FireEye, Inc.
Form 10-Q
November 04, 2016

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)
x QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended September 30, 2016

or
o 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 001-36067

FireEye, Inc.
(Exact name of registrant as specified in its charter)

Delaware	20-1548921
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

1440 McCarthy Blvd.
Milpitas, CA 95035
(408) 321-6300
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No ¨

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer x	Accelerated filer ¨
Non-accelerated filer ¨ (Do not check if a smaller reporting company)	Smaller reporting company ¨

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

The number of shares of the registrant's common stock outstanding as of November 1, 2016 was 171,098,281.

Table of Contents

TABLE OF CONTENTS

PART I — FINANCIAL INFORMATION
Item1. Financial Statements
FIREEYE, INC.
Condensed Consolidated Balance Sheets
(In thousands, except per share data)
(Unaudited)

	September 30, 2016	December 31, 2015
ASSETS		
Current assets:		
Cash and cash equivalents	$ 223,697	$ 402,102
Short-term investments	702,469	767,775
Accounts receivable, net of allowance for doubtful accounts of $1,796 and $2,021 at September 30, 2016 and December 31, 2015, respectively	124,017	172,752
Inventories	7,807	13,747
Prepaid expenses and other current assets	27,957	30,883
Total current assets	1,085,947	1,387,259
Property and equipment, net	67,219	78,368
Goodwill	978,387	750,288
Intangible assets, net	260,111	214,560
Deposits and other long-term assets	11,184	10,998
TOTAL ASSETS	$ 2,402,848	$ 2,441,473
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$ 29,817	$ 43,650
Accrued and other current liabilities	29,322	29,820
Accrued compensation	126,193	79,294
Deferred revenue, current portion	362,081	305,169
Total current liabilities	547,413	457,933
Convertible senior notes, net	732,868	706,198
Deferred revenue, non-current portion	254,337	221,829
Other long-term liabilities	8,255	11,141
Total liabilities	1,542,873	1,397,101
Commitments and contingencies (NOTE 9)		
Stockholders' equity:		
Common stock, par value of $0.0001 per share; 1,000,000 shares authorized, 171,004 shares and 161,643 shares issued and outstanding as of September 30, 2016 and December 31, 2015, respectively	17	16
Additional paid-in capital	2,638,951	2,403,088
Treasury stock, at cost; 3,333 shares as of September 30, 2016 and December 31, 2015	(150,000)	(150,000)
Accumulated other comprehensive loss	(457)	(2,225)
Accumulated deficit	(1,628,536)	(1,206,507)
Total stockholders' equity	859,975	1,044,372
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 2,402,848	$ 2,441,473

See accompanying notes to condensed consolidated financial statements.

Table of Contents

FIREEYE, INC.
Condensed Consolidated Statements of Operations
(In thousands, except per share data)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Revenue:				
Product	$43,857	$60,101	$118,340	$150,034
Subscription and services	142,554	105,515	411,078	288,159
Total revenue	186,411	165,616	529,418	438,193
Cost of revenue:				
Product	16,675	21,265	49,767	53,566
Subscription and services	52,378	40,606	158,143	116,463
Total cost of revenue	69,053	61,871	207,910	170,029
Total gross profit	117,358	103,745	321,508	268,164
Operating expenses:				
Research and development	62,665	73,374	225,020	207,777
Sales and marketing	110,756	117,131	355,189	340,734
General and administrative	32,860	36,518	108,925	103,812
Restructuring charges	22,423	—	27,630	—
Total operating expenses	228,704	227,023	716,764	652,323
Operating loss	(111,346)	(123,278)	(395,256)	(384,159)
Interest income	1,687	956	4,779	1,616
Interest expense	(12,019)	(11,587)	(35,737)	(15,425)
Other expense, net	(467)	(985)	(843)	(2,559)
Loss before income taxes	(122,145)	(134,894)	(427,057)	(400,527)
Provision for (benefit from) income taxes	1,228	636	(8,464)	2,540
Net loss attributable to common stockholders	$(123,373)	$(135,530)	$(418,593)	$(403,067)
Net loss per share attributable to common stockholders, basic and diluted	$(0.75)	$(0.88)	$(2.59)	$(2.63)
Weighted average shares used in computing net loss per share attributable to common stockholders, basic and diluted	164,728	154,523	161,862	153,440

See accompanying notes to condensed consolidated financial statements.

