PROOFPOINT INC Form 10-Q November 01, 2018 UNITED STATES

#### SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the Quarterly Period Ended September 30, 2018

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 001-35506

PROOFPOINT, INC.

(Exact name of Registrant as specified in its charter)

Delaware51-0414846(State or other jurisdiction of(I.R.S. employer

incorporation or organization) 892 Ross Drive identification no.)

Sunnyvale, California 94089 (Address of principal executive offices) (Zip Code)

(408) 517-4710

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Sections 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was

required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES NO

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or 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	Smaller reporting company
	Emerging growth company

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

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

Shares of Proofpoint, Inc. common stock, \$0.0001 par value per share, outstanding as of October 19, 2018: 54,647,922 shares.

# TABLE OF CONTENTS

PART I. FINANCIAL INFORMATION	Page
ITEM 1. FINANCIAL STATEMENTS (UNAUDITED):	3
Condensed Consolidated Balance Sheets as of September 30, 2018 and December 31, 2017	3
Condensed Consolidated Statements of Operations for the Three and Nine Months Ended September 30, 2018 and 2017	4
Condensed Consolidated Statements of Comprehensive Loss for the Three and Nine Months Ended September 30, 2018 and 2017	5
Condensed Consolidated Statements of Cash Flows for the Nine Months Ended September 30, 2018 and 2017	6
Notes to Condensed Consolidated Financial Statements	8
ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	29
ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	43
ITEM 4. CONTROLS AND PROCEDURES	44
PART II. OTHER INFORMATION	
ITEM 1. LEGAL PROCEEDINGS	45
ITEM 1A. RISK FACTORS	45
ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS	60
ITEM 3. DEFAULTS UPON SENIOR SECURITIES	60
ITEM 4. MINE SAFETY DISCLOSURES	60
ITEM 5. OTHER INFORMATION	60
ITEM 6. EXHIBITS	61
SIGNATURES	62

## PART I. FINANCIAL INFORMATION

## ITEM 1. FINANCIAL STATEMENTS.

Proofpoint, Inc.

Condensed Consolidated Balance Sheets

## (In thousands, except per share amounts)

(Unaudited)

	September 30, 2018	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	\$ 160,561	\$ 286,072
Short-term investments	29,829	45,526
Accounts receivable, net	143,859	107,696
Inventory	372	730
Deferred product costs	1,789	1,541
Deferred commissions	32,840	26,249
Prepaid expenses and other current assets	19,274	18,669
Total current assets	388,524	486,483
Property and equipment, net	73,518	73,617
Long-term deferred product costs	316	259
Goodwill	460,596	297,704
Intangible assets, net	147,237	95,602
Long-term deferred commissions	60,459	51,954
Other assets	7,064	12,813
Total assets	\$ 1,137,714	\$ 1,018,432
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 14,931	\$ 12,271
Accrued liabilities	81,578	65,503
Capital lease obligations	31	34
Deferred rent	799	586
Deferred revenue	444,051	364,521
Total current liabilities	541,390	442,915
Convertible senior notes		197,858
Long-term capital lease obligations	30	55
Long-term deferred rent	3,918	4,102
Other long-term liabilities	7,241	11,069
Long-term deferred revenue	81,287	63,318
Total liabilities	633,866	719,317

Commitments and contingencies (Note 6)			
Stockholders' equity:			
Convertible preferred stock, \$0.0001 par value; 5,000 shares			
authorized; no shares issued and outstanding		_	
Common stock, \$0.0001 par value; 200,000 shares authorized; 54,483			
and 50,325 shares issued and outstanding at September 30, 2018 and			
December 31, 2017, respectively	5	5	
Additional paid-in capital	1,078,028	787,572	
Accumulated other comprehensive loss	(2	) (9	)
Accumulated deficit	(574,183	) (488,453	)
Total stockholders' equity	503,848	299,115	
Total liabilities and stockholders' equity	\$ 1,137,714	\$ 1,018,432	

See accompanying Notes to the Condensed Consolidated Financial Statements.

Proofpoint, Inc.

Condensed Consolidated Statements of Operations

(In thousands, except per share amounts)

(Unaudited)

	Three Months Ended September 30,		September		
	2018	2017	2018	2017	
Revenue:					
Subscription	\$181,505	\$130,534	\$509,311	\$362,328	
Hardware and services	2,674	4,152	9,204	10,434	
Total revenue	184,179	134,686	518,515	372,762	
Cost of revenue: <sup>(1)(2)</sup>					
Subscription	45,679	31,211	133,495	89,895	
Hardware and services	5,258	4,800	15,271	12,985	
Total cost of revenue	50,937	36,011	148,766	102,880	
Gross profit	133,242	98,675	369,749	269,882	
Operating expense: <sup>(1)(2)</sup>					
Research and development	45,917	32,477	137,176	94,389	
Sales and marketing	90,006	66,406	252,814	182,452	
General and administrative	23,877	13,388	60,431	36,223	
Total operating expense	159,800	112,271	450,421	313,064	
Operating loss	(26,558)	(13,596)	(80,672)	(43,182)	
Interest expense	(9,097)	(5,733)	(15,105)	(17,547)	
Other (expense) income, net	(425)	829	(715)	) 884	
Loss before income taxes	(36,080)	(18,500)	(96,492)	(59,845)	
Benefit from (provision for) income taxes	20	(977)	13,978	(3,410)	
Net loss	\$(36,060)	\$(19,477)	\$(82,514)	\$(63,255)	
Net loss per share, basic and diluted	\$(0.69)	\$(0.44)	\$(1.61)	\$(1.44)	
Weighted average shares outstanding, basic and diluted	52,184	44,418	51,214	43,850	

(1) Includes stock-based compensation expense as follows:				
Cost of subscription revenue	\$3,503	\$2,876	\$10,402	\$8,115
Cost of hardware and services revenue	\$474	\$493	\$1,636	\$1,401
Research and development	\$9,678	\$7,803	\$29,699	\$22,597
Sales and marketing	\$13,191	\$8,943	\$37,075	\$25,070
General and administrative	\$11,250	\$5,222	\$24,153	\$15,032

(2) Includes intangible amortization expense as follows:

Cost of subscription revenue

\$7,121 \$3,190 \$20,141 \$9,567

Research and development	\$15	\$15	\$45	\$45
Sales and marketing	\$3,982	\$875	\$10,379	\$2,791

See accompanying Notes to the Condensed Consolidated Financial Statements.

Proofpoint, Inc.

Condensed Consolidated Statements of Comprehensive Loss

(In thousands)

(Unaudited)

	Three Mor	nths		
	Ended		Nine Mon	ths Ended
	September	: 30,	September	30,
	2018	2017	2018	2017
Net loss	\$(36,060)	\$(19,477)	\$(82,514)	\$(63,255)
Other comprehensive income, net of tax:				
Unrealized (loss) gain on short-term investments, net	(1)	3	7	7
Comprehensive loss	\$(36,061)	\$(19,474)	\$(82,507)	\$(63,248)

See accompanying Notes to the Condensed Consolidated Financial Statements.

Proofpoint, Inc.

Condensed Consolidated Statements of Cash Flows

(In thousands)

(Unaudited)

	Nine Months September 3	
	2018	2017
Cash flows from operating activities		
Net loss	\$(82,514)	\$(63,255)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization	54,315	29,286
Stock-based compensation	102,965	72,215
Change in fair value of contingent consideration	(79)	(1,797)
Amortization of debt issuance costs and accretion of debt discount	8,383	16,491
Amortization of deferred commissions	26,121	20,720
Loss on conversion of convertible notes	7,207	—
Deferred income taxes	(15,269)	(1,831)
Other	1,147	(466)
Changes in assets and liabilities:		
Accounts receivable	(26,501)	(18,452)
Inventory	359	141
Deferred product costs	(304)	190
Deferred commissions	(41,218)	(29,242)
Prepaid expenses	(2,344)	(1,849)
Other current assets	1,212	312
Long-term assets	248	(3,438)
Accounts payable	2,655	(1,914)
Accrued liabilities	10,479	15,469
Deferred rent	29	1,184
Deferred revenue	82,799	77,406
Net cash provided by operating activities	129,690	111,170
Cash flows from investing activities		
Proceeds from maturities of short-term investments	51,237	78,803
Proceeds from sales of short-term investments	11,931	
Purchase of short-term investments	(47,457)	(71,096)
Purchase of property and equipment	(23,108)	(34,756)
Receipt from escrow account	3,321	5,116
Acquisition of business, net of cash acquired	(223,786)	_
Net cash used in investing activities	(227,862)	(21,933)
Cash flows from financing activities		
Proceeds from issuance of common stock	15,898	16,928

Withholding taxes related to restricted stock net share settlement	(41,967	) (31,239)
Repayments of equipment loans and capital lease obligations	(29	) (25 )
Repayments of convertible notes	(142	) —
Contingent consideration payment	(555	) (5,116 )
Net cash used in financing activities	(26,795)	) (19,452)
Effect of exchange rate changes on cash, cash equivalents and		
restricted cash	(352	) 1,035
Net (decrease) increase in cash, cash equivalents and restricted cash	(125,319)	) 70,820
Cash, cash equivalents and restricted cash		
Beginning of period	286,660	345,537
End of period	\$161,341	\$416,357
Supplemental disclosure of noncash investing and financing information		
Unpaid purchases of property and equipment and asset retirement		
obligations	\$3,253	\$2,310
Liability awards converted to equity	\$8,870	\$8,307
Convertible senior notes converted to equity	\$213,306	\$1,828

	September 30, 2018	September 30, 2017
Reconciliation of cash, cash equivalents and restricted cash as shown in		
the consolidated statement of cash flows		
Cash and cash equivalents	\$ 160,561	\$ 416,006
Restricted cash included in prepaid expenses and other current assets	289	83
Restricted cash included in other non-current assets	491	268
Total cash, cash equivalents and restricted cash	\$ 161,341	\$ 416,357

See accompanying Notes to the Condensed Consolidated Financial Statements.

Proofpoint, Inc.

Notes to Condensed Consolidated Financial Statements

(Unaudited)

(Dollars and share amounts in thousands, except per share amounts)

1. The Company and Summary of Significant Accounting Policies

The Company

Proofpoint, Inc. (the "Company") was incorporated in Delaware in June 2002 and is headquartered in California.

Proofpoint, Inc. is a leading security-as-a-service provider that enables large and mid-sized organizations worldwide to defend, protect, archive and govern their most sensitive data. The Company's security-and compliance platform is comprised of an integrated suite of threat protection, information protection, and brand protection solutions, including email protection, advanced threat protection, email authentication, data loss prevention, SaaS application protection, response orchestration and automation, digital risk, web browser isolation, email encryption, archiving, eDiscovery, supervision, secure communication, phishing simulation and security awareness computer-based training.

Basis of Presentation and Consolidation

These condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

These condensed consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles ("GAAP"), pursuant to the rules and regulations of the Securities and Exchange Commission (the "SEC"). Certain information and note disclosures have been condensed or omitted pursuant to such rules and regulations. The accompanying Condensed Consolidated Balance Sheet as of December 31, 2017 is derived from audited financial statements as of that date but does not include all of the information and footnotes required by accounting principles generally accepted in the United States for complete financial statements. The unaudited condensed consolidated financial statements have been prepared on the same basis as the annual financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for a fair statement of the periods presented. Certain prior period amounts have been adjusted due to the adoption of Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers: Topic 606 ("ASC 606"). Refer to Note 2 "Revenue, Deferred Revenue and Deferred Contract Costs" for more information. The results of operations for the three and nine months ended September 30, 2018 are not necessarily indicative of the results to be expected for the year ending December 31, 2018 or for other interim periods or for future years.

These condensed consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements and accompanying notes for the year ended December 31, 2017 included in the Company's Annual Report on Form 10-K filed with the SEC. The Company's significant accounting policies are described in Note 1 to those audited consolidated financial statements. See Note 2 "Revenue, Deferred Revenue and Deferred Contract Costs" for the summary of the new accounting policies under ASC 606.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of expenses during the reporting period. Actual results could differ from those estimates and such difference may be material to the financial statements.

