trade barriers, economic sanctions and other regulatory or contractual limitations on our ability to sell or provide our solutions in certain foreign markets, and the risks and costs of non-compliance;
- heightened risks of unfair or corrupt business practices in certain geographies and of improper or fraudulent sales arrangements that may impact financial results and result in restatements of, and irregularities in, financial statements;
- the potential for political unrest, acts of terrorism, hostilities or war;
- management communication and integration problems resulting from cultural differences and geographic dispersion;
- costs associated with language localization of our products;

- increased exposure to natural disasters, acts of war, terrorism, epidemics, or pandemics and other health crises, including the ongoing COVID-19 pandemic; and

- costs of compliance with multiple and possibly overlapping tax structures.

Our business, including the sales of our products and professional services by us and our channel partners, may be subject to foreign governmental regulations, which vary substantially from country to country and change from time to time. Our failure, or the failure by our channel partners, to comply with these regulations could adversely affect our business. Further, in many foreign countries it is common for others to engage in business practices that are prohibited by our internal policies and procedures or U.S. regulations applicable to us. Although we have implemented policies and procedures designed to comply with these laws and policies, there can be no assurance that our employees, contractors, channel partners and agents have complied, or will comply, with these laws and policies. Violations of laws or key control policies by our employees, contractors, channel partners or agents could result in delays in revenue recognition, financial reporting misstatements, fines, penalties or the prohibition of the importation or exportation of our products and could have a material adverse effect on our business and results of operations. If we are unable to successfully manage the challenges of international expansion and operations, our business and operating results could be adversely affected.

We are also monitoring developments related to Brexit, which could have significant implications for our business. Brexit could lead to economic and legal uncertainty, including significant volatility in global stock markets and currency exchange rates, and differing laws and regulations as the United Kingdom determines which European Union laws to replace or replicate. In particular, although the United Kingdom enacted a Data Protection Act in May 2018 that is consistent with the EU General Data Protection Regulation, uncertainty remains regarding how data transfers to and from the United Kingdom will be regulated. Any of these effects of Brexit, among others, could adversely affect our operations in the United Kingdom and our financial results.

Because our products collect and store user and related information, domestic and international privacy and cyber security concerns, and other laws and regulations, could result in additional costs and liabilities to us or inhibit sales of our products.

We, and our customers, are subject to a number of domestic and international laws and regulations that apply to online services and the internet generally. These laws, rules and regulations address a range of issues including data privacy and cyber security, and restrictions or technological requirements regarding the collection, use, storage, protection, retention or transfer of data. The regulatory framework for online services, data privacy and cyber security issues worldwide can vary substantially from jurisdiction to jurisdiction, is rapidly evolving and is likely to remain uncertain for the foreseeable future. Many federal, state and foreign government bodies and agencies have adopted or are considering adopting laws, rules and regulations regarding the collection, use, storage and disclosure of information, web browsing and geolocation data collection, data analytics, cyber security and breach notification procedures. Interpretation of these laws, rules and regulations and their application to our products and professional services in the United States and foreign jurisdictions is ongoing and cannot be fully determined at this time.

In the United States, these include rules and regulations promulgated under the authority of the Federal Trade Commission, the Electronic Communications Privacy Act, Computer Fraud and Abuse Act, the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the Gramm Leach Bliley Act and state breach notification laws, as well as regulator enforcement positions and expectations reflected in federal and state regulatory actions, settlements, consent decrees and guidance documents. In June 2018, California enacted the California Consumer Privacy Act (CCPA), which took effect on January 1, 2020. The CCPA requires a broad range of companies that do business in California to honor the requests of California residents to access and require deletion of their personal information, opt out of certain personal information sharing and receive detailed information about how their personal information is used and shared. The CCPA provides for civil penalties of up to $7,500 for violations, and a private right of action for data breaches that allows private plaintiffs to seek the greater of actual damages or statutory damages of up to $750 per affected consumer per data breach. These statutory remedies are expected to prompt an increase in data breach litigation and the cost to resolve it. The CCPA has prompted a number of proposals for new federal and state privacy legislation in the United States that, if passed, could increase our potential liability, increase our compliance costs and adversely affect our business.

Internationally, virtually every jurisdiction in which we operate has established its own data security and privacy legal frameworks with which we, and/or our customers, must comply, including the European Union's General Data Protection Regulation, (EU) 2016/679 (GDPR), which went into effect in May 2018 and is designed to update current privacy laws to better reflect the digital economy and to unify data protection within the European Union (EU) under a single law and laws implemented by EU member states which contain derogations from, or exemptions or authorizations for the purposes of, the GDPR, or which are otherwise intended to supplement the GDPR and any legislation that replaces or converts into domestic law the GDPR or any other law relating to data protection, the processing of personal data and privacy as a consequence of the United Kingdom leaving the EU. The GDPR presents significantly greater risks, compliance burdens and costs for companies with users and operations in the European Union. Under the GDPR, fines of up to 20 million euros or up to 4% of the annual global turnover of the infringer, whichever is greater, could be imposed for significant non-compliance. These laws are broad in their application and apply when we do business with EU-based customers and when our U.S.-based customers collect and use personal data that originates from individuals resident in the EU. They also apply to transfers of information between us and our EU-based subsidiaries, including employee information. Further, many U.S. federal and state and other foreign government bodies and agencies have introduced, and are currently considering, additional laws and regulations. Non-compliance with these laws could result in penalties or significant legal liability. We could be adversely affected if legislation or regulations are expanded to require changes in our business practices or if governing jurisdictions interpret or implement their legislation or regulations in ways that negatively affect our business, results of operations or financial condition.

In addition, to facilitate the transfer of both customer and personnel data from the European Union to the United States, we self-certified under the EU-US Privacy Shield framework on December 20, 2016. However, it is possible that the Privacy Shield may be challenged in the future, so there is some uncertainty regarding its future validity and our ability to rely on it for EU to U.S. data transfers. The EU is monitoring the arrangement, and the EU Commissioner and the U.S. Department of Commerce carry out annual joint reviews to assess whether it continues to ensure an adequate level of protection of personal data, the most recent of which took place in October 2019. Non-compliance with the transfer restrictions could result in the EU data protection authorities imposing a number of different sanctions on us until we do, including fines and, ultimately, a prohibition on transfers.

In addition to government regulation, privacy advocates and industry groups may propose new and different self-regulatory standards that either legally or contractually apply to us. Because the interpretation and application of privacy and data protection laws are still uncertain, it is possible that these laws may be interpreted and applied in a manner that is inconsistent with our existing practices or the features of our products. We may also be subject to claims of liability or responsibility for the actions of third parties with whom we interact or upon whom we rely in relation to various services, including but not limited to vendors and business partners. If so, in addition to the possibility of fines, lawsuits and other claims, we could be required to fundamentally change our business activities and practices or modify our products, which could have an adverse effect on our business. Any inability to adequately address privacy concerns, even if unfounded, or comply with applicable privacy or data protection laws, regulations and policies, could result in additional cost and liability to us, damage our reputation, inhibit sales and adversely affect our business.

The costs of compliance with, and other burdens imposed by, the laws, rules, regulations and policies that are applicable to the businesses of our customers may limit the use and adoption of, and reduce the overall demand for, our software. Privacy or cyber security concerns, whether valid or not valid, may inhibit market adoption of our products particularly in certain industries and foreign countries.

Further, there are active legislative discussions regarding the implementation of laws or regulations that could restrict the manner in which security research is conducted and that could restrict or possibly bar the conduct of penetration testing and the use of exploits, which are an essential component of our Metasploit product and our business strategy more generally. Our failure to comply with existing laws, rules or regulations, changes to existing laws or their interpretation, or the imposition of new laws, rules or regulations, could result in additional costs and may necessitate changes to our business practices and divergent operating models, which may have a material and adverse impact on our business, results of operations, and financial condition.

Organizations may be reluctant to purchase our cloud-based offerings due to the actual or perceived vulnerability of cloud solutions.