2

Table of Contents
FIREEYE, INC.
Condensed Consolidated Statements of Comprehensive Loss
(In thousands)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Net loss	$(123,373)	$(135,530)	$(418,593)	$(403,067)
Change in net unrealized gains/(losses) on available-for-sale investments, net of tax	(870)	48	1,768	17
Comprehensive loss	$(124,243)	$(135,482)	$(416,825)	$(403,050)

See accompanying notes to condensed consolidated financial statements.

3

FIREEYE, INC.
Condensed Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	Nine Months Ended September 30, 2016	2015
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$(418,593)	$(403,067)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	90,852	82,154
Stock-based compensation	168,117	164,652
Non-cash interest expense related to convertible senior notes	26,670	11,397
Change in fair value of contingent earn-out liability	1,756	—
Deferred income taxes	(11,836)	120
Other	6,984	3,144
Changes in operating assets and liabilities, net of business acquisitions:		
Accounts receivable	60,372	50,885
Inventories	2,985	(4,986)
Prepaid expenses and other assets	4,258	1,059
Accounts payable	(11,598)	1,289
Accrued liabilities	(5,059)	7,554
Accrued transaction costs of acquiree	(7,727)	—
Accrued compensation	6,142	8,305
Deferred revenue	68,334	102,324
Other long-term liabilities	(3,174)	2,741
Net cash provided by (used in) operating activities	(21,517)	27,571
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment and demonstration units	(28,009)	(37,193)
Purchases of short-term investments	(379,695)	(640,162)
Proceeds from maturities of short-term investments	438,624	159,149
Proceeds from sales of short-term investments	4,507	—
Business acquisitions, net of cash acquired	(204,926)	—
Lease deposits	(480)	(627)
Net cash used in investing activities	(169,979)	(518,833)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Net proceeds from issuance of convertible senior notes	—	896,530
Prepaid forward stock purchase	—	(150,000)
Repayment of debt of acquired business	(8,842)	—
Payments for contingent earn-outs	(87)	—
Payment related to shares withheld for taxes	(1,124)	(2,027)
Proceeds from employee stock purchase plan	12,684	10,835
Proceeds from exercise of equity awards	10,460	26,462
Net cash provided by financing activities	13,091	781,800
Net change in cash and cash equivalents	(178,405)	290,538
Cash and cash equivalents, beginning of period	402,102	146,363
Cash and cash equivalents, end of period	$223,697	$436,901
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:		
Cash paid for income taxes	$4,352	$1,392

Cash paid for interest	$6,060	$—
SUPPLEMENTAL DISCLOSURES OF NON-CASH INVESTING AND FINANCING ACTIVITIES:		
Vesting of early exercised stock options	$1,296	$1,743
Common stock issued in connection with acquisitions	$41,000	$—
Contingent earn-out in connection with acquisitions	$39,088	$—
Purchases of property and equipment and demonstration units in accounts payable and accrued liabilities	$6,087	$4,981

See accompanying notes to condensed consolidated financial statements.

Table of Contents
FIREEYE, INC.
Notes to Condensed Consolidated Financial Statements