Goodwill and Intangible Assets

Goodwill represents the excess of the purchase price of the acquired enterprise over the fair value of identifiable assets acquired and liabilities assumed. The Company performs an annual goodwill impairment test during the fourth quarter of a calendar year and more frequently if an event or circumstances indicates that impairment may have occurred. For the purposes of impairment testing, the Company has determined that it has one operating segment and one reporting unit. The Company performs a two-step impairment test of goodwill whereby the fair value of the reporting unit is compared to its carrying value. If the fair value of the reporting unit exceeds the carrying value of the net assets assigned to that unit, goodwill is not considered impaired and further testing is not required. If the carrying value of the net assets assigned to the

reporting unit exceeds the fair value of the reporting unit, then the Company must perform the second step of the impairment test in order to determine the implied fair value of the reporting unit's goodwill. If the carrying value of a reporting unit's goodwill exceeds its implied fair value, then impairment loss equal to the difference is recorded. The identification and measurement of goodwill impairment involves the estimation of the fair value of the Company. The estimate of fair value of the Company, based on the best information available as of the date of the assessment, is subjective and requires judgment, including management assumptions about expected future revenue forecasts and discount rates, changes in the overall economy, trends in the stock price and other factors. No impairment indicators were identified by the Company as of September 30, 2018.

Intangible assets consist of developed technology, customer relationships, non-compete arrangements, trademarks and patents and order backlog. The values assigned to intangibles are based on estimates and judgments regarding expectations for success and life cycle of solutions and technologies acquired.

Intangible assets are amortized on a straight-line basis over their estimated lives, which approximate the pattern in which the economic benefits of the intangible assets are consumed, as follows (in years):

	Low	High
Patents	4	5
Developed technology	3	7
Customer relationships	2	8
Order backlog	1	3
Trade names and trademarks	1	5

#### Comprehensive Loss

Comprehensive loss includes all changes in equity that are not the result of transactions with stockholders. The Company's comprehensive loss consists of its net loss and changes in unrealized gains (losses) from its available-for-sale investments. The Company had no material reclassifications out of accumulated other comprehensive loss into net loss for the three and nine months ended September 30, 2018 and 2017.

#### Accounting Pronouncements Adopted in 2018

In May 2014, the Financial Accounting Standards Board ("FASB") issued ASC 606 to supersede nearly all existing revenue recognition guidance under U.S. GAAP. The standard contains a comprehensive new revenue recognition model that requires revenue to be recognized in a manner to depict the transfer of services or products to a customer at an amount that reflects the consideration expected to be received in exchange for those services or products. The FASB has issued several amendments to the standard, including clarifications on disclosure of prior-period and remaining performance obligations. The Company adopted ASC 606 effective January 1, 2018 using full retrospective transition method. Refer to Note 2 "Revenue, Deferred Revenue and Deferred Contract Costs" for more information.

In October 2016, the FASB issued ASU No. 2016-16, Income Taxes: Intra-Entity Transfers of Assets Other Than Inventory ("ASU 2016-16"). ASU 2016-16 eliminates the requirement to defer the recognition of current and deferred income taxes for intra-entity asset transfer until the asset has been sold to an outside party. Therefore, an entity should recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer

occurs. ASU 2016-16 has been applied on a modified retrospective basis starting January 1, 2018. As a result of the adoption, the Company's long-term assets decreased and accumulated deficit increased by \$3,216 as of January 1, 2018, the date of adoption.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments ("ASU 2016-15"). ASU 2016-15 clarifies how certain cash receipts and payments should be classified in the statement of cash flows. The Company adopted ASU 2016-15 on January 1, 2018 with no impact on its consolidated financial statements.

#### Recent Accounting Pronouncements Not Yet Effective

In August 2018, the FASB issued ASU No. 2018-15, Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract ("ASU 2018-15"). ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The update to the standard is effective for interim and annual periods beginning after December 15, 2019, with early adoption permitted. Entities can choose to adopt the ASU 2018-15 prospectively or retrospectively. The Company is currently assessing the impact ASU 2018-15 will have on its consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, Intangibles - Goodwill and Other (Topic 350): Simplifying the Accounting for Goodwill Impairment ("ASU 2017-04"). ASU 2017-04 removes the requirement to perform a hypothetical purchase price allocation to measure goodwill impairment. A goodwill impairment charge will be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. The update to the standard is effective for interim and annual periods beginning after December 15, 2019, with early adoption permitted, and should be applied prospectively. The Company does not expect ASU 2017-04 to have a material impact on its consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments ("ASU 2016-13"). ASU 2016-13 changes the impairment model for most financial assets, and will require the use of an expected loss model in place of the currently used incurred loss method. Under this model, entities will be required to estimate the lifetime expected credit loss on such instruments and record an allowance to offset the amortized cost basis of the financial asset, resulting in a net presentation of the amount expected to be collected on the financial asset. The update to the standard is effective for interim and annual periods beginning after December 15, 2019. The Company is currently evaluating the impact of the adoption of ASU 2016-13 on its consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842) ("ASU 2016-02"), which requires lessees to put most leases on their balance sheets but recognize the expenses on their statements of operations in a manner similar to current practice. ASU 2016-02 states that a lessee would recognize a lease liability for the obligation to make lease payments and a right-to-use asset for the right to use the underlying asset for the lease term. The new standard is effective for interim and annual periods beginning after December 15, 2018 and early adoption is permitted. While the Company is currently assessing the impact ASU 2016-02 will have on the Company's consolidated financial statements, the Company expects the primary impact to its consolidated financial position upon adoption will be the recognition, on a discounted basis, of the Company's minimum commitments under non-cancelable operating leases on its consolidated balance sheets resulting in the recording of right of use assets and lease obligations.

#### 2. Revenue, Deferred Revenue and Deferred Contract Costs

Effective January 1, 2018, the Company adopted ASC 606 using the full retrospective method. Under this method, the Company is presenting the consolidated financial statements as of December 31, 2017, and for the three and nine months ended September 30, 2017, as if ASC 606 had been effective for those periods. The most significant impact of the standard related to i) the timing of revenue recognition for contracts related to certain on-premise offerings, in which the Company granted customers the right to deploy its subscription software on the customers' own servers. For these contracts, the Company is required to recognize as revenue a significant portion of the contract price upon delivery of the software compared to the previous practice of recognizing the entire contract price ratably over a

subscription period; and ii) the timing of revenue recognition in instances when all revenue recognition criteria were not met until after the start date of the subscription. Previously these amounts were recognized prospectively over the remaining contract term, while under ASC 606, the Company is required to recognize revenue on a cumulative catch-up basis for amounts earned up to the time all revenue recognition criteria have been met. In addition, iii) certain contract acquisition costs such as sales commissions are being amortized over an expected benefit period that is longer than the Company's previous policy of amortizing the deferred amounts over the specific revenue contract term for the associated contract.

The Company applied ASC 606 using two practical expedients: 1) for the reporting periods presented before January 1, 2018, the Company doesn't disclose the amount of the transaction price allocated to the remaining performance obligations or an explanation of when the Company expects to recognize that amount as revenue; 2) the Company doesn't disclose the amount of the transaction price allocated to the remaining performance obligations for contracts with an original expected length of one year or less.

Select condensed consolidated balance sheet line items, which reflect the adoption of the new standard, are as follows:

	December 3 As Previously	1, 2017	As
	Reported	Adjustments	Adjusted
Assets			
Accounts receivable, net	\$109,325	\$ (1,629)	\$107,696
Deferred commissions, current	\$27,144	\$ (895 )	\$26,249
Long-term deferred commissions	\$5,811	\$ 46,143	\$51,954
Liabilities			
Accrued liabilities	\$63,926	\$ 1,577	\$65,503
Deferred revenue	\$381,915	\$ (17,394)	\$364,521
Long-term deferred revenue	\$69,873	\$ (6,555 )	\$63,318
Stockholders' Equity			
Accumulated deficit	(554, 444)	\$ 65,991	\$(488,453)

Select unaudited condensed consolidated statements of operations line items, which reflect the adoption of the new standard, are as follows:

	Three Mon 2017 As Previously	ths Ended Sep	As
	Reported	Adjustments	Adjusted
Revenue:	-		
Subscription	\$131,038	\$ (504 )	\$130,534
Hardware and services	3,274	878	4,152
Total revenue	\$134,312	\$ 374	\$134,686
Gross profit	\$98,301	\$ 374	\$98,675
Operating expense:			
Sales and marketing	\$68,518	\$ (2,112 )	\$66,406
Operating loss	\$(16,082)	\$ 2,486	\$(13,596)
Net loss	\$(21,963)	\$ 2,486	\$(19,477)
Net loss per share, basic and diluted	\$(0.49)	\$ 0.05	\$(0.44)

Nine Months Ended September 30, 2017 Adjustments

	As Previously		As Adjusted
	Reported		
Revenue:			
Subscription	\$360,891	\$ 1,437	\$362,328
Hardware and services	9,000	1,434	10,434
Total revenue	\$369,891	\$ 2,871	\$372,762
Gross profit	\$267,011	\$ 2,871	\$269,882
Operating expense:			
Sales and marketing	\$189,704	\$ (7,252	) \$182,452
Operating loss	\$(53,305)	\$ 10,123	\$(43,182)
Net loss	\$(73,378)	\$ 10,123	\$(63,255)
Net loss per share, basic and diluted	\$(1.67)	\$ 0.23	\$(1.44)

Select unaudited condensed consolidated statement of cash flows line items, which reflect the adoption of the new standard are as follows:

	Nine Mont 2017 As Previously	ths Ended Sept	ember 30,
	<b>D</b>		As
	Reported	Adjustments	Adjusted
Cash flows from operating activities			
Net loss	\$(73,378)	\$ 10,123	\$(63,255)
Adjustments to reconcile net loss to net cash provided by operating activities:			
Amortization of deferred commissions	\$—	\$ 20,720	\$20,720
Changes in assets and liabilities:			
Accounts receivable	\$(18,575)	\$ 123	\$(18,452)
Deferred commissions	\$(1,271)	\$ (27,971	\$(29,242)
Accrued liabilities	\$15,544	\$ (75	\$15,469
Deferred revenue	\$80,326	\$ (2,920	\$77,406
Net cash provided by operating activities	\$111,170	\$ —	\$111,170

The core principle of ASC 606 is to recognize revenue to depict the transfer of services or products to customers in an amount that reflects the consideration the Company expects to be entitled to in exchange for those services or products. The principle is achieved through the following five-step approach:

Identification of the contract, or contracts, with the customer - The Company considers the terms and conditions of the contract and its customary business practice in identifying its contracts under ASC 606. The Company determines it has a contract with a customer when the contract is approved, the Company can identify each party's rights regarding the services and products to be transferred, the Company can identify the payment terms for the services and products, the Company has determined the customer has the ability and intent to pay and the contract has commercial substance. At contract inception, the Company evaluates whether two or more contracts should be combined and accounted for as a single contract and whether the combined contract or single contract includes more than one performance obligation. The Company applies judgment in determining the customer's ability and intent to pay, which is based on a variety of factors, including the customer's historical payment experience or, in the case of a new customer, credit and financial information pertaining to the customer.

Identification of the performance obligation in the contract - Performance obligations promised in a contract are identified based on the services or products that will be transferred to the customer that are both i) capable of being distinct, whereby the customer can benefit from the service or product either on its own or together with other resources that are readily available from third parties or from the Company, and ii) distinct in the context of the contract, whereby the transfer of the services or products is separately identifiable from other promises in the contract. To the extent a contract includes multiple promised services or products, the Company applies judgment to determine whether promised services or products are capable of being distinct and distinct in the context of the contract. If these criteria are not met the promised services or products are accounted for as a combined performance

### obligation.

Determination of the transaction price - The transaction price is determined based on the consideration to which the Company expects to be entitled in exchange for transferring services and products to the customer. Variable consideration is included in the transaction price if, in the Company's judgment, it is probable that a significant future reversal of cumulative revenue under the contract will not occur. None of the Company's contracts contain a significant financing component.

Allocation of the transaction price to the performance obligations in the contract - If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. Contracts that contain multiple performance obligations require an allocation of the transaction price to each performance obligation based on a relative standalone selling price, or SSP, basis.

Recognition of revenue when, or as, the Company satisfies a performance obligation - The Company recognizes revenue when control of the services or products are transferred to the customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for those services or products. The Company records its revenue net of any value added or sales tax.

The Company generates sales directly through its sales team and, to a growing extent, through its channel partners. Sales to channel partners are made at a discount and revenues are recorded at this discounted price once all revenue recognition criteria are met. Channel partners generally receive an order from an end-customer prior to placing an order with the Company, and these partners do not carry any inventory of the Company's products or solutions. Payment from channel partners is not contingent on the partner's success in sales to end-customers. In the event that the Company offers rebates, joint marketing funds, or other incentive programs to a partner, recorded revenues are reduced by these amounts accordingly.