Some organizations have been reluctant to use cloud solutions for cyber security, such as our InsightVM, InsightIDR, InsightAppSec and InsightConnect, because they have concerns regarding the risks associated with the reliability or security of the technology delivery model associated with this solution. If we or other cloud service providers experience security incidents, breaches of customer data, disruptions in service delivery or other problems, the market for cloud solutions as a whole may be negatively impacted, which could harm our business.

As a cyber security provider, we are a target of cyber attacks and other cyber risks that could adversely impact our reputation and operating results.

We sell cyber security and data analytics products. As a result, we have been and will be a target of cyber attacks designed to impede the performance of our products, penetrate our network security or the security of our cloud platform or our internal systems, or that of our customers, misappropriate proprietary information and/or cause interruptions to our services. For example, because Metasploit serves as an introduction to hacking for many individuals, a successful cyber attack on us may be perceived as a victory for the cyber attacker, thereby increasing the likelihood that we may be a target of cyber attacks, even absent financial motives. Further, if our systems are breached as a result of third-party action, employee error or misconduct, attackers could learn critical information about how our products operate to help protect our customers' IT infrastructures from cyber risk, thereby making our customers more vulnerable to cyber attacks. In addition, if actual or perceived breaches of our network security occur, they could adversely affect the market perception of our products, negatively affecting our reputation, and may expose us to the loss of our proprietary information or information belonging to our customers, investigations or litigation and possible liability, including injunctive relief and monetary damages. Such security breaches could also divert the efforts of our technical and management personnel. In addition, such security breaches could impair our ability to operate our business and provide products to our customers. If this happens, our reputation could be harmed, our revenue could decline and our business could suffer.

Additionally, we cannot be certain that our insurance coverage will be adequate for data security liabilities actually incurred, will cover any indemnification claims against us relating to any incident, that insurance will continue to be available to us on economically reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim. The successful assertion of one or more large 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.

We recognize a significant percentage of our revenue ratably over the term of our agreements with customers, and as a result, downturns or upturns in sales may not be immediately reflected in our operating results.

We recognize a significant percentage of our revenue ratably over the various terms of our agreements with customers. As a result, a substantial portion of the revenue that we report in each period will be derived from the recognition of deferred revenue relating to agreements entered into during previous periods. Consequently, a decline in new sales or renewals in any one period may not be immediately reflected in our revenue results for that period. This decline, however, will negatively affect our revenue in future periods. Accordingly, the effect of significant downturns in sales and market acceptance of our products and potential changes in our rate of renewals may not be fully reflected in our results of operations until future periods. Our model also makes it difficult for us to rapidly increase our revenue through additional sales in any period, as revenue from new customers generally will be recognized over the applicable term.

We also intend to increase our investment in research and development, sales and marketing, and general and administrative functions and other areas to grow our business. We are likely to recognize the costs associated with these increased investments earlier than some of the anticipated benefits and the return on these investments may be lower, or may develop more slowly, than we expect, which could adversely affect our operating results.

We may be unable to rapidly and efficiently adjust our cost structure in response to significant revenue declines, which could adversely affect our operating results.

If our customers are unable to implement our products successfully, customer perceptions of our offerings may be impaired or our reputation and brand may suffer.

Our products are deployed in a wide variety of IT environments, including large-scale, complex infrastructures. Some of our customers have experienced difficulties implementing our products in the past and may experience implementation difficulties in the future. If our customers are unable to implement our products successfully, customer perceptions of our offerings may be impaired or our reputation and brand may suffer.

In addition, in order for our products to achieve their functional potential, our products must effectively integrate into our customers' IT infrastructures, which have different specifications, utilize varied protocol standards, deploy products from multiple different vendors and contain multiple layers of products that have been added over time. Our customers' IT infrastructures are also dynamic, with a myriad of devices and endpoints entering and exiting the customers' IT systems on a regular basis, and our products must be able to effectively adapt to and track these changes.

Any failure by our customers to appropriately implement our products or any failure of our products to effectively integrate and operate within our customers' IT infrastructures could result in customer dissatisfaction, impact the perceived reliability of our products, result in negative press coverage, negatively affect our reputation and harm our financial results.

Acquisitions could disrupt our business and harm our financial condition and operating results.

In order to remain competitive, we have in the past and may in the future seek to acquire additional businesses, products or technologies. We also may not find suitable acquisition candidates, and acquisitions we complete may be unsuccessful.

Achieving the anticipated benefits of past or future acquisitions will depend in part upon whether we can integrate acquired operations, products and technology in a timely and cost-effective manner and successfully market and sell these as new product offerings, or as new features within our existing offerings. For example, on May 1, 2020 we acquired DivvyCloud, a CSPM, platform that enables visibility, automation, and continuous security governance across multi-cloud environments. Some of our acquisitions could improve the capabilities of our existing offerings or platform, as opposed to becoming a new offering. The acquisition of DivvyCloud is intended to extend the cloud security capabilities of our Insight Platform, helping security and DevOps teams understand and manage governance, risk and security in their growing cloud environments. The integration of DivvyCloud and any other acquisition may prove to be difficult due to the necessity of coordinating geographically separate organizations and integrating personnel with disparate business backgrounds and accustomed to different corporate cultures. The acquisition and integration processes are complex, expensive and time consuming, and may cause an interruption of, or loss of momentum in, product development, sales activities and operations of both companies. Further, we may be unable to retain key personnel of an acquired company following the acquisition, including certain employees which we acquired in connection with our acquisition of DivvyCloud. If we are unable to effectively execute or integrate acquisitions, our business, financial condition and operating results could be adversely affected.

In addition, we may only be able to conduct limited due diligence on an acquired company's operations or may discover that the products or technology acquired were not as capable as we thought based upon the initial or limited due diligence. Following an acquisition, we may be subject to unforeseen liabilities arising from an acquired company's past or present operations and these liabilities may be greater than the warranty and indemnity limitations that we negotiate. Any unforeseen liability that is greater than these warranty and indemnity limitations could have a negative impact on our financial condition.

We may be unable to realize the anticipated benefits of the acquisition of DivvyCloud or those benefits may take longer to realize than expected.

The acquisition of DivvyCloud involves the combination of two companies that have historically operated independently. In order to realize the anticipated benefits of such acquisition, we will be required to devote significant management attention and resources to align the business practices, supply chains, cultures and operations of each business. We may encounter difficulties as we attempt to integrate the businesses in a manner that permits us to achieve the cost savings, synergies, business opportunities, growth prospects and other benefits anticipated to result from the acquisition of DivvyCloud. Accordingly, the contemplated benefits of such acquisition may not be realized fully, or at all, or may take longer to realize than expected. In addition, even if the DivvyCloud is integrated successfully, the anticipated benefits of such acquisition may not be realized, including the sales or growth opportunities that are anticipated. Further, additional unanticipated costs may be incurred in the integration process.

DivvyCloud may underperform relative to our expectations.

We may not be able to maintain the growth rate, levels of revenue, earnings or operating efficiency that we and DivvyCloud have achieved or might achieve separately. The business and financial performance of DivvyCloud are subject to certain risks and uncertainties. Our failure to maintain the growth rate, levels of revenue, earnings or operating efficiency could have a material adverse effect on our financial condition and results of operations.

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

Our success is dependent in part upon establishing and maintaining relationships with a variety of channel partners that we utilize to extend our geographic reach and market penetration. We anticipate that we will continue to rely on these partners in order to help facilitate sales of our offerings as part of larger purchases in the United States and to grow our business internationally. For 2019, 2018 and 2017, we derived approximately 43%, 39%, and 37%, respectively, of our revenue from sales of products and professional services through channel partners, and the percentage of revenue derived from channel partners may increase in future periods. Our agreements with our channel partners are non-exclusive and do not prohibit them from working with our competitors or offering competing solutions, and some of our channel partners may have more established relationships with our competitors. If our channel partners choose to place greater emphasis on products of their own or those offered by our competitors or do not effectively market and sell our products and professional services, our ability to grow our business and sell our products and professional services, particularly in key international markets, may be adversely affected. In addition, our failure to recruit additional channel partners, or any reduction or delay in their sales of our products and professional services or conflicts between channel sales and our direct sales and marketing activities may harm our results of operations. Finally, even if we are successful, our relationships with channel partners may not result in greater customer usage of our products and professional services or increased revenue.