1. Description of Business and Summary of Significant Accounting Policies
Description of Business
FireEye, Inc., with principal executive offices located in Milpitas, California, was incorporated as NetForts, Inc. on February 18, 2004, under the laws of the State of Delaware, and changed its name to FireEye, Inc. on September 7, 2005.
FireEye, Inc. and its wholly owned subsidiaries (collectively, the “Company”, “we”, “us” or “our”) is a leader in stopping advanced cyber attacks that use advanced malware, zero-day exploits, and APT (“Advanced Persistent Threat”) tactics. Our solutions supplement traditional and next-generation firewalls, Intrusion Prevention Systems (“IPS”), anti-virus, and gateways, which cannot stop advanced threats, leaving security holes in networks. We offer a solution that detects and blocks attacks across Web, email, endpoint, file and mobile threat vectors, as well as latent malware resident on file shares. Our solutions address all stages of an attack lifecycle with a signature-less engine utilizing stateful attack analysis to detect zero-day threats.
In February 2016, we acquired Invotas International Corporation (“Invotas”), a provider of security automation and orchestration technology. We paid upfront cash consideration of $17.7 million and issued 742,026 shares of our common stock with an estimated fair value of $11.1 million.
In January 2016, we acquired iSIGHT Security, Inc. (d/b/a iSIGHT Partners, Inc.) (“iSIGHT”), one of the world’s leading providers of cyber threat intelligence for global enterprises. We paid upfront cash consideration of $192.8 million, incurred liabilities of $39.1 million contingent upon the achievement of a threat intelligence bookings target on or before the end of the second quarter of 2018, and issued 1,793,305 shares of our common stock with an estimated fair value of $29.9 million.
In June 2015, we issued $460.0 million principal amount of 1.000% Convertible Senior Notes due 2035 (the “Series A Notes”) and $460.0 million principal amount of 1.625% Convertible Senior Notes due 2035 (the “Series B Notes” and together with the Series A Notes, the “Convertible Senior Notes”), in a private placement to qualified institutional purchasers pursuant to an exemption from registration provided by Section 4(a)(2) and Rule 144A under the Securities Act of 1933, as amended (the “Securities Act”). We recognized total net proceeds after the initial purchasers' discount and issuance costs of $896.5 million. In connection with the issuance of the Convertible Senior Notes, we also entered into privately negotiated prepaid forward stock purchase transactions (each a “Prepaid Forward”) with one of the initial purchasers of the Convertible Senior Notes, pursuant to which we paid approximately $150.0 million. The amount of the prepaid is equivalent to approximately 3.3 million shares which are to be settled on or around June 1, 2020 and June 1, 2022, respectively, subject to any early settlement in whole or part of each Prepaid Forward.
We sell the majority of our products, subscriptions and services to end-customers through distributors, resellers, and strategic partners, with a lesser percentage of sales directly to end-customers.
Basis of Presentation and Consolidation
The accompanying unaudited condensed consolidated financial statements include the accounts of FireEye, Inc. and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.
The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”), and following the requirements of the Securities and Exchange Commission (“SEC”), for interim reporting. As permitted under those rules, certain footnotes or other financial information that are normally required by U.S. GAAP can be condensed or omitted. These unaudited condensed consolidated financial statements have been prepared on the same basis as our annual consolidated financial statements and, in the opinion of management, reflect all adjustments, consisting only of normal recurring adjustments, that are necessary for a fair statement of our financial information. The results of operations for the three and nine months ended September 30, 2016 are not necessarily indicative of the results to be expected for the year ending December 31, 2016 or for any other interim period or for any other future year. The balance sheet as of December 31, 2015 has been derived from audited consolidated financial statements at that date but does not include all of the information required by U.S. GAAP for annual consolidated financial statements.

The accompanying unaudited condensed consolidated financial statements and related financial information should be read in conjunction with the audited consolidated financial statements and the related notes thereto for the year ended December 31, 2015 included in our Annual Report on Form 10-K, which was filed with the SEC on February 26, 2016.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Such management estimates include, but are not limited to, the best estimate of selling price for our products and services, commissions expense, future taxable income, contract manufacturer liabilities, litigation and settlement costs and other loss contingencies, fair value of our stock options and the purchase price allocation of acquired businesses. We base our estimates on historical experience and also on assumptions that we believe are reasonable. Changes in facts or circumstances may cause us to change our assumptions and estimates in future periods, and it is possible that actual results could differ from current or revised future estimates.

Summary of Significant Accounting Policies

There have been no significant changes to our significant accounting policies as of and for the three and nine months ended September 30, 2016, as compared to the significant accounting policies described in our Annual Report on Form 10-K for the year ended December 31, 2015, except with respect to changes in our policy on Stock-Based Compensation.

Stock-Based Compensation

As permitted under ASU 2016-09, we have elected to recognize forfeitures as they occur, and no longer estimate a forfeiture rate when calculating the stock-based compensation for our equity awards.