Payment terms on invoiced amounts are typically 30 to 45 days.

#### Disaggregation of Revenue

The Company derives its revenue primarily from: (1) subscription service revenue; (2) subscription software revenue, and (3) hardware and services, which include professional service and training revenue provided to customers related to their use of the platform.

The following table presents the Company's revenue disaggregation:

	Three Months Ended		Nine Mon	ths Ended	
	September 30,		September 30, September		: 30,
	2018	2017	2018	2017	
Subscription service revenue	\$174,082	\$126,419	\$492,068	\$350,556	
Subscription software revenue	7,423	4,115	17,243	11,772	
Hardware and services	2,674	4,152	9,204	10,434	
Total revenue	\$184,179	\$134,686	\$518,515	\$372,762	

#### Subscription service revenue

Subscription service revenue is derived from a subscription-based enterprise licensing model with contract terms typically ranging from one to three years, and consists of (1) subscription fees from the licensing of the Company's security-as-a-service platform and it's various components, (2) subscription fees for software with support and related future updates where the software updates are critical to the customers' ability to derive benefit from the software due to the fast changing nature of the technology. These function together as one performance obligation, and (3) subscription fees for the right to access the Company's customer support services for software with significant standalone functionality and support services for hardware. The hosted on-demand service arrangements do not provide customers with the right to take possession of the software supporting the hosted services. Support revenue is derived from ongoing security updates, upgrades, bug fixes, and maintenance. A time-elapsed method is used to measure progress because the Company transfers control evenly over the contractual period. Accordingly, the fixed consideration related to subscription service revenue is generally recognized on a straight-line basis over the contract term beginning on the date access is provided, as long as other revenue recognition criteria have been met. Most of the company's contracts are non-cancelable over the contract term. Customers typically have the right to terminate their contract for cause if the Company fails to perform in accordance with the contractual terms. Some of the Company's customers have the option to purchase additional subscription services at a stated price. These options are evaluated on a case-by-case basis but generally do not provide a material right as they are priced at or above the Company's SSP

and, as such, would not result in a separate performance obligation.

Subscription software revenue

Subscription software revenue is primarily derived from term-based software that is deployed on the customers' own servers and has significant standalone functionality, is recognized upon transfer of control to the customer. The control for subscription software is transferred at the later of delivery to the customer or the software license start date.

Hardware and services

Hardware revenue consists of amounts derived from the sale of the Company's on-premise hardware appliance, which is recognized upon passage of control, which occurs upon shipment of the product. Professional services revenue consists of fees associated with consulting, implementation and training services for assisting customers in implementing and expanding the use of the Company's services and products. These services are distinct from subscription, subscription software licenses and hardware. Professional services do not result in significant customization of the Company's services and products. The Company recognizes revenue related to the professional services as they are performed.

#### Contracts with multiple performance obligations

Most of the Company's contracts with customers contain multiple performance obligations that are distinct and accounted for separately. The transaction price allocated to subscription services and subscription software that does not have significant standalone functionality is determined by considering factors such as historical pricing practices, and the selling price of hardware and professional services is estimated using a cost plus model. The selling price for support of a functional subscription software license is calculated as a percentage of functional subscription software license value which is derived by analyzing internal pricing practice, customer expectations, and industry practice.

#### Variable Consideration

Revenue from sales is recorded at the net sales price, which is the transaction price, and includes estimates of variable consideration. The amount of variable consideration that is included in the transaction price is constrained, and is included in the net sales price only to the extent that it is probable that a significant reversal in the amount of the cumulative revenue will not occur when the uncertainty is resolved. If the Company's services or products do not meet certain service level commitments, the Company's customers are entitled to receive service credits representing a form of variable consideration. The Company has not historically experienced any significant incidents affecting the defined levels of reliability and performance as required by the Company's subscription contracts. Accordingly, any estimated refunds related to these contracts in the condensed consolidated financial statements are not material during the periods presented.

#### Unbilled accounts receivables

Unbilled accounts receivable represents amounts for which the Company has recognized revenue, pursuant to its revenue recognition policy, for software licenses already delivered and professional services already performed, but billed in arrears and for which the Company believes it has an unconditional right to payment. The unbilled accounts receivable balance, included in accounts receivable in the condensed consolidated balance sheet, was \$1,886 and \$603 as of September 30, 2018 and December 31, 2017.

#### Deferred commissions

The Company capitalizes sales commissions and associated payroll taxes paid to internal sales personnel, and referral fees paid to independent third-parties, that are incremental to the acquisition of customer contracts. These costs are recorded as deferred commissions on the condensed consolidated balance sheets. The Company determines whether costs should be deferred based on its sales compensation plans, if the commissions are incremental and would not have occurred absent the customer contract. Sales commissions for renewal of a subscription contract are not considered commensurate with the commissions paid for the acquisition of the initial subscription contract given the substantive difference in commission rate between new and renewal contracts. Commissions paid upon the initial acquisition of a contract are amortized over an estimated period of benefit of five years while commissions paid related to renewal contracts are amortized over a contractual renewal period. Amortization is recognized based on the expected future revenue streams under the customer contracts. Amortization of deferred sales commissions is included in sales and marketing expense in the accompanying condensed consolidated statements of operations. The Company determines the period of benefit for commissions paid for the acquisition of the initial subscription contract by taking into consideration its initial estimated customer life and the technological life of the Company's software and related significant features. The Company classifies deferred commissions as current or long-term based on the timing of when the Company expects to recognize the expense. The Company periodically reviews these deferred commission costs to determine whether events or changes in circumstances have occurred that could impact the period of benefit

of these deferred contract acquisition costs. There were no material impairment losses recorded during the periods presented.

For the three and nine months ended September 30, 2018, the Company capitalized \$19,289 and \$41,218 of commission costs, respectively, and amortized \$9,413 and \$26,121, respectively. For the three and nine months ended September 30, 2017, the Company capitalized \$11,619 and \$29,242, respectively, of commission costs, respectively, and amortized \$7,445 and \$20,720, respectively.

## Deferred product costs

Deferred product costs are the incremental costs to fulfill a contract that are directly associated with each non-cancellable customer contract and primarily consist of royalty payments made to third parties, from whom the Company has obtained licenses to integrate certain software into its products. The deferred product costs are recognized based on the contractual term, and included in cost of revenue in the accompanying condensed consolidated statements of operations. The Company classifies deferred product costs as current or long-term based on the timing of when the Company expects to recognize the expense.

For the three and nine months ended September 30, 2018, the Company capitalized \$691 and \$2,127 of deferred product costs, respectively, and amortized \$641 and \$1,824, respectively. For the three and nine months ended September 30, 2017, the Company capitalized \$825 and \$1,989 of deferred product costs, respectively, and amortized \$656 and \$2,179, respectively.

#### Deferred revenue

The Company records deferred revenue when cash payments are received, or invoices are issued in advance of the Company's performance, and generally recognizes revenue over the contractual term. The Company recognized \$156,741 and \$314,849 of revenue during the three and nine months ended September 30, 2018, respectively, that was included in the deferred revenue balances at the beginning of the respective periods. The Company recognized \$110,044 and \$216,512 of revenue during the three and nine months ended September 30, 2017, respectively, that was included in the deferred revenue balances at the beginning of the respective periods.

The Company recognized \$2,039 and \$2,869 of revenue during the three and nine months ended September 30, 2018, respectively, related to the performance obligations satisfied in prior periods. The Company recognized \$494 and \$1,037 of revenue during the three and nine months ended September 30, 2017, respectively, related to the performance obligations satisfied in prior periods.

The acquisition of Wombat Securities, Inc. (see Note 3 "Acquisitions") on February 28, 2018, increased deferred revenue by \$14,700, of which \$10,071 was recognized in the nine month period ended September 30, 2018.

#### Remaining performance obligations

Contracted revenue as of September 30, 2018 that has not yet been recognized ("contracted not recognized") was \$421,003, which includes deferred revenue and non-cancellable amounts that will be invoiced and recognized as revenue in future periods and excludes contracts with an original expected length of one year or less. The Company expects 62% of contracted and not recognized revenue to be recognized over the next twelve months, 37% in years two and three, with the remaining balance recognized thereafter.

#### 3. Acquisitions

Acquisitions are accounted for under the purchase method of accounting in which the tangible and identifiable intangible assets and liabilities of each acquired company are recorded at their respective fair values as of each acquisition date, including an amount for goodwill representing the difference between the respective acquisition consideration and fair values of identifiable net assets. The Company believes that for each acquisition, the combined entities will achieve savings in corporate overhead costs and opportunities for growth through expanded geographic and customer segment diversity with the ability to leverage additional products and capabilities. These factors, among others, contributed to a purchase price in excess of the estimated fair value of each acquired company's net identifiable assets acquired and, as a result, goodwill was recorded in connection with each acquisition. Goodwill related to each acquisition below is not deductible for tax purposes.

While the Company uses its best estimates and assumptions as part of the purchase price allocation process to value assets acquired and liabilities assumed at the acquisition date, these estimates and assumptions are subject to refinement. When additional information becomes available, such as finalization of negotiations of working capital adjustments and tax related matters, the Company may revise its preliminary purchase price allocation. As a result, during the preliminary purchase price allocation period, which may be up to one year from the acquisition date, the

Company may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. Subsequent to the purchase price allocation period, adjustments to assets acquired or liabilities assumed are recognized in the operating results.

2018 Acquisitions

Wombat Security Technologies, Inc.

On February 28, 2018 (the "Wombat Acquisition Date"), pursuant to the terms of the merger agreement, the Company acquired all shares of Wombat Security Technologies, Inc. ("Wombat"), a leader for phishing simulation and security awareness computer-based training. By collecting data from Wombat's PhishAlarm solution, the Company has access to data on phishing campaigns as seen by non-Company customers, providing broader visibility and insight to the Proofpoint Nexus platform.

With this acquisition, the Company's customers can leverage the industry's first solution combining the Company's advanced threat protection with Wombat's phishing simulation and computer-based security awareness training. With the combined solutions, the Company's customers can:

Use real detected phishing attacks for simulations, assessing users based on the threats that are actually targeting them;

Both investigate and take action on user-reporting phishing, leveraging orchestration and automation to find real attacks, quarantine emails in users' inboxes, and lock user accounts to limit risk;

Train users in the moment immediately after they click for both simulated and real phishing attacks.

The Company also expects to achieve savings in corporate overhead costs for the combined entities. These factors, among others, contributed to a purchase price in excess of the estimated fair value of acquired net identifiable assets and, as a result, goodwill was recorded in connection with the acquisition. The Company has estimated fair values of acquired tangible assets, intangible assets and liabilities at the Wombat Acquisition Date. The amounts reported are considered provisional as the Company is completing the valuation work to determine the fair value of certain assets and liabilities acquired, largely with respect to working capital adjustments. The results of operations and the provisional fair values of the acquired assets and liabilities assumed have been included in the accompanying condensed consolidated financial statements since the Wombat Acquisition Date.

At the Wombat Acquisition Date, the consideration transferred was \$225,366, net of cash acquired of \$13,452. Of the consideration transferred, \$22,500 was held in escrow to secure indemnification obligations, which has not been released as of the filing date of this Quarterly Report on Form 10-Q. The Company incurred \$719 in acquisition-related costs which were recorded within operating expenses for the nine months ended September 30, 2018. The Company recorded \$21,183 in revenue from Wombat for the nine months ended September 30, 2018, and due to the continued integration of the combined businesses, it was impractical to determine the earnings.

Per the terms of the merger agreement, unvested in-the-money stock options held by Wombat employees were canceled and paid off using the same amount per option as for the common share less applicable exercise price for each option. The fair value of \$1,580 of these unvested options was attributed to pre-combination service and included in consideration transferred. The fair value of unvested options of \$1,571 was allocated to post-combination services and expensed in the three months ended March 31, 2018. Also, as part of the merger agreement, 51 shares of the Company's common stock were deferred for certain key employees with the total fair value of \$5,458 (see Note 8 "Equity Award Plans"), which was not included in the purchase price. The deferred shares are subject to forfeiture if employment terminates prior to the lapse of the restrictions, and their fair value is expensed as stock-based compensation expense over the vesting period.