If we are not able to maintain and enhance our brand, our business and operating results may be adversely affected.

We believe that maintaining and enhancing our brand identity is critical to our relationships with our customers and channel partners and to our ability to attract new customers and channel partners. The successful promotion of our brand will depend largely upon our marketing efforts, our ability to continue to offer high-quality offerings and our ability to successfully differentiate our offerings from those of our competitors. Our brand promotion activities may not be successful or yield increased revenues. In addition, independent industry analysts often provide reviews of our offerings, as well as those of our competitors, and perception of our offerings in the marketplace may be significantly influenced by these reviews. If these reviews are negative, or less positive as compared to those of our competitors' products and professional services, our brand may be adversely affected.

Moreover, it may be difficult to maintain and enhance our brand in connection with sales through channel or strategic partners. The promotion of our brand requires us to make substantial expenditures, and we anticipate that the expenditures will increase as our market becomes more competitive, as we expand into new markets and as more sales are generated through our channel partners. To the extent that these activities yield increased revenues, these revenues may not offset the increased expenses we incur. If we do not successfully maintain and enhance our brand, our business may not grow, we may have reduced pricing power relative to competitors with stronger brands, and we could lose customers and channel partners, all of which would adversely affect our business operations and financial results.

Failure to maintain high-quality customer support could have a material adverse effect on our business.

Once our products are deployed within our customers' networks, our customers depend on our technical and other customer support services to resolve any issues relating to the implementation and maintenance of our products. If we do not effectively assist our customers in deploying our products, help our customers quickly resolve post-deployment issues or provide effective ongoing support, our ability to renew or sell additional products or professional services to existing customers would be adversely affected and our reputation with potential customers could be damaged. Further, to the extent that we are unsuccessful in hiring, training and retaining adequate technical and customer success personnel, our ability to provide adequate and timely support to our customers will be negatively impacted, and our customers' satisfaction with our offerings will be adversely affected.

We are dependent on the continued services and performance of our senior management and other key employees, the loss of any of whom could adversely affect our business, operating results and financial condition.

Our future performance depends on the continued services and contributions of our senior management, particularly Corey Thomas, our Chief Executive Officer, and other key employees to execute on our business plan and to identify and pursue new opportunities and product innovations. From time to time, there may be changes in our senior management team resulting from the termination or departure of our executive officers and key employees. Our senior management and key employees are employed on an at-will basis, which means that they could terminate their employment with us at any time. Further, members of our management and other key personnel in critical functions across our organization may be unable to perform their duties or have limited availability due to COVID-19. The temporary or permanent loss of the services of our senior management, particularly Mr. Thomas, or other key employees for any reason could significantly delay or prevent the achievement of our development and strategic objectives and harm our business, financial condition and results of operations.

We rely on third-party software to operate certain functions of our business.

We rely on software vendors to operate certain critical functions of our business, including financial management, customer relationship management and human resource management. If we experience difficulties in implementing new software or if these services become unavailable due to extended outages or interruptions or because they are no longer available on commercially reasonable terms or prices, our expenses could increase, our ability to manage our finances could be interrupted and our processes for managing sales of our solutions and supporting our customers could be impaired until equivalent services, if available, are identified, obtained and integrated, all of which could harm our business.

We use third-party software and data that may be difficult to replace or that may cause errors or failures of our solutions, which could lead to lost customers or harm to our reputation and our operating results.

We license third-party software and security and compliance data from various third parties that are used in our solutions in order to deliver our offerings. In the future, this software or data may not be available to us on commercially reasonable terms, or at all. Any loss of the right to use any of this software or data could result in delays in the provisioning of our offerings until equivalent technology or data is either developed by us, or, if available, is identified, obtained and integrated, which could harm our business. In addition, any errors or defects in or failures of this third-party software could result in errors or defects in our products or cause our products to fail, which could harm our business and be costly to correct. Many of these providers attempt to impose limitations on their liability for such errors, defects or failures, and if enforceable, we may have additional liability to our customers or third-party providers that could harm our reputation and increase our operating costs.

We will need to maintain our relationships with third-party software and data providers, and to obtain software and data from such providers that do not contain errors or defects. Any failure to do so could adversely impact our ability to deliver effective solutions to our customers and could harm our operating results.

Our products contain third-party open source software components, and our failure to comply with the terms of the underlying open source software licenses could restrict our ability to sell our products.

Our products contain software licensed to us by third parties under so-called "open source" licenses, including the GNU General Public License, the GNU Lesser General Public License, the BSD License, the Apache License and others. From time to time, there have been claims against companies that distribute or use open source software in their products and services, asserting that such open source software infringes the claimants' intellectual property rights. We could be subject to suits by parties claiming that what we believe to be licensed open source software infringes their intellectual property rights. Use and distribution of open source software may entail greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. In addition, certain open source licenses require that source code for software programs that are subject to the license be made available to the public and that any modifications or derivative works to such open source software continue to be licensed under the same terms.

Although we monitor our use of open source software in an effort both to comply with the terms of the applicable open source licenses and to avoid subjecting our products to conditions we do not intend, the terms of many open source licenses have not been interpreted by U.S. courts, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our products. The terms of certain open source licenses require us to release the source code of our applications and to make our applications available under those open source licenses if we combine or distribute our applications with open source software in a certain manner. In the event that portions of our applications are determined to be subject to an open source license, we could be required to publicly release the affected portions of our source code, re-engineer all, or a portion of, those applications or otherwise be limited in the licensing of our applications. Disclosing our proprietary source code could allow our competitors to create similar products with lower development effort and time and ultimately, could result in a loss of sales for us. Disclosing the source code of our proprietary software could also make it easier for cyber attackers and other third parties to discover vulnerabilities in or to defeat the protections of our products, which could result in our products failing to provide our customers with the security they expect. Any of these events could have a material adverse effect on our business, operating results and financial condition.

Our technology alliance partnerships expose us to a range of business risks and uncertainties that could have a material adverse impact on our business and financial results.

We have entered, and intend to continue to enter, into technology alliance partnerships with third parties to support our future growth plans, including with certain of our actual or potential competitors. For example, through these technology alliance partnerships, we integrate with certain third-party application program interfaces (APIs), which enhance our data collection capabilities in our customers' IT environments. If these third parties no longer allow us to integrate with their APIs, or if we determine not to maintain these integrations, the functionality of our products may be reduced and our products may not be as marketable to certain potential customers. Technology alliance partnerships require significant coordination between the parties involved, particularly if a partner requires that we integrate its products with our products. Further, we have invested and will continue to invest significant time, money and resources to establish and maintain relationships with our technology alliance partners, but we have no assurance that any particular relationship will continue for any specific period of time, result in new offerings that we can effectively commercialize or result in enhancements to our existing offerings. In addition, while we believe that entering into technology alliance partnerships with certain of our actual or potential competitors is currently beneficial to our competitive position in the market, such partnerships may also give our competitors insight into our offerings that they may not otherwise have, thereby allowing them to compete more effectively against us.

The continued utility of Metasploit depends in part on the continued contributions from security researchers.

Our Metasploit product relies on information provided by an active community of security researchers who contribute new exploits, attacks and vulnerabilities. We expect that the continued contributions from these third parties will both enhance the robustness of Metasploit and also support our sales and marketing efforts. However, to the extent that the information provided by these third parties is inaccurate or malicious, the potential for false indications of security vulnerabilities and susceptibility to attack increases, which could adversely impact market acceptance of our products and professional services and could result in negative publicity, loss of customers and sales and increased costs to remedy any problem. Further, to the extent that our community of third parties is reduced in size or participants become less active, we may lose valuable insight into the dynamic threat landscape and our ability to quickly respond to new exploits, attacks and vulnerabilities may be reduced.

If our products fail to help our customers achieve and maintain compliance with regulations and/or industry standards, our revenue and operating results could be harmed.

We generate a portion of our revenue from our vulnerability management offerings that help organizations achieve and maintain compliance with regulations and industry standards both domestically and internationally. For example, many of our customers subscribe to our vulnerability management offerings to help them comply with the security standards developed and maintained by the Payment Card Industry Security Standards Council (the PCI Council), which apply to companies that process, transmit or store cardholder data. In addition, our vulnerability management offerings are used by customers in the health care industry to help them comply with numerous federal and state laws and regulations related to patient privacy. In particular, HIPAA, and the 2009 Health Information Technology for Economic and Clinical Health Act include privacy standards that protect individual privacy by limiting the uses and disclosures of individually identifiable health information and implementing data security standards. The foregoing and other state, federal and international legal and regulatory regimes may affect our customers' requirements for, and demand for, our products and professional services. Governments and industry organizations, such as the PCI Council, may also adopt new laws, regulations or requirements, or make changes to existing laws or regulations, that could impact the demand for, or value of, our products. If we are unable to adapt our products to changing legal and regulatory standards or other requirements in a timely manner, or if our products fail to assist with, or expedite, our customers' cyber security defense and compliance efforts, our customers may lose confidence in our products and could switch to products offered by our competitors or threaten or bring legal actions against us. In addition, if laws, regulations or standards related to data security, vulnerability management and other IT security and compliance requirements are relaxed or the penalties for non-compliance are changed in a manner that makes them less onerous, our customers may view government and industry regulatory compliance as less critical to their businesses, and our customers may be less willing to purchase our products. In any of these cases, our revenue and operating results could be harmed.

In addition, government and other customers may require our products to comply with certain privacy, security or other certifications and standards. If our products are late in achieving or fail to achieve or maintain compliance with these certifications and standards, or our competitors achieve compliance with these certifications and standards, we may be disqualified from selling our products to such customers, or may otherwise be at a competitive disadvantage, either of which would harm our business, results of operations, and financial condition.

A portion of our revenue is generated by sales to government entities, which are subject to a number of challenges and risks.

Selling to government entities can be highly competitive, expensive and time consuming, and often requires significant upfront time and expense without any assurance that we will win a sale. Government demand and payment for our products and professional services may also be impacted by public sector budgetary cycles and funding authorizations, with funding reductions or delays adversely affecting public sector demand for our offerings. Government entities also have heightened sensitivity surrounding the purchase of cyber security solutions due to the critical importance of their IT infrastructures, the nature of the information contained within those infrastructures and the fact that they are highly-visible targets for cyber attacks. Accordingly, increasing sales of our products and professional services to government entities may be more challenging than selling to commercial organizations. Further, in the course of providing our products and professional services to government entities, our employees and those of our channel partners may be exposed to sensitive government information. Any failure by us or our channel partners to safeguard and maintain the confidentiality of such information could subject us to liability and reputational harm, which could materially and adversely affect our results of operations and financial performance.

The phaseout of LIBOR, or the replacement of LIBOR with a different reference rate, may adversely affect interest rates.

On July 27, 2017, the Financial Conduct Authority (the authority that regulates LIBOR) announced that it would phase out LIBOR by the end of 2021. It is unclear whether new methods of calculating LIBOR will be established such that it continues to exist after 2021, or if alternative rates or benchmarks will be adopted. Changes in the method of calculating LIBOR, or the replacement of LIBOR with an alternative rate or benchmark, may adversely affect interest rates and result in higher borrowing costs. This could materially and adversely affect our results of operations, cash flows and liquidity. We cannot predict the effect of the potential changes to LIBOR or the establishment and use of alternative rates or benchmarks. We may need to renegotiate our senior secured credit facility or incur other indebtedness, and changes in the method of calculating LIBOR, or the use of an alternative rate or benchmark, may negatively impact the terms of such indebtedness. If changes are made to the method of calculating LIBOR or LIBOR ceases to exist, we may need to amend certain contracts, including our senior secured credit facility, and we cannot predict what alternative rate or benchmark would be negotiated. This may result in an increase to our interest expense.

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

Our reporting currency is the U.S. dollar and we generate a majority of our revenue in U.S. dollars. However, for each of the three months ended March 31, 2020 and 2019 we incurred 12% of our expenses outside of the United States in foreign currencies, primarily the British pound sterling and euro, principally with respect to salaries and related personnel expenses associated with our sales and research and development operations. Additionally, for the three months ended March 31, 2020 and 2019, 8% and 7%, respectively, of our revenue was generated in foreign currencies. Accordingly, changes in exchange rates may have an adverse effect on our business, operating results and financial condition. The exchange rate between the U.S. dollar and foreign currencies has fluctuated in recent years and may fluctuate substantially in the future. Furthermore, a strengthening of the U.S. dollar could increase the cost in local currency of our products and services to customers outside the United States, which could adversely affect our business, results of operations, financial condition and cash flows. To date, we have not engaged in any hedging strategies, and any such strategies, such as forward contracts, options and foreign exchange swaps related to transaction exposures that we may implement to mitigate this risk may not eliminate our exposure to foreign exchange fluctuations.

Changes in financial accounting standards may adversely impact our reported results of operations.

A change in accounting standards or practices could adversely affect our operating results and may even affect our reporting of transactions completed before the change is effective. New accounting pronouncements and varying interpretations of accounting pronouncements have occurred and may occur in the future. Changes to existing rules or the questioning of current practices may adversely affect our operating results.

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

We intend to continue to make investments to support our business growth and may require additional funds to respond to business challenges, including the need to develop new features or enhance our products, improve our operating infrastructure or acquire complementary businesses and technologies. Accordingly, we may need to engage in equity or debt financings to secure additional funds. If we raise additional funds through future issuances of equity or convertible debt securities, our existing stockholders could suffer significant dilution, and any new equity securities we issue could have rights, preferences and privileges superior to those of holders of our common stock. Any debt financing that we may secure in the future could involve restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. We may not be able to obtain additional financing on terms favorable to us, if at all. For example, while the potential impact and duration of the COVID-19 pandemic on the global economy and our business in particular may be difficult to assess or predict, the pandemic has resulted in, and may continue to result in significant disruption of global financial markets, reducing our ability to access capital, which could in the future negatively affect our liquidity. Although we expect that current cash and cash equivalent balances and cash flows that are generated from operations will be sufficient to meet our domestic and international working capital needs and other capital and liquidity requirements for at least the next 12 months, if we are unable to obtain adequate financing or financing on terms satisfactory to us if and when we require it, our ability to continue to support our business growth and to respond to business challenges could be significantly impaired, and our business may be adversely affected.

Risks Related to Intellectual Property, Litigation, Government Regulation, Data Collection and Catastrophic Events

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

Our success and competitive position depend in part on our ability to protect our intellectual property and proprietary technologies. To safeguard these rights, we rely on a combination of patent, trademark, copyright and trade secret laws and contractual protections in the United States and other jurisdictions, all of which provide only limited protection and may not now or in the future provide us with a competitive advantage.

We cannot assure you that any patents will issue from any patent applications, that patents that issue from such applications will give us the protection that we seek or that any such patents will not be challenged, invalidated, or circumvented. Any patents that may issue in the future from our pending or future patent applications may not provide sufficiently broad protection and may not be enforceable in actions against alleged infringers. We have registered the “Rapid7,” “Nexpose” and “Metasploit” names and logos in the United States and certain other countries. We have registrations and/or pending applications for additional marks in the United States and other countries; however, we cannot assure you that any future trademark registrations will be issued for pending or future applications or that any registered trademarks will be enforceable or provide adequate protection of our proprietary rights. While we have copyrights in our software, we do not typically register such copyrights with the Copyright Office. This failure to register the copyrights in our software may preclude us from obtaining statutory damages for infringement under certain circumstances. We also license software from third parties for integration into our products, including open source software and other software available on commercially reasonable terms. We cannot assure you that such third parties will maintain such software or continue to make it available.