The following table summarizes the fair values of tangible assets acquired, liabilities assumed, intangible assets and goodwill:

	Estimated	
		Estimated
	Fair	
	Value	Useful Life (in years)
Current assets	\$23,344	N/A
Fixed assets	954	N/A
Customer relationships	37,800	7

Order backlog	6,800	2
Core/developed technology	35,200	4
Trade name	2,400	4
Deferred revenue	(14,700)	) N/A
Deferred tax liability, net	(14,725)	) N/A
Other liabilities	(1,120	) N/A
Goodwill	162,865	Indefinite
	\$238,818	

#### 2017 Acquisitions

Cloudmark, Inc.

On November 21, 2017 (the "Cloudmark Acquisition Date"), pursuant to the terms of the merger agreement, the Company acquired all shares of Cloudmark, Inc. ("Cloudmark"), a leader in messaging security and threat intelligence for internet service providers and mobile carriers worldwide. As part of the acquisition, Cloudmark's Global Threat Network will be incorporated into Company's cloud-based Nexus platform, which powers its email, social media, mobile, and SaaS security effectiveness.

The Company believes that with this acquisition, it will benefit from increased messaging threat intelligence from the analysis of billions of daily emails, malicious domain intelligence, and visibility into fraudulent and malicious SMS messages directed to mobile carriers worldwide. The Company also expects to achieve savings in corporate overhead costs for the combined entities. These factors, among others, contributed to a purchase price in excess of the estimated fair value of acquired net identifiable assets and, as a result, goodwill was recorded in connection with the acquisition.

The Company has provisionally estimated fair values of acquired tangible and intangible assets and assumed liabilities at the Cloudmark Acquisition Date. The amounts reported are considered provisional as the Company is completing the valuation work to determine the fair value of certain assets and liabilities acquired, largely with respect to working capital adjustments. The results of operations and the provisional fair values of the acquired assets and liabilities assumed have been included in the accompanying condensed consolidated financial statements since the Cloudmark Acquisition Date.

At the Cloudmark Acquisition Date, the consideration transferred was \$107,283, net of cash acquired of \$31,973. Of the consideration transferred, \$16,700 was held in escrow to secure indemnification obligations, which has not been released as of the filing date of this Quarterly Report on Form 10-Q.

Per the terms of the merger agreement, unvested stock options and unvested restricted stock units held by Cloudmark employees were canceled and exchanged for the Company's unvested stock options and unvested restricted stock units, respectively. The fair value of \$91 of these unvested awards was attributed to pre-combination services and included in consideration transferred. The fair value of \$1,180 was allocated to post-combination services. The unvested awards are subject to the recipient's continued service with the Company, and \$1,180 will be recognized ratably as stock-based compensation expense over the required remaining service period.

The following table summarizes the fair values of tangible assets acquired, liabilities assumed, intangible assets and goodwill:

		Estimated
	Estimated	
		Useful
	Fair	Life (in
	Value	years)
Current assets	\$37,390	N/A
Fixed assets	543	N/A
Non-current assets	50	N/A

Liabilities	(4,569) N/A	
Deferred revenue	(15,400) N/A	
Customer relationships	15,300 8	
Order backlog	1,400 1	
Core/developed technology	18,500 4	
Deferred tax liability, net	(7,905) N/A	
Goodwill	93,947 Indefinite	
	\$139,256	

WebLife Balance, Inc.

On November 30, 2017 (the "WebLife Acquisition Date"), pursuant to the terms of a merger agreement, the Company acquired all shares of WebLife Balance, Inc. ("WebLife"), a browser isolation offerings vendor, to extend its advanced threat protection capabilities into personal email, while preserving the privacy of its users.

The Company has estimated fair values of acquired tangible assets, intangible assets and liabilities at the WebLife Acquisition Date. The amounts reported are considered provisional as the Company is completing the valuation work to determine the fair value of certain assets and liabilities acquired, largely with respect to working capital adjustments. The results of operations and the provisional fair values of the acquired assets and liabilities assumed have been included in the accompanying condensed consolidated financial statements since the WebLife Acquisition Date.

At the WebLife Acquisition Date, the consideration transferred was \$48,765, net of cash acquired of \$278. Of the consideration transferred, \$6,203 was held in escrow to secure indemnification obligations, which has not been released as of the filling date of this Quarterly Report on Form 10-Q.

Per the terms of the merger agreement, unvested stock options held by WebLife employees were canceled and exchanged for the Company's unvested awards. The fair value of \$333 of these unvested options was attributed to pre-combination service and included in consideration transferred. The fair value of \$1,468 was allocated to post-combination services. The unvested awards are subject to the recipient's continued service with the Company, and \$1,468 will be recognized ratably as stock-based compensation expense over the required remaining service period. Also, as part of the merger agreement, 107 shares of the Company's common stock were deferred for certain key employees with the total fair value of \$9,652 (see Note 8 "Equity Award Plans"), which was not included in the purchase price. The deferred shares are subject to forfeiture if employment terminates prior to the lapse of the restrictions, and their fair value is expensed as stock-based compensation expense over the vesting period.

The following table summarizes the fair values of tangible assets acquired, liabilities assumed, intangible assets and goodwill:

		Estimated
	Estimated	
		Useful
	Fair	Life (in
	Value	years)
Current assets	\$ 534	N/A
Fixed assets	23	N/A
Liabilities	(88)	N/A
Deferred revenue	(700)	N/A
Customer relationships	600	5
Core/developed technology	16,600	5
Deferred tax liability, net	(4,440)	N/A
Goodwill	36,514	Indefinite
	\$49,043	

Pro Forma Financial Information (unaudited)

The following unaudited pro forma financial information presents the combined results of operations for the three and nine months ended September 30, 2018 and 2017 as though the Wombat acquisition had occurred as of January 1, 2017, with adjustments to give effect to pro forma events that are directly attributable to the acquisition such as

amortization expense of acquired intangible assets, stock-based compensation directly attributable to the acquisition and acquisition-related transaction costs. Accordingly, these unaudited pro forma results are presented for informational purposes only and are not necessarily indicative of what the actual results of operations of the combined company would have been if the acquisition had occurred at the beginning of the period presented, nor are they indicative of future results of operations:

	Three Months Ended		Nine Months Ended	
	September	· 30,	September	: 30,
	2018	2017	2018	2017
Total revenue	\$184,179	\$145,026	\$525,149	\$400,819
Net loss	\$(36,060)	\$(22,357)	\$(82,745)	\$(75,717)
Basic and diluted net loss per share	\$(0.69)	\$(0.50)	\$(1.62)	\$(1.73)

4. Goodwill and Intangible Assets

The goodwill activity and balances are presented below:

Beginning balance as of December 31, 2017	\$297,704
Acquisition during period	162,865
Purchase accounting adjustments	27
Closing balance as of September 30, 2018	\$460,596

Intangible assets, excluding goodwill, consisted of the following:

	September 30, 2018			December 31, 2017		
	Gross		Net	Gross		Net
	Carrying	Accumulated	Carrying	Carrying	Accumulated	Carrying
	Amount	Amortization	Amount	Amount	Amortization	Amount
Developed technology	\$154,069	\$ (72,695)	\$81,374	\$118,869	\$ (52,554	) \$66,315
Customer relationships	71,400	(12,629)	58,771	33,600	(5,918	) 27,682
Trade names and patents	3,330	(1,280)	2,050	930	(825	) 105
Order backlog	9,100	(4,058)	5,042	2,300	(800	) 1,500
	\$237,899	\$ (90,662)	\$147,237	\$155,699	\$ (60,097	) \$95,602

Amortization of intangible assets expense was \$11,118 and \$4,080 for the three months ended September 30, 2018 and 2017, respectively, and \$30,565 and \$12,403 for the nine months ended September 30, 2018 and 2017, respectively.

Future estimated amortization of intangible assets expense as of September 30, 2018 are presented below:

Year ending December 31,	
2018, remainder	\$10,592
2019	39,650
2020	34,566
2021	31,698
2022	13,501
Thereafter	17,230
	\$147,237

### 5. Fair Value Measurements and Investments

### Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., the "exit price") in an orderly transaction between market participants at the measurement date. A hierarchy for inputs used in measuring fair value has been defined to minimize the use of unobservable inputs by requiring the use of observable market data when available. Observable inputs are inputs that market participants would use in pricing the asset or liability based on active market data. Unobservable inputs are inputs that reflect the Company's assumptions about the assumptions market participants would use in pricing the asset or liability based on the best information available in the circumstances.

The fair value hierarchy prioritizes the inputs into three broad levels:

Level 1: Quoted (unadjusted) prices in active markets for identical assets or liabilities. The Company's Level 1 assets generally consist of money market funds.

Level 2: Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the asset or liability. The Company's Level 2 assets and liabilities generally consist of corporate debt securities, commercial papers, U.S. agency and Treasury securities.

Level 3: Unobservable inputs to the valuation methodology that are supported by little or no market activity and that are significant to the measurement of the fair value of the assets or liabilities. Level 3 assets and liabilities include those whose fair value measurements are determined using pricing models, discounted cash flow methodologies or similar valuation techniques, as well as significant management judgment or estimation. In connection with the acquisition of Return Path in 2016, a liability was recognized on the Return Path Acquisition

Date for the estimate of the fair value of the Company's contingent payment. The Company determined the fair value of the Acquisition-related contingent liability based on the estimated amount and timing of future contract assignments, and the probability of success. This fair value measurement was based on significant inputs not observable in the market and thus represented Level 3 measurement.

The following tables summarize, for each category of assets or liabilities carried at fair value, the respective fair value as of September 30, 2018 and December 31, 2017 and the classification by level of input within the fair value hierarchy:

September 30, 2018

	September	50,2010			
	_			Le	evel
	Total	Level 1	Level 2	3	
Assets					
Cash equivalents:					
Money market funds	\$118,776	\$118,776	\$—	\$	
Corporate debt securities	3,548	_	3,548		
Commercial paper	1,996	_	1,996		
U.S agency securities	1,997	_	1,997		
Short-term investments:					
Commercial paper	22,894	_	22,894		
Corporate debt securities	4,947	_	4,947		
U.S. Treasury securities	1,988		1,988		_
Total financial assets	\$154,158	\$118,776	\$35,382	\$	

	December 31, 2017			
				Level
	Total	Level 1	Level 2	3
Assets				
Cash equivalents:				
Money market funds	\$231,828	\$231,828	\$—	\$—
Commercial paper	7,995		7,995	
U.S agency securities	1,996		1,996	
Short-term investments:				
Corporate debt securities	11,600		11,600	
Commercial paper	27,939		27,939	
U.S. agency securities	3,991		3,991	
U.S. Treasury securities	1,996		1,996	
Total financial assets	\$287,345	\$231,828	\$55,517	\$—

Liabilities				
Acquisition-related contingent consideration liability	\$634	\$—	\$—	\$634

The following table represents a reconciliation of the Acquisition-related contingent consideration liability measured at fair value on a recurring basis, using significant unobservable inputs (Level 3):

	Three Months Ended	Nine Months Ended
	September 30,	September 30,
	20182017	2018 2017
Beginning balance	\$ —\$ 1,883	\$634 \$8,233
Payments during the period	— (496 )	) (555) (5,116)
Adjustments to fair value during the period recorded		
in general and administrative expenses	— (67 )	) (79) (1,797)
Ending balance	\$ —\$ 1,320	\$— \$1,320

The carrying amounts of the Company's cash equivalents, accounts receivable and accounts payable approximate their fair values due to their short maturities.

#### Investments

The cost and fair value of the Company's cash and cash equivalents and available-for-sale investments as of September 30, 2018 and December 31, 2017 were as follows:

	September	30, 2018				
	_					Fair
	Amortized	Costealize	d Gains	Unrea	lized Losse	s Value
Cash and cash equivalents:						
Cash	\$34,244	\$		\$		\$34,244
Money market funds	118,776					118,776
Corporate debt securities	3,549				(1	) 3,548
Commercial paper	1,996					1,996
U.S. agency securities	1,997					1,997
Total	\$160,562	\$		\$	(1	) \$160,561
Short-term investments:						
Commercial paper	\$22,894	\$		\$		\$22,894
Corporate debt securities	4,948				(1	) 4,947
U.S. Treasury securities	1,989				(1	) 1,988
Total	\$29,831	\$		\$	(2	) \$29,829

December 31, 2017						
						Fair
	Amortized	Costealize	d Gains	Unrea	alized Losses	Value
Cash and cash equivalents:						
Cash	\$44,253	\$		\$		\$44,253
Money market funds	231,828					231,828
Commercial paper	7,995					7,995
U.S. agency securities	1,996					1,996
Total	\$286,072	\$		\$	_	\$286,072
Short-term investments:						
Corporate debt securities	\$11,607	\$		\$	(7	) \$11,600
Commercial paper	27,939					27,939
U.S. agency securities	3,992				(1	) 3,991
U.S. Treasury securities	1,997				(1	) 1,996
Total	\$45,535	\$		\$	(9	) \$45,526

As of September 30, 2018 and December 31, 2017, all investments mature in less than one year. Estimated fair values for marketable securities are based on quoted market prices for the same or similar instruments.