In order to protect our unpatented proprietary technologies and processes, we rely on trade secret laws and confidentiality agreements with our employees, consultants, channel partners, vendors and others. Despite our efforts to protect our proprietary technology and trade secrets, unauthorized parties may attempt to misappropriate, reverse engineer or otherwise obtain and use them. In addition, others may independently discover our trade secrets, in which case we would not be able to assert trade secret rights, or develop similar technologies and processes. Further, the contractual provisions that we enter into may not prevent unauthorized use or disclosure of our proprietary technology or intellectual property rights and may not provide an adequate remedy in the event of unauthorized use or disclosure of our proprietary technology or intellectual property rights. Moreover, policing unauthorized use of our technologies, trade secrets and intellectual property is difficult, expensive and time-consuming, particularly in foreign countries where the laws may not be as protective of intellectual property rights as those in the United States and where mechanisms for enforcement of intellectual property rights may be weak. We may be unable to determine the extent of any unauthorized use or infringement of our solutions, technologies or intellectual property rights.

From time to time, legal action by us may be necessary to enforce our patents and other intellectual property rights, to protect our trade secrets, to determine the validity and scope of the intellectual property rights of others or to defend against claims of infringement or invalidity. Such litigation could result in substantial costs and diversion of resources and could result in impairment or loss of portions of our intellectual property. Furthermore, 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 failure to secure, protect and enforce our intellectual property rights could negatively affect our brand and adversely impact our business, operating results and financial condition.

Assertions by third parties of infringement or other violations by us of their intellectual property rights, whether or not correct, could result in significant costs and harm our business and operating results.

Patent and other intellectual property disputes are common in our industry. We are periodically involved in disputes brought by non-practicing entities alleging patent infringement and we may, from time to time, be involved in other such disputes in the ordinary course of our business. Some companies, including some of our competitors, own large numbers of patents, copyrights and trademarks, which they may use to assert claims against us. Many of these companies have the capability to dedicate substantially greater resources to enforce their intellectual property rights. Third parties have in the past and may in the future assert claims of infringement, misappropriation or other violations of intellectual property rights against us and we are currently involved in legal proceedings with Finjan, Inc., which has filed a complaint against us and our wholly-owned subsidiary, Rapid7 LLC, in the United States District Court, District of Delaware, alleging patent infringement. Third parties may also assert claims against our customers or channel partners, whom we typically indemnify against claims that our solutions infringe, misappropriate or otherwise violate the intellectual property rights of third parties. As the numbers of products and competitors in our market increase and overlaps occur, claims of infringement, misappropriation and other violations of intellectual property rights may increase. Any claim of infringement, misappropriation or other violation of intellectual property rights by a third party, even those without merit, could cause us to incur substantial costs defending against the claim and could distract our management from our business.

The patent portfolios of our most significant competitors are larger than ours. This disparity may increase the risk that they may sue us for patent infringement and may limit our ability to counterclaim for patent infringement or settle through patent cross-licenses. In addition, future assertions of patent rights by third parties, and any resulting litigation, may involve patent holding companies or other adverse patent owners who have no relevant product revenues and against whom our own patents may therefore provide little or no deterrence or protection. There can be no assurance that we will not be found to infringe or otherwise violate any third-party intellectual property rights or to have done so in the past.

An adverse outcome of a dispute may require us to:

- pay substantial damages, including treble damages, if we are found to have willfully infringed a third party’s patents or copyrights;
- cease making, licensing or using solutions that are alleged to infringe or misappropriate the intellectual property of others;

- expend additional development resources to attempt to redesign our solutions or otherwise develop non-infringing technology, which may not be successful;
- enter into potentially unfavorable royalty or license agreements in order to obtain the right to use necessary technologies or intellectual property rights; and
- indemnify our partners and other third parties.

In addition, royalty or licensing agreements, if required or desirable, may be unavailable on terms acceptable to us, or at all, and may require significant royalty payments and other expenditures. Some licenses may also be non-exclusive, and therefore, our competitors may have access to the same technology licensed to us.

Any of the foregoing events could seriously harm our business, financial condition and results of operations.

We are subject to governmental export and import controls that could impair our ability to compete in international markets and/or subject us to liability if we are not in compliance with applicable laws.

Like other U.S.-based IT security products, our products are subject to U.S. export control and import laws and regulations, including the U.S. Export Administration Regulations and various economic and trade sanctions regulations administered by the U.S. Treasury Department’s Office of Foreign Assets Control. Exports of these products must be made in compliance with these laws and regulations. Compliance with these laws and regulations is complex, and if we were to fail to comply with these laws and regulations, we and certain of our employees could be subject to substantial civil and criminal penalties, including fines for our company and responsible employees or managers, and, in extreme cases, incarceration of responsible employees and managers and the possible loss of export privileges. Complying with export control laws and regulations, including obtaining the necessary licenses or authorizations, for a particular sale may be time-consuming, is not guaranteed and may result in the delay or loss of sales opportunities. Changes in export or import laws and regulations, shifts in the enforcement or scope of existing laws and regulations, or changes in the countries, governments, persons, products or services targeted by such laws and regulations, could also result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or potential customers. A decreased use of our products or limitation on our ability to export or sell our products could adversely affect our business, financial condition and results of operations.

We also incorporate encryption technology into our products. These encryption products may be exported outside of the United States only with the required export authorizations, including by a license, a license exception or other appropriate government authorizations, including the filing of a product classification request. In addition, various countries regulate the import and domestic use of certain encryption technology, including through import permitting and licensing requirements, and have enacted laws that could limit our ability to distribute our products or could limit our customers’ ability to implement our products in those countries. Governmental regulation of encryption technology and regulation of imports or exports of encryption products, or our failure to obtain required import or export approval for our products, when applicable, could harm our international sales and adversely affect our revenue. Compliance with applicable laws and regulations regarding the export and import of our products, including with respect to new products or changes in existing products, may create delays in the introduction of our products in international markets, prevent our customers with international operations from deploying our products globally or, in some cases, could prevent the export or import of our products to certain countries, governments, entities or persons altogether.

Further, U.S. export control laws and economic sanctions prohibit the shipment of certain products and services to U.S. embargoed or sanctioned countries, governments or persons. Although we take precautions to prevent our products from being provided to those subject to U.S. sanctions, such measures may be circumvented and we have in the past identified limited instances of non-compliance with these rules. After these instances were disclosed to U.S. authorities, those authorities decided to not bring enforcement actions against or impose penalties on us.

Finally, in recent years, there have been multinational efforts to impose additional restrictions on certain cyber security products that could include commercial versions of Metasploit. Such restrictions have been imposed by individual countries, but are not currently in effect in the United States. The implementation of such restrictions could adversely affect our business, financial condition and results of operations. We are closely monitoring these efforts and are prepared to work with interested parties and/or stakeholders with respect to the implementation of restrictions potentially applicable to our products.

Failure to comply with governmental laws and regulations could harm our business.

Our business is subject to regulation by various federal, state, local and foreign governments. In certain jurisdictions, these regulatory requirements may be more stringent than those in the United States. Noncompliance with applicable regulations or requirements could subject us to investigations, sanctions, mandatory product recalls, enforcement actions, disgorgement of profits, fines, damages, civil and criminal penalties, injunctions or other collateral consequences. If any governmental sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, results of operations, and financial condition could be materially adversely affected. In addition, responding to any action will likely result in a significant diversion of management's attention and resources and an increase in professional fees. Enforcement actions and sanctions could harm our business, reputation, results of operations and financial condition.

Our intercompany relationships are subject to complex transfer pricing regulations, which may be challenged by taxing authorities.

We generally conduct our international operations through wholly-owned subsidiaries and report our taxable income in various jurisdictions worldwide based upon our business operations in those jurisdictions. Our intercompany relationships are and will continue to be subject to complex transfer pricing regulations administered by taxing authorities in various jurisdictions. The relevant taxing authorities may disagree with our determinations as to the income and expenses attributable to specific jurisdictions. If such a disagreement were to occur, and our position were not sustained, we could be required to pay additional taxes, interest and penalties, which could result in one-time tax charges, higher effective tax rates, reduced cash flows and lower overall profitability of our operations.

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

As of December 31, 2019, we had federal and state net operating loss carryforwards (NOLs), of $275.8 million and $209.7 million, respectively, available to offset future taxable income, which expire in various years beginning in 2021 if not utilized. A lack of future taxable income would adversely affect our ability to utilize these NOLs before they expire. Under the provisions of the Internal Revenue Code of 1986, as amended (the Internal Revenue Code), substantial changes in our ownership may limit the amount of pre-change NOLs that can be utilized annually in the future to offset taxable income. Section 382 of the Internal Revenue Code imposes limitations on a company's ability to use NOLs if a company experiences a more-than-50-percentage point ownership change over a three-year testing period. Based upon our analysis as of December 31, 2019, we determined that although a limitation on our historical NOLs exists, we do not expect this limitation to impair our ability to use our NOLs prior to expiration. However, if changes in our ownership occur in the future, our ability to use our NOLs may be further limited. For these reasons, we may not be able to utilize a material portion of the NOLs, even if we achieve profitability. If we are limited in our ability to use our NOLs in future years in which we have taxable income, we will pay more taxes than if we were able to fully utilize our NOLs. This could adversely affect our operating results, cash balances and the market price of our common stock.

We could be subject to additional tax liabilities.

We are subject to U.S. federal, state, local and sales taxes in the United States and foreign income taxes, withholding taxes and transaction taxes in numerous foreign jurisdictions. Significant judgment is required in evaluating our tax positions and our worldwide provision for taxes. During the ordinary course of business, there are many activities and transactions for which the ultimate tax determination is uncertain. In addition, our tax obligations and effective tax rates could be adversely affected by changes in the relevant tax, accounting and other laws, regulations, principles and interpretations by recognizing tax losses or lower than anticipated earnings in jurisdictions where we have lower statutory rates and higher than anticipated earnings in jurisdictions where we have higher statutory rates, by changes in foreign currency exchange rates, or by changes in the valuation of our deferred tax assets and liabilities. We may be audited in various jurisdictions, and such jurisdictions may assess additional taxes, sales taxes and value-added taxes against us. Although we believe our tax estimates are reasonable, the final determination of any tax audits or litigation could be materially different from our historical tax provisions and accruals, which could have a material adverse effect on our operating results or cash flows in the period for which a determination is made.

Our business is subject to the risks of pandemics, earthquakes, fire, power outages, floods and other catastrophic events, and to interruption by manmade problems such as terrorism.

A significant public health crisis, epidemic or pandemic (including the ongoing COVID-19 pandemic), or a natural disaster, such as an earthquake, fire or a flood, or a significant power outage could have a material adverse impact on our business, operating results and financial condition. In addition, public health crises or natural disasters could affect our channel partners' ability to perform services for us on a timely basis. In the event we or our channel partners are hindered by any of the events discussed above, our ability to provide our products or professional services to customers could be delayed.

In addition, our facilities and those of our third-party data centers and hosting providers are vulnerable to damage or interruption from human error, intentional bad acts, pandemics, earthquakes, hurricanes, floods, fires, war, terrorist attacks, power losses, hardware failures, systems failures, telecommunications failures and similar events. The occurrence of a public health crisis, natural disaster, power failure or an act of terrorism, vandalism or other misconduct, a decision by a third party to close a facility on which we rely without adequate notice, or other unanticipated problems could result in lengthy interruptions in provision or delivery of our products, potentially leaving our customers vulnerable to cyber attacks. The occurrence of any of the foregoing events could damage our systems and hardware or could cause them to fail completely, and our insurance may not cover such events or may be insufficient to compensate us for the potentially significant losses, including the potential harm to the future growth of our business, that may result from interruptions in our service as a result of system failures.

All of the aforementioned risks may be exacerbated if our disaster recovery plans or the disaster recovery plans established for our third-party data centers and hosting providers prove to be inadequate. To the extent that any of the above results in delayed or reduced customer sales, our business, financial condition and results of operations could be adversely affected.

Risks Related to our Common Stock

The market price of our common stock has been and is likely to continue to be volatile.

The market price of our common stock may be highly volatile and may fluctuate substantially as a result of a variety of factors, some of which are related in complex ways. Since shares of our common stock were sold in our initial public offering, or IPO, in July 2015 at a price of $16.00 per share, our stock price has ranged from an intraday low of $9.05 to an intraday high of $66.01 through April 30, 2020. Factors that may affect the market price of our common stock include:

- actual or anticipated fluctuations in our financial condition and operating results;
- variance in our financial performance from expectations of securities analysts;
- changes in our projected operating and financial results;
- changes in the prices of our products and professional services;
- changes in laws or regulations applicable to our products or professional services;
- announcements by us or our competitors of significant business developments, acquisitions or new offerings;
- our involvement in any litigation or investigations by regulators;
- our sale of our common stock or other securities in the future;
- changes in our board of directors, senior management or key personnel;
- trading volume of our common stock;
- price and volume fluctuations in the overall stock market;
- changes in the anticipated future size and growth rate of our market;
- sales of shares of our common stock by us or our stockholders, including sales and purchases of any common stock issued upon conversion of our 1.25% convertible senior notes due 2023 (the 2023 Notes) and our 2.25% convertible senior notes due 2025 (the 2025 Notes and, together with the 2023 Notes, the Notes); and
- general economic, regulatory and market conditions.

Recently, the stock markets, and in particular the market on which our common stock is listed, have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies due to, among other factors, the actions of market participants or other actions outside of our control, including general market volatility caused by the COVID-19 pandemic. These fluctuations have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry fluctuations, as well as general economic, political, regulatory and market conditions, may negatively impact the market price of our common stock. In the past, companies that have experienced volatility in the market price of their securities have been subject to securities class action litigation. We may be the target of this type of litigation in the future, which could result in substantial costs and divert our management's attention.

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 about our business, future operating results and key metrics, including ARR. In developing this guidance, our management must make certain assumptions and judgments about our future performance. Some of those key assumptions relate to the impact of the COVID-19 pandemic, the anticipated contributions of

DivvyCloud and the associated economic uncertainty on our business and the timing and scope of economic recovery globally, which are inherently difficult to predict. While presented with numerical specificity, this guidance is necessarily speculative in nature, and is inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions or economic conditions, some of which may change. This guidance, which inherently consists of forward-looking statements, is also qualified by, and subject to, assumptions, estimates and expectations as of the date given. Forward-looking statements are subject to a number of risks, uncertainties, assumptions and other factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by the forward-looking statements including the risks described in this Risk Factors section and in the Risk Factors section of any future SEC filings we make. It can be expected that some or all of the assumptions, estimates and expectations of any guidance we furnished will not materialize or will vary significantly from actual results. Accordingly, our guidance is only an estimate of what management believes is realizable as of the date of release of such guidance.

Furthermore, analysts and investors may develop and publish their own projections of our business, which may form a consensus about our future performance. Our business results may vary significantly from such guidance 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 COVID-19 pandemic and which could adversely affect our operations and operating results. There are no comparable recent events that provide guidance as to the probable effect of the COVID-19 pandemic, and, as a result, the ultimate impact of the COVID-19 outbreak is highly uncertain and subject to change. We are relying on the reports and models of economic and medical experts in making assumptions relating to the duration of this crisis and predictions as to timing and pace of any future economic recovery. If these models are incorrect or incomplete, or if we fail to accurately predict the full impact that the COVID-19 pandemic will have on all aspects of our business, the guidance and other forward-looking statements provided may also be incorrect or incomplete. Furthermore, if we make downward revisions of our previously announced guidance, or if our publicly announced guidance of future operating results fails to meet expectations of securities analysts, investors or other interested parties, the price of our common stock would decline.

If securities or industry analysts do not publish research or reports about our business, or publish negative reports about our business, our stock price and trading volume could decline.

The trading market for our common stock depends, in part, on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. If our financial performance fails to meet analyst estimates or one or more of the analysts who cover us downgrade our shares or change their opinion of our shares, our share price would likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

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

We have never declared or paid any cash dividends on our common stock and do not intend to pay any cash dividends in the foreseeable future. We anticipate that we will retain all of our future earnings for use in the development of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our board of directors. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

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

We have been and are required, pursuant to Section 404 of the Sarbanes-Oxley Act (Section 404), to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting on an annual basis. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal controls are effective. While we have established certain procedures and control over our financial reporting processes, we cannot assure you that these efforts will prevent restatements of our financial statements in the future.