The Company reviews its investments on a quarterly basis to identify and evaluate investments that have an indication of possible impairment and has determined that no other-than-temporary impairments were required to be recognized during the three and nine months ended September 30, 2018.

6. Commitments and Contingencies

**Operating Leases** 

The Company leases certain of its facilities under non-cancellable operating leases with various expiration dates through 2027.

Premises rent expense was \$2,817 and \$2,087 for the three months ended September 30, 2018 and 2017, respectively, and \$8,192 and \$5,758 for the nine months ended September 30, 2018 and 2017, respectively.

#### Capital Lease

In July 2015, the Company entered into a lease agreement (the "July 2015 Lease") to lease certain office equipment with expiration in August 2020. The July 2015 Lease bears an annual interest rate of 6.5%. The lease is secured by fixed assets used in the Company's office locations.

At September 30, 2018, future annual minimum lease payments under non-cancellable operating and capital leases were as follows:

	Capital	Operating
	Leases	Leases
Year ending December 31,		
2018, remainder	\$7	\$6,460
2019	37	25,108
2020	21	16,853
2021		9,657
2022		7,021
Thereafter		11,382
Total minimum lease payments	65	\$76,481
Less: Amount representing interest	(4	)
Present value of capital lease obligations	61	
Less: current portion	(31	)
Long-term portion of capital lease obligations	\$ 30	

#### Contingencies

Under the indemnification provisions of the Company's customer agreements, the Company agrees to indemnify and defend and hold harmless its customers against, among other things, infringement of any patent, trademark or copyright under any country's laws or the misappropriation of any trade secret arising from the customers' legal use of the Company's solutions. The exposure to the Company under these indemnification provisions is generally limited to the total amount paid by the customers under the applicable customer agreement. However, certain indemnification provisions potentially expose the Company to losses in excess of the aggregate amount paid to the Company by the customer under the applicable customer agreement. To date, there have been no claims against the Company or its customers pursuant to these indemnification provisions.

#### Legal Contingencies

From time to time, the Company may be involved in legal proceedings and subject to claims in the ordinary course of business. For lawsuits where the Company is the defendant, the Company is in the process of defending these litigation matters, and while there can be no assurances and the outcomes of these matters are currently not determinable, the Company currently believes that there are no existing claims or proceedings that are likely to have a material adverse effect on the Company's financial position, results of operations or cash flows.

# 7. Convertible Senior Notes

## 0.75% Convertible Senior Notes due June 2020

On June 17, 2015, the Company issued \$200,000 principal amount of 0.75% Convertible Senior Notes (the "0.75% Notes") due 2020 in a private offering to qualified institutional buyers ("Holders") pursuant to Rule 144A under the Securities Act of 1934, as amended (the "Securities Act"). The initial Holders of the 0.75% Notes also had an option to purchase an additional \$30,000 in principal amount which was exercised in full. The net proceeds after the agent's discount and issuance costs of \$6,581 from the 0.75% Notes offering were approximately \$223,419. The Company used the net proceeds for working capital and general corporate purposes, which included funding the Company's operations, capital expenditures, and acquisitions of businesses, products or technologies. The 0.75% Notes bore interest at 0.75% per year, payable semi-annually in arrears every June 15 and December 15, beginning on December 15, 2015.

In accordance with the authoritative accounting guidance, the Company allocated the total amount of the 0.75% Notes into liability and equity components. The carrying value of the liability component at issuance was calculated as the present value of its cash flows using a discount rate of 6.5% based on the blended rate between the yield rate for a Moody's B1 rating and the average debt rate for comparable convertible transactions from similar companies. The difference between

the 0.75% Notes principal and the carrying value of the liability component, representing the value of conversion premium assigned to the equity component, was recorded as an increase to additional paid in capital and as a debt discount on the issuance date. The equity component was being accreted using the effective interest rate method over the period from the issuance date through the conversion date as a non-cash charge to interest expense. Upon issuance of the 0.75% Notes, the Company recorded \$174,359 as debt and \$55,641 as additional paid in capital within stockholders' equity.

Additionally, the debt discount and issuance costs were allocated based on the total amount incurred to the liability and equity components using the same proportions as the proceeds from the 0.75% Notes. The equity issuance costs of \$1,592 were recorded as a decrease to additional paid-in capital at the issuance date.

During the quarter ended September 30, 2018, \$229,869 of the principal amount of the 0.75% Notes was converted into 2,928 shares of common stock, with the remaining \$142 repaid in cash. The shares of common stock had a fair value of \$336,994 at the time of the conversion. This transaction resulted in a \$7,207 loss on extinguishment that is included in interest expense in the Consolidated Statement of Operations. The loss on extinguishment was calculated as the difference between the fair value amount allocated to the liability component on the date of conversion and net carrying amount of the liability component.

The following table presents the carrying values of the 0.75% Notes as of September 30, 2018 and December 31, 2017:

	Septem	ber 30,	December 3	1,
	2018		2017	
Liability component:				
Principal	\$		\$ 230,000	
Less: debt discount and issuance costs, net of amortization			(32,142	)
Net carrying amount	\$		\$ 197,858	
Equity component (1)	\$		\$ 54,049	

(1)Recorded on the condensed consolidated balance sheet as additional paid-in capital, net of the issuance costs in equity

1.25% Convertible Senior Notes due December 2018

On December 11, 2013, the Company issued \$175,000 principal amount of 1.25% Convertible Senior Notes (the "1.25% Notes") due 2018 in a private offering to Holders pursuant to Rule 144A under the Securities Act. The initial Holders of the 1.25% Notes also had an option to purchase an additional \$26,250 in principal amount which was exercised in full. The net proceeds after the agent's discount and issuance costs of \$5,803 from the 1.25% Notes offering were approximately \$195,446. The Company used the net proceeds for working capital and general corporate purposes, which included funding the Company's operations, capital expenditures, and acquisitions of businesses, products or technologies believed to be of strategic importance. The 1.25% Notes bore interest at 1.25% per year, payable semi-annually in arrears every June 15 and December 15, beginning on June 15, 2014.

During the year ended December 31, 2017, the entire \$201,250 of the principal amount of the 1.25% Notes was converted into 5,159 shares of common stock, with the remaining \$14 paid in cash.

For the three and nine months ended September 30, 2018 and 2017, the Company incurred the following expenses related to the convertible senior notes:

	Three Months		Nine Mo	nths			
	Ended		Ended				
	September 30,		September 30, Septem		Septembe	ember 30,	
	2018	2017	2018	2017			
Interest expense related to contractual interest coupon	\$309	\$1,053	\$1,172	\$3,173			
Amortization of debt discount and issuance costs	2,230	5,603	8,383	16,491			
Loss on conversion	7,207		7,207				
	\$9,746	\$6,656	\$16,762	\$19,664			

#### 8. Equity Award Plans

Stock-Based Compensation Plans

On March 30, 2012, the Board of Directors and the Company's stockholders approved the 2012 Equity Incentive Plan (the "2012 Plan"), which became effective in April 2012. The Company has six equity incentive plans: the Company's 2002 stock option plan (the "2002 Plan"), the 2012 Plan and four plans assumed by the Company upon various business acquisitions. The assumed plans are the Cloudmark plan, the WebLife plan, and two FireLayers plans. Upon the Company's initial public offering, all shares that were reserved under the 2002 Plan but not issued, and shares issued but subsequently returned to the plan through forfeitures, cancellations and repurchases became part of the 2012 Plan and no further shares will be granted pursuant to the 2002 Plan. No further shares will be granted pursuant to the assumed plans. All outstanding stock awards under the 2002 Plan, the assumed plans and 2012 Plan will continue to be governed by their existing terms. Under the 2012 Plan, the Company has the ability to issue incentive stock options ("ISOs"), nonstatutory stock options ("NSOs"), restricted stock awards, stock bonus awards, stock appreciation rights ("SARs"), restricted stock units ("RSUs"), and performance stock units ("PSUs"). The 2012 Plan also allows direct issuance of common stock to employees, outside directors and consultants at prices equal to the fair market value at the date of grant of options or issuance of common stock. Additionally, the 2012 Plan provides for the grant of performance cash awards to employees, directors and consultants. The Company has the right to repurchase any unvested shares (at the option exercise price) of common stock issued directly or under option exercises. The right of repurchase generally expires over the vesting period.

Stock bonus and other liability awards are accounted for as liability-classified awards, because the obligations are based predominantly on fixed monetary amounts that are generally known at the inception of the obligation, to be settled with a variable number of shares of the Company's common stock.

Under the equity incentive plans, the term of an option grant shall not exceed ten years from the date of its grant and options generally vest over a three to four-year period, with vesting on a monthly or annual interval. Under the 2012 Plan, 20,316 shares of common stock are reserved for issuance to eligible participants. As of September 30, 2018, 4,483 shares were available for future grant. Restricted stock awards generally vest over a four-year period.

The Company net-share settles equity awards held by employees by withholding shares upon vesting to satisfy tax withholding obligations. The shares withheld to satisfy employee tax withholding obligations are returned to the Company's 2012 Plan and will be available for future issuance. Payments for employee's tax obligations to the tax authorities are recognized as a reduction to additional paid-in capital and reflected as financing activities in the Company's consolidated statements of cash flows.

#### Stock Options

There were no options granted during the three and nine months ended September 30, 2018 and 2017.

The Company realized no income tax benefit from stock option exercises in each of the periods presented due to recurring losses and the valuation allowances for deferred tax assets.

Stock option activity under the Plan is as follows:

#### Shares subject to Options Outstanding Weighted

## Average

		Weighted	Remaining	
			Contractual	Aggregate
	Number	r Average		
	of		Term	Intrinsic
		Exercise		
	Shares	Price	(in years)	Value
Balance at December 31, 2017	2,040	\$ 22.88	5.17	\$134,511
Options exercised	(548)	13.08		
Options forfeited and expired	(18)	50.95		
Balance at September 30, 2018	1,474	\$ 26.20	4.75	\$118,147

The total intrinsic value of options exercised was \$54,964 and \$69,211 for the nine months ended September 30, 2018 and 2017, respectively. Total cash proceeds from such option exercises were \$7,173 and \$10,430 for the nine months ended September 30, 2018 and 2017, respectively.

The fair value of option grants that vested was \$2,693 and \$6,075 for the nine months ended September 30, 2018 and 2017, respectively.

As of September 30, 2018, the Company had unamortized stock-based compensation expense of \$3,595 related to stock options that will be recognized over the average remaining vesting term of the options of 1.19 years.

Restricted Stock and Performance Stock Units

A following table summarized the activity of RSUs and PSUs:

RSUs a	nd PSUs
Outstan	ding
Number	r
of	Granted Fair

	Shares	Value Per Unit
Awarded and unvested at December 31, 2017	3,540	\$ 71.77
Awards granted	1,680	116.76
Awards vested	(928)	65.22
Awards forfeited	(487)	86.32
Awarded and unvested at September 30, 2018	3,805	\$ 91.37

As of September 30, 2018, there was \$249,534 of unamortized stock-based compensation expense related to unvested RSUs, which is expected to be recognized over a weighted average period of 2.94 years.

The Company granted 249 and 177 PSUs in the nine months ended September 30, 2018 and 2017, respectively. The PSU vesting conditions were based on individual performance targets. Unamortized stock-based compensation expense was \$33,184 as of September 30, 2018.

Stock Bonus and Other Liability Awards

The total accrued liability for the stock bonus and other liability awards was \$9,246 and \$8,502 as of September 30, 2018 and December 31, 2017, respectively.

During the nine months ended September 30, 2018 and 2017, 61 and 85 shares, respectively, of common stock earned under the stock bonus program were issued. Stock-based compensation expense related to stock bonus program was \$9,206 and \$4,501 for the nine months ended September 30, 2018 and 2017, respectively.

In March 2015, the Company issued liability awards with a fair value of \$6,885, which vested annually over a three-year period and were subject to continuous service and other conditions. The liability was settled with a variable number of shares of the Company's common stock. During the nine months ended September 30, 2018 and 2017, 20 and 29 shares, respectively, were vested and issued. The Company recognized \$408 and \$1,715 of stock-based compensation expense related to these liability awards in the nine months ended September 30, 2018 and 2017, respectively. There are no outstanding liability awards as of September 30, 2018.

#### Employee Stock Purchase Plan

On March 30, 2012, the Board of Directors and the Company's stockholders approved the 2012 Employee Stock Purchase Plan (the "ESPP"), which became effective in April 2012. A total of 745 shares of the Company's common stock were initially reserved for future issuance under the ESPP. The number of shares reserved for issuance under the ESPP will increase automatically on January 1 of each of the first eight years commencing with 2013 by the number of shares equal to 1% of the Company's shares outstanding on the immediately preceding December 31, but not to exceed 1,490 shares, unless the Board of Directors, in its discretion, determines to make a smaller increase. As of September 30, 2018, there were 1,998 shares of the Company's common stock available for future issuance under the ESPP.

As of September 30, 2018, the Company expects to recognize \$731 of the total unamortized compensation cost related to employee purchases under the ESPP over a weighted average period of 0.1 years.

#### Restricted Stock and Deferred Shares

The Company granted 111 shares of restricted stock in 2016 to certain key employees with the total fair value of \$8,669 with annual vesting term of three years. The Company recognized \$2,159 of stock-based compensation expense in each of the nine months ended September 30, 2018 and 2017. As of September 30, 2018, there was \$3,077 of unamortized stock-based compensation expense related to the unvested shares of restricted stock. The shares of restricted stock are subject to forfeiture if employment terminates prior to the lapse of the restrictions, and are expensed over the vesting period. They are considered issued and outstanding shares of the Company at the grant date and have the same rights as other shares of common stock.

As part of the WebLife acquisition, 107 shares were deferred for certain key employees with the total fair value of \$9,652, and a vesting period between three and four years. The Company recognized \$1,806 of stock-based compensation in the nine months ended September 30, 2018. As of September 30, 2018, there was \$7,641 of unamortized stock-based compensation expense related to the unvested deferred shares. The deferred shares are subject to forfeiture if employment terminates prior to the lapse of the deferral date, and are expensed over the vesting period.

As part of the Wombat acquisition, 51 shares were deferred for certain key employees with the total fair value of \$5,458, and a vesting period of two years. The Company recognized \$1,600 of stock-based compensation in the nine months ended September 30, 2018. As of September 30, 2018, there was \$3,858 of unamortized stock-based compensation expense related to the unvested deferred shares. The deferred shares are subject to forfeiture if employment terminates prior to the lapse of the deferral date, and are expensed over the vesting period.

#### 9. Net Loss per Share

Basic net loss per share of common stock is calculated by dividing the net loss by the weighted average number of shares of common stock outstanding for the period. The weighted average number of shares of common stock used to calculate basic net loss per share of common stock excludes those shares subject to repurchase related to stock options or restricted stock that were exercised or issued prior to vesting as these shares are not deemed to be issued for accounting purposes until they vest. Diluted net loss per share of common stock, excluding common stock subject to repurchase, and, if dilutive, potential shares of common stock outstanding during the period. Basic and diluted net loss per common share was the same for all periods presented as the impact of all potentially dilutive securities outstanding was anti-dilutive.

The following table presents the potentially dilutive common shares outstanding that were excluded from the computation of diluted net loss per share for the periods presented because including them would have been anti-dilutive:

	September 30, 2018	September 30, 2017
Stock options to purchase common stock	1,474	2,193
Restricted stock units	3,805	3,175
Employee stock purchase plan	97	102
Common stock subject to repurchase	232	127
Bonus and other liability awards	89	78

1.25% Convertible senior notes	_	5,107
0.75% Convertible senior notes		2,831
Total	5,697	13,613

#### 10. Segment Reporting

Operating segments are reported in a manner consistent with the internal reporting supported and defined by the components of an enterprise about which separate financial information is available, provided and is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance. The Company's chief operating decision maker is its Chief Executive Officer. The Company's Chief Executive Officer reviews financial information presented on a consolidated basis. The Company has one business activity, and there are no segment managers who are held accountable for operations, operating results and plans for levels or components below the consolidated unit level. Accordingly, the Company determined that it has one operating and reportable segment.

The following sets forth total revenue by solutions offered by the Company and by geographic area. Revenue by geographic area is based upon the billing address of the customer:

			Three Months EndedNine MonSeptember 30,September			
	2018	2017	2018	2017		
Total revenue by solution:						
Advanced Threat	\$137,953 \$99,551		\$390,774	\$271,733		
Compliance	46,226	35,135	127,741	101,029		
Total revenue	\$184,179 \$134,686		\$518,515	\$372,762		

	Three Months Ended		Nine Months Ended		
	September 30,		September	: 30,	
	2018	2017	2018	2017	
Total revenue:					
United States	\$148,718	\$111,178	\$422,878	\$311,169	
Rest of world	35,461	23,508	95,637	61,593	
Total revenue	\$184,179	\$134,686	\$518,515	\$372,762	

Long-lived assets by geographic area are presented below:

	September 30, 2018	December 31, 2017
Long-lived assets:		
United States	\$ 60,086	\$ 66,134
Rest of world	13,432	7,483
Total long-lived assets	\$ 73,518	\$ 73,617

#### 11. Income Taxes

The Company's quarterly provision for income taxes is based on an estimated effective annual income tax rate. The Company's quarterly provision for income taxes also includes the tax impact of certain unusual or infrequently occurring items, if any, including changes in judgment about valuation allowances and effects of changes in tax laws or rates, in the interim period in which they occur.

Income tax benefit from the three and nine months ended September 30, 2018 was \$20 and \$13,978 on pre-tax losses of \$36,080 and \$96,492, respectively. The Company recognized income tax expense of \$977 and \$3,410 on pre-tax losses of \$18,500 and \$59,845 for the three and nine months ended September 30, 2017, respectively. The income tax rate for the three and nine months ended September 30, 2018 varied from the United States statutory income tax rate primarily due to valuation allowances in the United States whereby pre-tax losses and income do not result in the

recognition of corresponding income tax benefits and expenses and also the recognition of a \$14,725 deferred tax benefit in the U.S. related to changes in the Company's valuation allowance resulting from the Wombat business acquisition. The income tax rate for the three and nine months ended September 30, 2017 varied from the United States statutory income tax rate primarily due to valuation allowances in the United States whereby pre-tax losses and income do not result in the recognition of corresponding income tax benefits and expenses.

The Company's effective tax rate for the nine months ended September 30, 2018 and 2017 was 14% and negative 6%, respectively.

In December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act significantly impacted the future ongoing U.S. corporate income tax by lowering the U.S. corporate income tax rates from 34% to 21%, providing for unlimited net operating loss carry-forward periods, and implementing a territorial tax system, among other changes. The reduction of the U.S. corporate tax rate required the Company to revalue its U.S. deferred tax assets and liabilities to the recently enacted federal rate of 21% in the quarter ended December 31, 2017 which resulted in a \$87,621 reduction of certain of the Company's US deferred tax assets which are offset by a full valuation allowance. This transitional impact also resulted in a deferred tax benefit of \$2,024 in the quarter ended December 31, 2017 related to a reduction in a US deferred tax liability on certain long-lived acquired intangibles.

As part of the transition to the new territorial tax system, the Act imposes a one-time repatriation tax on deemed repatriation of historical earnings of foreign subsidiaries. Based on the current evaluation of the company's operations, no repatriation tax charge is anticipated due to negative earnings and profits in the Company's foreign subsidiaries.

The Company continues to appropriately refine such amounts within the measurement period allowed by Staff Accounting Bulletin ("SAB") No. 118, which will continue through the end of 2018. In addition, further interpretations from U.S. Federal and state governments and regulatory organizations may change the accounting treatment of the provisional tax liability.

As of September 30, 2018, the amounts recorded for the Tax Act remain provisional for the repatriation tax, the remeasurement of deferred taxes, and our reassessment of permanently reinvested earnings, uncertain tax positions and valuation allowances. These estimates may be impacted by further analysis and future clarification and guidance regarding available tax accounting methods and elections, earnings and profits computations, state tax conformity to federal tax changes, among others.

The Company reviews the likelihood that it will realize the benefit of its deferred tax assets and, therefore, the need for valuation allowances, on a quarterly basis. There is no corresponding income tax benefit recognized with respect to losses incurred and no corresponding income tax expense recognized with respect to earnings generated in jurisdictions with a valuation allowance. This causes variability in the Company's effective tax rate. The Company intends to maintain the valuation allowances until it is more likely than not that the net deferred tax assets will be realized.

During the three months ended March 31, 2017, the Company transferred certain intellectual property rights from its wholly owned subsidiary in Israel to the United States. Although the transfer of intellectual property rights between consolidated entities did not result in any gain in the consolidated statements of operations, the transfer did result in a taxable gain in Israel. In the Company's financial statements ending before January 1, 2018, taxes incurred related to the intercompany transaction have been treated as a prepaid tax asset in the Company's consolidated balance sheet and were being amortized to income tax expense over the life of the intellectual property. Effective January 1, 2018, pursuant to the Company's modified retrospective adoption of ASU 2016-16, the Company's remaining prepaid tax asset of \$3,216 was recorded as an increase to accumulated deficit.

As of September 30, 2018, the Company's gross uncertain tax benefits totaled \$15,922, excluding related accrued interest and penalties of \$286. As of September 30, 2018, \$4,810 of the Company's uncertain tax benefits, including related accrued interest and penalties, would impact the effective tax rate if recognized. During the nine months ended September 30, 2018, the Company's gross uncertain tax benefits increased \$2,131. The increase is comprised of a \$2,013 increase for tax positions taken in the current period, a \$370 increase for tax positions taken in prior periods, offset by a \$252 decrease related to statute of limitation expirations.

The Company is currently under audit by the Israel Tax Authority for tax years 2013 through 2017. Related to the audit by the Israel Tax Authority it is reasonably possible that the Company's uncertain tax positions could change within the next 12 months. An estimate of the range of any change cannot be made. The Company believes it has recorded all appropriate provisions for all jurisdictions and open years. However, the Company can give no assurance that taxing authorities will not propose adjustments that would increase its tax liabilities. The Company is not currently under audit by the IRS or any similar taxing authority in any other material jurisdiction.

# 12. Defined Contribution Plan

The Company's tax-deferred savings plan is qualified under Section 401(k) of the United States Internal Revenue Code. Employees may make voluntary, tax-deferred contributions to the 401(k) Plan up to the statutorily prescribed annual limit. The Company makes discretionary matching contributions to the 401(k) Plan on behalf of employees up to the limit determined by the Board of Directors. The Company contributed \$310 and \$1,268, respectively, to the 401(k) Plan during both three and nine months ended September 30, 2018.

## 13. Subsequent Events

In October 2018, the Company entered into a 127 months lease agreement to lease approximately 242,400 square feet of corporate office space in Sunnyvale, California, which is expected to become the Company's new corporate headquarters beginning in 2020. The property will be constructed by the landlord, with the completion date expected to occur between April and August 2020. The lease contains a rent holiday period, scheduled rent increases, lease incentives, and renewal option which allow the lease term to be extended by 5 years. Base rental payments will be approximately \$161,300 over the lease term.

# 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 the (1) unaudited condensed consolidated financial statements and the related notes thereto included elsewhere in this Quarterly Report on Form 10-Q, and (2) the audited consolidated financial statements and notes thereto and management's discussion and analysis of financial condition and results of operations for the year ended December 31, 2017 included in our 2017 Annual Report on Form 10-K. This Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These statements are often identified by the use of words such as "may," "will," "expect," "believe," "anticipate," "intend," "could," "estimate," or "continue," and similar expressions or variations. Such forward-looking statement are subject to risks, uncertainties and other factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such 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 Form 10-Q and in our other SEC filings, including our 2017 Annual Report on Form 10-K. We disclaim any obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.