Our independent registered public accounting firm is also required, pursuant to Section 404, to report annually on the effectiveness of our internal control over financial reporting. This assessment is required to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. For future reporting periods, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed or operating. We may not be able to remediate any future material weaknesses, or to complete our evaluation, testing and any required remediation in a timely fashion.

If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion that our internal controls over financial reporting are effective, investors could lose confidence in the accuracy and completeness of our financial reports, which could cause the price of our common stock to decline, and we could be subject to sanctions or investigations by regulatory authorities, including the SEC and Nasdaq. Failure to remediate any material weakness in our internal control over financial reporting, or to maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

Future sales of our common stock or equity-linked securities in the public market could lower the market price for our common stock and adversely impact the trading price of the Notes.

In the future, we may sell additional shares of our common stock or equity-linked securities to raise capital. In addition, a substantial number of shares of our common stock is reserved for issuance upon the exercise of stock options, settlement of other equity incentive awards and upon conversion of the Notes. The indentures for the Notes do not restrict our ability to issue additional common stock or equity-linked securities in the future. We cannot predict the size of future issuances or the effect, if any, that they may have on the market price for our common stock. The issuance and sale of substantial amounts of common stock or equity-linked securities, or the perception that such issuances and sales may occur, could adversely affect the trading price of the Notes and the market price of our common stock and impair our ability to raise capital through the sale of additional equity or equity-linked securities.

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

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

- authorize our board of directors to issue preferred stock without further stockholder action and with voting liquidation, dividend and other rights superior to our common stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent, and limit the ability of our stockholders to call special meetings;
- establish an advance notice procedure for stockholder proposals to be brought before an annual meeting, including proposed nominations of persons for director nominees;
- establish that our board of directors is divided into three classes, with directors in each class serving three-year staggered terms;
- require the approval of holders of two-thirds of the shares entitled to vote at an election of directors to adopt, amend or repeal our amended and restated bylaws or amend or repeal the provisions of our amended and restated certificate of incorporation regarding the election and removal of directors and the ability of stockholders to take action by written consent or call a special meeting;
- prohibit cumulative voting in the election of directors; and
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, who are responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any “interested” stockholder for a period of three years following the date on which the stockholder became an “interested” stockholder. Any of the foregoing provisions could limit the opportunity for our stockholders to receive a premium for their shares of our common stock and could also affect the price that some investors are willing to pay for our common stock.

Our amended and restated certificate of incorporation designates the Court of Chancery of the State of Delaware as the exclusive forum for certain litigation that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us.

Pursuant to our amended and restated certificate of incorporation, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware is the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (3) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws or (4) any action asserting a claim governed by the internal affairs doctrine. Our amended and restated certificate of incorporation further provides that any person or entity purchasing or otherwise acquiring any interest in shares of our common stock is deemed to have notice of and consented to the foregoing provision. The forum selection clause in our amended and restated certificate of incorporation may limit our stockholders' ability to obtain a favorable judicial forum for disputes with us.

Risks Related to our Indebtedness

We have a significant amount of debt that may decrease our business flexibility, access to capital, and/or increase our borrowing costs, and we may still incur additional debt in the future, which may adversely affect our operations and financial results. We may not have sufficient cash flow from our business to pay our substantial debt when due.

As of December 31, 2019, we had $230.0 million aggregate principal amount of indebtedness under 2023 Notes and we issued an additional $230.0 million aggregate principal amount of indebtedness under the 2025 Notes on May 1, 2020. In addition, we may also incur indebtedness under our senior secured credit facility. Our indebtedness may:

- limit our ability to borrow additional funds for working capital, capital expenditures, acquisitions or other general business purposes;
- limit our ability to use our cash flow or obtain additional financing for future working capital, capital expenditures, acquisitions or other general business purposes;
- require us to use a substantial portion of our cash flow from operations to make debt service payments;
- limit our flexibility to plan for, or react to, changes in our business and industry;
- place us at a competitive disadvantage compared to our less leveraged competitors; and
- increase our vulnerability to the impact of adverse economic and industry conditions.

Further, the indentures governing the Notes do not restrict our ability to incur additional indebtedness, secure existing or future debt, recapitalize our existing or future debt or take a number of other actions that could intensify the risks discussed above and below. Further, we and our subsidiaries may incur substantial additional indebtedness in the future, subject to the restrictions contained in our senior secured credit facility and any future debt instruments existing at the time, some of which may be secured indebtedness. While our senior secured credit facility restricts our ability to incur additional indebtedness, if our senior secured credit facility is terminated, we may not be subject to such restriction under the terms of such indebtedness.

Our ability to pay our debt when due or to refinance our indebtedness, including the Notes, depends on our future performance, which is subject to economic, financial, competitive, and other factors beyond our control. Our business may not generate cash flow from operations in the future sufficient to service our debt and make necessary capital expenditures. In addition, any required repurchase of the Notes for cash as a result of a fundamental change or voluntary redemption (in each case, pursuant to the terms of the Notes) would lower our current cash on hand such that we would not have that cash available to fund operations. If we are unable to generate sufficient cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring our debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

In addition, our senior secured credit facility contains, and any future additional indebtedness that we may incur may contain, financial and other restrictive covenants that limit our ability to operate our business, raise capital, pay dividends and/or make payments under our other indebtedness. If we fail to comply with these covenants or to make payments under our indebtedness when due, then we would be in default under that indebtedness, which could, in turn, result in that and our other indebtedness becoming immediately payable in full. Any such event of default under our senior secured credit facility would give the lenders the right to terminate their commitments to provide additional loans under our senior secured credit facility and to declare any and all borrowings outstanding, together with accrued and unpaid interest and fees, to be immediately due and payable. In addition, the lenders under our senior secured credit facility would have the right to proceed against the collateral in which we granted a security interest to them, which consists of substantially all our assets. If the debt under our senior secured credit facility were to be accelerated, we may not have sufficient cash or be able to borrow sufficient funds to refinance the debt or sell sufficient assets to repay the debt, which could immediately materially and adversely affect our cash flows, business, results of operations, financial condition and our ability to make payments under our indebtedness, including the Notes, when due. Further, the terms of any new or additional financing may be on terms that are more restrictive or on terms that are less desirable to us.

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

In the event the conditional conversion features of the Notes are triggered, holders of the Notes will be entitled to convert their Notes at any time during specified periods at their option. If one or more holders elect to convert their Notes, unless we elect to satisfy our conversion obligation by delivering solely shares of our common stock (other than paying cash in lieu of delivering any fractional share), we would be required to settle a portion or all of our conversion obligation in cash, which could adversely affect our liquidity. As disclosed in Note 7 to our consolidated financial statements, the conditional conversion feature of the 2023 Notes was triggered as of December 31, 2019, and the 2023 Notes were convertible at the option of the holders, in whole or in part, between January 1, 2020 and March 31, 2020. However, the holders of the 2023 Notes did not elect to convert their Notes during the January 1, 2020 through March 31, 2020 period. In addition, even if holders of Notes do not elect to convert their Notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the Notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

The accounting method for convertible debt securities that may be settled in cash, such as the Notes, could have a material effect on our reported financial results.

Under Accounting Standards Codification 470-20, *Debt with Conversion and Other Options* (ASC 470-20), an entity must separately account for the liability and equity components of the convertible debt instruments (such as the Notes) that may be settled entirely or partially in cash upon conversion in a manner that reflects the issuer’s economic interest cost. The effect of ASC 470-20 on the accounting for the Notes is that the equity component is required to be included in the additional paid-in capital section of stockholders’ equity on our consolidated balance sheet at the issuance date and the value of the equity component would be treated as debt discount for purposes of accounting for the debt component of the Notes. As a result, we will be required to record non-cash interest expense through the amortization of the excess of the face amount over the carrying amount of the expected life of the Notes. We will report larger net losses (or lower net income) in our financial results because ASC 470-20 requires interest to include both the amortization of the debt discount and the instrument’s cash coupon interest rate, which could adversely affect our reported or future financial results, the trading price of our common stock and the trading price of the Notes.