#### Overview

Proofpoint is a leading next generation cybersecurity company that enables large and mid-sized organizations worldwide to protect their employees from advanced threats and compliance risks. Our security and compliance platform is comprised of an integrated suite of advanced threat protection, information protection, and brand protection solutions. These capabilities include email protection and authentication, advanced threat protection, data loss prevention, email encryption, SaaS application protection, response orchestration and automation, digital risk, web browser isolation, archiving, eDiscovery, supervision, and secure communication. Our solutions are built on a flexible, cloud-based platform and leverage a number of proprietary technologies - including big data analytics, machine learning, deep content inspection, secure storage, advanced encryption, intelligent message routing, dynamic malware analysis, threat correlation, and virtual execution environments to address today's rapidly changing threat and compliance landscape.

Our platform addresses this growing challenge by not only protecting data as it flows into and out of the enterprise via on-premises and cloud-based email, instant messaging, social media and other cloud-applications, but also by keeping track of this information as it is modified and distributed throughout the enterprise for compliance and data loss prevention, and securely archiving these communications for compliance and discovery. We address four important problems for the enterprise:

protecting users from the advanced attacks that target them via email, social media and SaaS applications; preventing the theft or inadvertent loss of sensitive information and, in turn, ensuring compliance with regulatory data protection mandates;

collecting, retaining, governing and discovering sensitive data for compliance and litigation support; and enabling organizations to respond quickly to security issues, providing both the intelligence and the context to prioritize incidents and orchestrate remediation actions.

Our platform and its associated solutions are sold to customers on a subscription basis and can be deployed through our unique cloud-based architecture that leverages both our global data centers as well as optional points-of-presence behind our customers' firewalls. Our flexible deployment model enables us to deliver superior security and compliance while maintaining the favorable economics afforded by cloud computing, creating a competitive advantage for us over

legacy on-premises and cloud-only offerings.

We were founded in 2002 to provide a unified solution to help enterprises address their growing data security requirements. Our first solution was commercially released in 2003 to combat the burgeoning problem of spam and viruses and their impact on corporate email systems. To address the evolving threat landscape and the adoption of communication and collaboration systems beyond corporate email and networks, we have broadened our solutions to defend against a wide range of threats, protect against outbound security risks, and archive and govern corporate information. As the threat environment has continued to evolve, we have dedicated significant resources to meet the ongoing challenges that this highly dynamic environment creates for our customers such as investing significantly to expand the breadth of our data protection platform as these expenditures are primarily in connection with the replacement and upgrade of equipment to lower the cost of deployment as well as to improve the efficiency for our cloud-based architecture.

Our business is based on a recurring revenue model. Our customers pay a subscription fee to license the various components of our SaaS platform for a contract term that is typically one to three years. At the end of the license term, customers may renew their subscription and in each year since the launch of our first solution in 2003, we have maintained a renewal rate with our existing customers of over 90%. We derive this retention rate by calculating the total annually recurring subscription revenue from customers currently using our SaaS platform and dividing it by the total annually recurring subscription revenue from both these current customers as well as all business lost through non-renewal.

We market and sell our solutions worldwide both directly through our sales teams and indirectly through a hybrid model where our sales organization actively assists our network of distributors and resellers. We also derive a lesser portion of our total revenue from the license of our solutions to strategic partners who offer our solutions in conjunction with one or more of their own products or services.

Our solutions are designed to be implemented, configured and operated without the need for any training or professional services. We offer various training and professional services for those customers that seek to develop deeper expertise in the use of our solutions or would like assistance with complex configurations or the importing of data. In some cases, we provide a hardware appliance to those customers that elect to host elements of our solution behind their firewall. Increasing adoption of virtualization in the data center has led to a decline in the sales of our hardware appliances and a shift towards our software-based virtual appliances, which are delivered as a download via the Internet. Our hardware and services offerings carry lower margins and are provided as a courtesy to our customers. We expect the overall proportion of revenue derived from the hardware and services offerings to generally remain below 5% of our total revenue.

Historically, the majority of our revenue was derived from our customers in the United States. We believe the markets outside of the United States offer an opportunity for growth and we intend to make additional investments in sales and marketing to expand in these markets. Revenue from customers outside of the United States grew 51% for the three months ended September 30, 2018 as compared to the prior year period, representing 19% of our total revenue for the period. One partner accounted for 12% of our total revenue for the three months ended September 30, 2018 and 2017, although the partner sold to a number of end-users, none of which accounted for more than 10% of our total revenue. The partner's sales were spread across many individual customers, all of which have a direct relationship with us as part of their access to our demand services.

We have not been profitable to date and will need to grow revenue at a rate faster than our investments in cost of revenue and operating expenses in order to achieve profitability, as discussed in more detail below.

#### Key Opportunities and Challenges

The total costs associated with the teams tasked with closing business with new customers and additional business with our existing customers have represented more than 90% of our total sales and marketing costs since 2008. Although we expect customers to be profitable over the duration of the customer relationship, the upfront costs typically exceed related revenue during the earlier periods of a contract. As a result, while our practice of invoicing our customers for the entire amount of the contract at the start of the term provides us with a relatively immediate contribution to cash flow, the revenue is recognized ratably over the term of the contract, and hence contributions toward operating income are limited in the period where the sales and marketing costs are incurred. Accordingly, an increase in the mix of new customers as a percentage of total customers would likely negatively impact our near-term operating results. On the other hand, we expect that an increase in the mix of existing customers as a percentage of total customers would likely negatively impact our near-term operating results.

renew their contracts, we anticipate that our mix of existing customers will increase, contributing to a decrease in our sales and marketing costs as a percentage of total revenue and a commensurate improvement in our operating income.

As part of maintaining our SaaS platform, we provide ongoing updates and enhancements to the platform services both in terms of the software as well as the underlying hardware and data center infrastructure. These updates and enhancements are provided to our customers at no additional charge as part of the subscription fees paid for the use of our platform. While more traditional products eventually become obsolete and require replacement, we are constantly updating and maintaining our cloud-based services and as such they operate with a continuous product life cycle. Much of this work is designed to both maintain and enhance the customers' experience over time while also lowering our costs to deliver the service. Our SaaS platform is a shared infrastructure that is used by all of our customers. Accordingly, the costs of the platform are spread in a relatively uniform manner across the entire customer base and no specific infrastructure elements are directly attached to any particular customer. As such, in the event that a customer chooses to not renew its subscription, the underlying resources are reallocated either to new customers or to accommodate the expanding needs of our existing customers and, as a result, we do not believe that the loss of any particular customer has a meaningful impact on our gross profit as long as we continue to grow our customer base.

To date, our customers have primarily used our solutions in conjunction with email messaging content. We have developed solutions to address new and evolving messaging solutions such as social media and file sharing applications, but these solutions are relatively nascent. If customers increase their use of these new messaging solutions in the future, we anticipate that our growth in revenue associated with older email messaging solutions may slow over time. Although revenue associated with our social media and file sharing applications has not been material to date, we believe that our ability to provide security, archiving, governance and discovery for these new solutions will be viewed as valuable by our existing customers, enabling us to derive revenue from these new forms of messaging and communication.

While the majority of our current and prospective customers run their email systems on premises, we believe that there is a trend for large and mid-sized enterprises to migrate these systems to the cloud. While our current revenue derived from customers using cloud-based email systems continues to grow as a percentage of our total revenue, many of these cloud-based email solutions offer some form of threat protection and governance services, potentially mitigating the need for customers to buy these capabilities from third parties such as ourselves. We believe that we can continue to provide security, archiving, governance, and discovery solutions that are differentiated from the services offered by cloud-based email providers, and as such our platform will continue to be viewed as valuable to enterprises once they have migrated their email services to the cloud, enabling us to continue to derive revenue from this new trend toward cloud-based email deployment models.

With the majority of our business, we invoice our customers for the entire contract amount at the start of the term and these amounts are recorded as deferred revenue on our balance sheet, with the dollar weighted average duration of these contracts for any given period over the past three years typically ranging from 14 to 20 months. As a result, while our practice of invoicing customers for the entire amount of the contract at the start of the term provides us with a relatively immediate contribution to cash flow, the revenue is recognized ratably over the term of the contract, and hence contributions toward operating income are realized over an extended period. As such, our efforts to improve our profitability require us to invest far less in operating expenses than the cash flow generated by our business might otherwise allow. As we strive to invest in an effort to continue to increase the size and scale of our business, we expect that the level of investment afforded by our growth in revenue should be sufficient to fund the investments needed to drive revenue growth and broaden our product line.

Considering all of these factors, we do not expect to be profitable on a GAAP basis in the near term and in order to achieve profitability we will need to grow revenue at a rate faster than our investments in operating expenses and cost of revenue.

We intend to grow our revenue through acquiring new customers by investing in our sales and marketing activities. We believe that an increase in new customers in the near term will result in a larger base of renewal customers, which, over time, we expect to be more profitable for us.

Sales and marketing is our largest expense and hence a significant contributing factor to our operating losses. We believe that our opportunity to improve our return on investment on sales and marketing costs relies primarily on our ongoing ability to cost-effectively renew our business with existing customers, thereby lowering our overall sales and marketing costs as a percentage of revenue as the mix of revenue derived from this more profitable renewal activity increases over time. Therefore, we anticipate that our initial significant investments in sales and marketing activities will, over time, generate a larger base of more profitable customers. Cost of subscription revenue is also a significant expense for us, and we expect to continue to build on the improvements over the past years, such as in replacing third-party technology with our proprietary technology and improving the utilization of our fixed investments in equipment and infrastructure, in order to provide the opportunity for improved subscription gross margins over time.

Although we plan to continue enhancing our solutions, we intend to lower our rate of investment in research and development as a percentage of revenue over time by deriving additional revenue from our existing solutions rather than by adding entirely new categories of solutions. In addition, as personnel costs are one of the primary drivers of the increases in our operating expenses, we plan to reduce our historical rate of headcount growth over time.

#### Key Metrics

We regularly review a number of metrics, including the following key metrics presented in the table below, to evaluate our business, measure our performance, identify trends in our business, prepare financial projections and make strategic decisions. Many of these key metrics, such as non-GAAP gross margin, billings and free cash flow, are non-GAAP measures. This non-GAAP information is not necessarily comparable to non-GAAP information of other companies. Users of this financial information should consider the types of events and transactions for which adjustments have been made.

				Nine Months Ended September 30,				
	2018		2017		2018		2017	
	(\$ in tho	ısaı	nds)					
Total revenue	\$184,179	)	\$134,680	5	\$518,5	15	\$372,	762
Growth	37	%	34	%	39	%	37	%
Gross margin percentage	72	%	73	%	71	%	72	%
Non-GAAP gross margin	78	%	78	%	78	%	78	%
Billings (non-GAAP)	\$221,377	7	\$166,494	4	\$605,4	-70	\$450,2	272
Growth	33	%	33	%	34	%	39	%
Free cash flow (non-GAAP)	\$58,207		\$32,326		\$106,5	82	\$76,4	14

## Non-GAAP gross margin

We define non-GAAP gross margin as non-GAAP gross profit divided by GAAP revenue. We define non-GAAP gross profit as GAAP gross profit, adjusted to exclude stock-based compensation expense and the amortization of intangibles associated with acquisitions. We consider this non-GAAP financial measure to be a useful metric for management and investors because it excludes the effect of stock-based compensation expense and the amortization of intangibles associated with acquisitions so that our management and investors can compare our business operating results over multiple periods, and compare our financial results with other companies in its industry, many of which present similar non-GAAP financial measure. However, there are a number of limitations related to the use of non-GAAP gross margin versus gross margin calculated in accordance with GAAP. For example, stock-based compensation has been and will continue to be for the foreseeable future a significant recurring expense in our business. Stock-based compensation is an important part of our employees' compensation and impacts their performance. In addition, the components of the costs that we exclude in our calculation of non-GAAP gross margin may differ from the components that our peer companies exclude when they report their non-GAAP results. Management compensates for these limitations by providing specific information regarding the GAAP amounts excluded from non-GAAP gross margin and evaluating non-GAAP gross margin together with gross margin calculated in accordance with GAAP.

The following table presents the reconciliation of gross margin to Non-GAAP gross margin for the three and nine months ended September 30, 2018 and 2017:

	Three Mon September		Nine Month September	
	2018	2017	2018	2017
	(\$ in thous	ands)		
GAAP gross profit	\$133,242	\$98,675	\$369,749	\$269,882
GAAP gross margin	72 9	6 73	% 71 %	5 72 %
Plus:				
Stock-based compensation expense	3,977	3,369	12,038	9,516
Intangible amortization expense	7,121	3,190	20,141	9,567
Non-GAAP gross profit	\$144,340	\$105,234	\$401,928	\$288,965
Non-GAAP gross margin	78 9	6 78	% 78 %	5 78 %

#### Billings

We have included billings, a non GAAP financial measure, in this report because it is a key measure used by our management and board of directors to manage our business and monitor our near term cash flows. We define billings as revenue recognized plus the change in deferred revenue and customer prepayments less unbilled accounts receivable from the beginning to the end of the period, but excluding additions to deferred revenue from acquisitions. We have provided reconciliation between total revenue, the most directly comparable GAAP financial measure, and billings. Accordingly, we believe that billings provide useful information to investors and others in understanding and evaluating our operating results in the same manner as our management and board of directors.

#### Table of Contents

Our use of billings as a non-GAAP measure has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for revenue or an analysis of our results as reported under GAAP. Some of these limitations are:

Billings is not a substitute for revenue, as trends in billings are not necessarily directly correlated to trends in revenue;

Billings is affected by a combination of factors including the timing of renewals, the sales of our solutions to both new and existing customers, the relative duration of contracts sold, and the relative amount of business derived from strategic partners. As each of these elements has unique characteristics in the relationship between billings and revenue, our billings activity is not necessarily closely correlated to revenue; and

Other companies, including companies in our industry, may not use billings, may calculate billings differently, or may use other financial measures to evaluate their performance all of which reduce the usefulness of billings as a comparative measure.

Our deferred revenue consists of amounts that have been invoiced but have not been recognized as revenue as of the period end. Customer prepayments represent billed amounts for which the contract can be terminated and the customer has a right of refund. Unbilled accounts receivable represent amounts for which we have recognized revenue, pursuant to our revenue recognition policy, for subscription software already delivered and professional services already performed, but billed in arrears and for which we believe we have an unconditional right to payment.

The following table presents the reconciliation of total revenue to billings for the three and nine months ended September 30, 2018 and 2017:

	Three Months EndedSeptember 30,20182017		Nine Mont September 2018	
Total revenue	(in thousar \$184 179	,	\$518,515	\$372,762
Deferred revenue and customer prepayments	φ101,179	φ151,000	φ510,515	<i>φ512</i> ,102
Ending	534,309	373,326	534,309	373,326
Beginning	496,315	341,687	431,371	295,996
Net change	37,994	31,639	102,938	77,330
Unbilled accounts receivable				
Ending	1,886	306	1,886	306
Beginning	1,090	475	603	486
Net change	(796)	169	(1,283)	180
Less: deferred revenue contributed by acquisitions		_	(14,700)	
Billings	\$221,377	\$166,494	\$605,470	\$450,272

#### Free cash flow

We define free cash flow as net cash provided by operating activities minus capital expenditures. We consider free cash flow to be a liquidity measure that provides useful information to management and investors about the amount of cash generated by the business that, after the acquisition of property and equipment, can be used for strategic opportunities, including investing in our business, making strategic acquisitions, and strengthening the balance sheet. Analysis of free cash flow facilitates management's comparisons of our operating results to competitors' operating results. A limitation of using free cash flow versus the GAAP measure of net cash provided by operating activities as a means for evaluating our company is that free cash flow does not represent the total increase or decrease in the cash balance from operations for the period because it excludes cash used for capital expenditures during the period. Management compensates for this limitation by providing information about our capital expenditures on the face of the cash flow statement and in the "Liquidity and Capital Resources" section below.

	Three Mo	onths		
	Ended		Nine Months Ended	
	Septembe	er 30,	September	30,
	2018	2017	2018	2017
	(in thousa	ands)		
GAAP cash flow provided by operating activities:	\$64,704	\$44,215	\$129,690	\$111,170
Less:				
Purchases of property and equipment	(6,497)	(11,889)	(23,108)	(34,756)
Non-GAAP free cash flow	\$58,207	\$32,326	\$106,582	\$76,414

#### Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations is based upon our accompanying Condensed Consolidated Financial Statements, which have been prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us to make estimates, assumptions and judgments that can have significant impact on the reported amounts of assets and liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities at the date of our financial statements. We base our estimates, assumptions and judgments on historical experience and various other factors that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. On a regular basis, we evaluate our estimates, assumptions and judgments and make changes accordingly.

We believe that the estimates, assumptions and judgments involved in revenue recognition, deferred commissions, stock-based compensation expense, fair value of assets acquired and liabilities assumed in business combinations, impairment assessment of goodwill, intangible assets and other long-lived assets, loss contingency, and recognition and measurement of current and deferred income taxes have the greatest potential impact on our accompanying Condensed Consolidated Financial Statements, and consider these to be our critical accounting estimates. Historically, our estimates, assumptions and judgments relative to our critical accounting policies have not differed materially from actual results. The critical accounting estimates associated with these policies are described in our 2017 Annual Report on Form 10-K, under "Management's Discussion and Analysis of Financial Condition and Results of Operations." Except for accounting policies related to the adoption of ASC 606, there have been no material changes to our critical accounting policies and estimates as compared to the critical accounting policies and estimates described

in our Annual Report on Form 10-K for the year ended December 31, 2017. See Note 2 "Revenue, Deferred Revenue and Deferred Contract Costs" of Part I, Item 1 of this Quarterly Report on Form 10-Q for the critical accounting policies resulting from the adoption of ASC 606.

Components of Our Results of Operations

Revenue

We derive our revenue primarily through the license of various solutions and services on our security-as-a-service platform on a subscription basis, supplemented by the sales of training, professional services and hardware depending upon our customers' requirements.

Subscription. We license our platform and its associated solutions and services on a subscription basis. The fees are charged on a per user, per year basis. Subscriptions are typically one to three years in duration. We invoice our customers upon signing for the entire term of the contract. The invoiced non-cancellable amounts billed in advance are treated as deferred revenue on the balance sheet and are recognized ratably, in accordance with the appropriate revenue recognition guidelines, over the term of the contract. We also derive a portion of our subscription revenue from the license of our solutions to strategic partners. We bill these strategic partners monthly. We expect our subscription revenue will continue to grow and remain above 95% of our total revenue.

Hardware and services. We provide hardware appliances as a convenience to our customers and as such it represents a small part of our business. Our solutions are designed to be implemented, configured and operated without the need for any training or professional services. For those customers that seek to develop deeper expertise in the use of our solutions or would like assistance with complex configurations or the importing of data, we offer various training and professional services. We typically invoice the customer for hardware at the time of shipment. We typically invoice customers for services at the time the order is placed and recognize this revenue as the services are performed. On occasion, customers may retain us for special projects such as archiving import and export services; these types of services are recognized upon completion of the project. We expect the overall proportion of revenue derived from hardware and service offerings to generally remain below 5% of our total revenue.

#### Cost of Revenue

Our cost of revenues consists of cost of subscription revenue and cost of hardware and services revenue. Personnel costs, which consist of salaries, benefits, bonuses, stock-based compensation, data center costs and hardware costs, are the most significant components of our cost of revenues. We expect personnel costs to continue to increase in absolute dollars as we hire new employees to continue to grow our business.

Cost of Subscription Revenue. Cost of subscription revenue primarily includes personnel costs, consisting of salaries, benefits, bonuses, and stock-based compensation, for employees who provide support services to our customers and operate our data centers. Other costs include fees paid to contractors who supplement our support and data center personnel; expenses related to the use of third-party data centers in both the United States and internationally; depreciation of data center equipment; amortization of licensing fees and royalties paid for the use of third-party technology; amortization of internally developed intangible assets; and the amortization of intangible assets acquired through business combinations. Growth in subscription revenue generally consumes production resources, requiring us to gradually increase our cost of subscription revenue in absolute dollars as we expand our investment in data center equipment, the third-party data center space required to house this equipment, and the personnel needed to manage this higher level of activity.

Cost of Hardware and Services Revenue. Cost of hardware and services revenue includes personnel costs for employees who provide training and professional services to our customers as well as the cost of server hardware shipped to our customers that we procure from third parties and configure with our software solutions.

#### **Operating Expenses**

Our operating expenses consist of research and development, sales and marketing, and general and administrative expenses. Personnel costs, which consist of salaries, benefits, bonuses, and stock-based compensation, are the most significant component of our operating expenses. We expect personnel costs to continue to increase in absolute dollars as we hire new employees to continue to grow our business. Our headcount has increased 30% from December 31, 2016 to December 31, 2017. As a result of this growth in headcount, operating expenses have increased significantly over these periods. We expect personnel costs to continue to increase in absolute dollars as we hire new employees to continue to continue to increase in absolute dollars as we hire new employees to continue to state the second state of the second state

Research and Development. Research and development expenses include personnel costs, consulting services and depreciation. We believe that these investments have played an important role in broadening the capabilities of our platform over the course of our operating history, enhancing the relevance of our solutions in the market in general and helping us to retain our customers over time. We expect to continue to devote substantial resources to research and development in an effort to continuously improve our existing solutions as well as to develop new offerings. We

believe that these investments are necessary to maintain and improve our competitive position. However, over the longer term, we intend to monitor these costs so as to decrease this spending as a percentage of total revenue. Our research efforts include both software developed for our internal use on behalf of our customers as well as software elements to be used by our customers in their own facilities. To date, our capitalized costs on software developed for internal use on behalf of our customers were not material. For the software developed for use on our customers' premises, the costs associated with the development work between technological feasibility and the general availability has not been material and as such we have not capitalized any of these development costs to date.

Sales and Marketing. Sales and marketing expenses include personnel costs, sales commissions, and other costs including travel and entertainment, marketing and promotional events, public relations and marketing activities. These costs also include amortization of intangible assets as a result of our past acquisitions. Due to our continued investment in growing our sales and marketing operations, both domestically and internationally, headcount increases were reflected in higher compensation expense consistent with our revenue growth. Our sales personnel are typically not immediately productive, and therefore the increase in sales and marketing expenses we incur when we add new sales representatives is not immediately offset by increased revenue and may not result in increased revenue over the long-term if these new sales people fail to become productive. The timing of our hiring of new sales personnel and the rate at which they generate incremental revenue will affect our future financial performance. We expect that sales and marketing expenses will continue to increase in absolute dollars and be among the most significant components of our operating expenses.

General and Administrative. General and administrative expenses consist of personnel costs, consulting services, audit fees, tax services, legal expenses and other general corporate items. As a result of our operational growth, we expect our general and administrative expenses to increase in absolute dollars in future periods as we continue to expand our operations and hire additional personnel.

#### Interest Expense

Interest expense consists of interest income earned on our cash, cash equivalents and short-term investments, the interest expense related to our convertible senior notes and our capital lease payments.

#### Other Income (Expense), Net

Other income (expense), net, consists primarily of the net effect of foreign currency transaction gains and losses.

#### Income Taxes

For most of the prior years, our income tax expense or benefit were primarily related to state and foreign income taxes. As we have incurred operating losses in all periods to date and recorded a full valuation allowance against our deferred tax assets, we had not historically recorded a provision for federal income taxes. However, in the year ended December 31, 2017, we recognized \$0.2 million of deferred tax benefit in the U.S. related to amortization of tax goodwill on business acquisitions and \$12.3 million of deferred tax benefit in the U.S. related to changes in the Company's valuation allowance resulting from the Cloudmark, Inc. and WebLife Balance, Inc. business acquisitions. For the nine months ended September 30, 2018, we recognized \$14.7 million of deferred tax benefit in the U.S. related to changes in the Company's valuation allowance resulting from the Wombat Security Technologies, Inc. acquisition. Realization of any of our deferred tax assets depends upon future earnings, the timing and amount of which are uncertain. Utilization of our net operating losses and research and development credits may be subject to substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code and similar state provisions. Analyses have been conducted to determine whether an ownership change had occurred since inception. The analyses have indicated that although ownership changes have occurred in prior years, the net operating losses and research and development credits would not expire before utilization as a result of the ownership change. In the event we have subsequent changes in ownership, net operating losses and research and development credit carryovers could be limited and may expire unutilized as a result of the subsequent ownership change.

**Recent Accounting Pronouncements** 

Refer to Note 1 "The Company and Summary of Significant Accounting Policies" to our condensed consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q for a full description of recent accounting pronouncements.

# Results of Operations

The following table is a summary of our consolidated statements of operations and results of operations as a percentage of our total revenue for those periods.

					Nine Months	Ended	
	Three Mor	onths Ended September 30,			September 30,		
	2018			2017	2018	2017	
		% of		% of	% of	% of	
	Amount	revenue		Amountvenue	Amorentenue	Amountvenue	
	(\$ in thous	ands)					
Revenue:							
Subscription	\$181,505	99	%				