In addition, under certain circumstances, convertible debt instruments (such as the Notes) that may be settled entirely or partly in cash may be accounted for utilizing the treasury stock method, the effect of which is that the shares issuable upon conversion of such Notes are not included in the calculation of diluted earnings per share except to the extent that the conversion value of such Notes exceeds their principal amount. Under the treasury stock method, for diluted earnings per share purposes, the transaction is accounted for as if the number of shares of common stock that would be necessary to settle such excess, if we elected to settle such excess in shares, are included in the denominator for purposes of calculating diluted earnings per share.

We cannot be sure that the accounting standards in the future will continue to permit the use of the treasury stock method. For example, in July 2019, the FASB issued an exposure draft that proposes to change the accounting for the convertible debt instruments described above. Under the exposure draft, an entity may no longer be required to separately account for the liability and equity components of convertible debt instruments. This could have the impact of reducing non-cash interest expense, and thereby increasing net income. Additionally, as currently proposed, the treasury stock method for calculating earnings per share will no longer be allowed for convertible debt instruments whose principal amount may be settled using shares. Rather, the if-converted method may be required. Application of the “if converted” method may reduce our reported diluted earnings per share. We cannot be sure that this exposure draft will be issued, or will be issued in its current format. We also cannot be sure whether other changes may be made to the current accounting standards related to the Notes, or otherwise, that could have an adverse impact on our financial statements.

The capped call transactions may affect the value of the Notes and our common stock.

In connection with the pricing of the Notes and the exercise by the initial purchasers of their option to purchase additional Notes, we entered into capped call transactions with certain counterparties (Capped Calls). The Capped Calls cover, subject to customary adjustments, the number of shares of our common stock initially underlying the Notes. The Capped Calls are expected to offset the potential dilution as a result of conversion of the Notes. In connection with establishing their initial hedge of the capped call transactions, the counterparties or their respective affiliates entered into various derivative transactions with respect to our common stock concurrently with or shortly after the pricings of the Notes, including with certain investors in the Notes. The counterparties and/or or their respective affiliates may modify or unwind their hedge positions by entering into or unwinding various derivatives with respect to our common stock and/or purchasing or selling our common stock or other securities of ours in secondary market transactions prior to the maturity of the Notes (and are likely to do so on each exercise date of the capped call transactions, which are scheduled to occur during the observation period relating to any conversion of the 2023 Notes on or after February 1, 2023, or the 2025 Notes on or after November 1, 2024, that is not in connection with a redemption). We cannot make any prediction as to the direction or magnitude of any potential effect that the transactions described above may have on the prices of the Notes or the shares of our common stock. Any of these activities could adversely affect the value of the Notes and our common stock.

We are subject to counterparty risk with respect to the capped call transactions.

The option counterparties are financial institutions, and we will be subject to the risk that one or more of the option counterparties may default or otherwise fail to perform, or may exercise certain rights to terminate, their obligations under the Capped Calls. Our exposure to the credit risk of the option counterparties will not be secured by any collateral. Recent global economic conditions have resulted in the actual or perceived failure or financial difficulties of many financial institutions. If an option counterparty becomes subject to insolvency proceedings, we will become an unsecured creditor in those proceedings with a claim equal to our exposure at the time under such transaction. Our exposure will depend on many factors but, generally, our exposure will increase if the market price or the volatility of our common stock increases. In addition, upon a default or other failure to perform, or a termination of obligations, by an option counterparty, we may suffer adverse tax consequences and more dilution than we currently anticipate with respect to our common stock. We can provide no assurances as to the financial stability or viability of the option counterparties.

Provisions in the indentures for the Notes may deter or prevent a business combination that may be favorable to our stockholders.

If a fundamental change occurs prior to the maturity date of the 2023 Notes or 2025 Notes, respectively, holders of the 2023 Notes, or 2025 Notes, as applicable, will have the right, at their option, to require us to repurchase all or a portion of their 2023 Notes or 2025 Notes, as applicable. In addition, if a "make-whole fundamental change" (as defined in the indentures) occurs prior the maturity date, we will in some cases be required to increase the conversion rate of the Notes for a holder that elects to convert its Notes in connection with such make-whole fundamental change.

Furthermore, the indentures governing the Notes will prohibit us from engaging in certain mergers or acquisitions unless, among other things, the surviving entity assumes our obligations under the Notes. These and other provisions in the indentures could deter or prevent a third party from acquiring us even when the acquisition may be favorable to our stockholders.

Conversion of the Notes will dilute the ownership interest of existing stockholders, including holders who had previously converted their Notes, or may otherwise depress the price of our common stock.

The conversion of some or all of the Notes will dilute the ownership interests of existing stockholders to the extent we deliver shares of our common stock upon conversion of any of the Notes. As disclosed in Note 7 to our consolidated financial statements, the conditional conversion feature of the 2023 Notes was triggered as of December 31, 2019, and the 2023 Notes were convertible at the option of the holders, in whole or in part, between January 1, 2020 and March 31, 2020. However, the holders of the 2023 Notes did not elect to convert their 2023 Notes during the January 1, 2020 through March 31, 2020 period. The Notes may become in the future convertible at the option of their holders prior to their scheduled terms under certain circumstances. Any sales in the public market of the common stock issuable upon such conversion could adversely affect prevailing market prices of our common stock. In addition, the existence of the Notes may encourage short selling by market participants because the conversion of the Notes could be used to satisfy short positions, or anticipated conversion of the Notes into shares of our common stock could depress the price of our common stock.

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

(a) Recent Sales of Unregistered Equity Securities

None.

(b) Use of Proceeds from Initial Public Offering of Common Stock

None.

(c) Issuer Purchases of Equity Securities

None.

Item 3. Defaults Upon Senior Securities.

Not applicable.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation of Rapid7, Inc. (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-37496), filed with the Securities and Exchange Commission on July 22, 2015, and incorporated herein by reference).
3.2	Amended and Restated Bylaws of Rapid7, Inc. (filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-37496), filed with the Securities and Exchange Commission on July 22, 2015, and incorporated herein by reference).
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.
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.
32.1**	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data file because its XBRL tags are embedded within the inline XBRL document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data file (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101)

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* Filed herewith.

** This certification is deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.

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.

RAPID7, INC.

Date: May 8, 2020	By:	/s/ Corey E. Thomas
		Name: Corey E. Thomas
		Title: Chief Executive Officer
		(Principal Executive Officer)
Date: May 8, 2020	By:	/s/ Jeff Kalowski
		Name: Jeff Kalowski
		Title: Chief Financial Officer
		(Principal Financial Officer and Principal Accounting Officer)

Exhibit 31.1

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Corey E. Thomas, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Rapid7, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

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

Date: May 8, 2020

By: /s/ Corey E. Thomas

Name: Corey E. Thomas

Title: Chief Executive Officer

(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Jeff Kalowski, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Rapid7, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

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

Date: May 8, 2020	By:	/s/ Jeff Kalowski
		Name: Jeff Kalowski
		Title: Chief Financial Officer
		(Principal Financial Officer and Principal Accounting Officer)

Exhibit 32.1

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

I, Corey E. Thomas, Chief Executive Officer of Rapid7, Inc., do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge, the Quarterly Report on Form 10-Q of Rapid7, Inc. for the quarter ended March 31, 2020 (the "Report"):

(1) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Rapid7, Inc. for the period presented herein.

Date: May 8, 2020

By: /s/ Corey E. Thomas

Name: Corey E. Thomas

Title: Chief Executive Officer

(Principal Executive Officer)

Exhibit 32.2

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

I, Jeff Kalowski, Chief Financial Officer of Rapid7, Inc., do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge, the Quarterly Report on Form 10-Q of Rapid7, Inc. for the quarter ended March 31, 2020 (the "Report"):

(1) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Rapid7, Inc. for the period presented herein.

Date: May 8, 2020	By:	/s/ Jeff Kalowski
		Name: Jeff Kalowski
		Title: Chief Financial Officer
		(Principal Financial Officer and Principal Accounting Officer)