Recent Accounting Pronouncements

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments (a consensus of the Emerging Issues Task Force). This standard clarifies how certain cash receipts and payments should be classified in the statement of cash flows, including the cash settlement of our Convertible Senior Notes. Upon cash settlement, repayment of the principal amount will be bifurcated between cash outflows for operating activities for the portion related to accreted interest attributable to debt discounts arising from the difference between the coupon interest rate and the effective interest rate, and financing activities for the remainder. This will result in $233.9 million of accreted interest being classified as cash used in operating activities in our consolidated financial statements upon cash settlement. See Note 8 Convertible Senior Notes regarding timing of settlement. The guidance is effective for us beginning in the first quarter of 2018, and should be applied retrospectively. Early adoption is permitted. We elected to early adopt this standard in the third quarter of 2016.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. This standard changes the impairment model for most financial assets and certain other instruments by introducing a current expected credit loss (CECL) model. The CECL model is a more forward-looking approach based on expected losses rather than incurred losses, requiring entities to estimate and record losses expected over the remaining contractual life of an asset. The guidance is effective for us beginning in the first quarter of 2020. Early adoption beginning in 2019 is permitted. We are currently evaluating the impact the adoption of this guidance will have on our consolidated financial statements and related disclosures.

In March 2016, the FASB issued ASU 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. This standard simplifies various aspects related to how share-based payments are accounted for and presented in the financial statements, including income taxes, forfeitures and statutory tax withholding requirements. The guidance is effective for us beginning in the first quarter of 2017. Early adoption is permitted. We elected to early adopt this standard in the first quarter of 2016.

As a result of adopting this standard, we have made an accounting policy election to account for forfeitures as they occur. This change has been applied on a modified retrospective basis, resulting in a cumulative-effect adjustment to increase accumulated deficit by $3.4 million as of January 1, 2016; the date of adoption. The adoption of this guidance also requires excess tax benefits and tax deficiencies be recorded in the income statement as opposed to additional paid-in capital when the awards vest or are settled, and has been applied on a prospective basis. The adoption of additional amendments related to the timing of when excess tax benefits are recognized and the accounting for minimum statutory withholding tax requirements included in this guidance has no impact on our current condensed consolidated financial statements or on any prior period financial statements presented.

This guidance also requires changes in the classification of shares withheld to pay employee taxes and excess tax benefits on the consolidated statements of cash flows. The amendments require cash paid by an employer when directly withholding shares for tax-withholding purposes be classified as a financing activity, and be applied retrospectively to all prior periods presented. As these cash flows have previously been presented as financing activities, there is no change resulting from the adoption of this amendment. The amendments also require excess tax benefits be classified as an operating activity, consistent with other income tax cash flows, and may be applied either on a retrospective or prospective basis. We have elected to apply this amendment on a prospective basis, as there is no impact to our prior period consolidated statements of cash flows. As such, prior periods have not been adjusted.

In March 2016, the FASB issued ASU 2016-06, Derivatives and Hedging (Topic 815): Contingent Put and Call Options in Debt Instruments (a consensus of the Emerging Issues Task Force). This standard clarifies the requirements for assessing whether contingent call (put) options that can accelerate the payment of principal on debt instruments are clearly and closely related to their debt hosts. The guidance is effective for us beginning in the first quarter of 2017 and should be applied on a modified retrospective basis to existing debt instruments as of the beginning of the fiscal year for which the amendments are effective. Early adoption is permitted. We elected to early adopt this standard in the third quarter of 2016. As we previously assessed the embedded call (put) options associated with our Convertible Senior Notes in accordance with the requirements in this guidance, the adoption of this standard did not have any impact on our consolidated financial statements and related disclosures.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842). This standard is intended to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The guidance is effective for us beginning in the first quarter of 2019, and should be applied on a modified retrospective basis. Early adoption is permitted. We expect the adoption of this standard to have a material impact on our consolidated financial statements and related disclosures.

In September 2015, the FASB issued ASU No. 2015-16, Business Combinations (Topic 805): Simplifying the Accounting for Measurement-Period Adjustments. This standard eliminates the requirement that an acquirer in a business combination account for measurement-period adjustments retrospectively. Under this guidance, measurement-period adjustments will be recognized during the period in which they are determined. We adopted this standard in the first quarter of 2016 and the adoption did not have a material impact on our consolidated financial statements and related disclosures. See Note 5 for details of measurement-period adjustments.

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606). This standard provides a single model for revenue arising from contracts with customers and supersedes current revenue recognition guidance. The core principle of the guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.

In July 2015, the FASB decided to defer the effective date by one year, and as a result, the guidance is effective for us beginning in the first quarter of 2018. Early adoption as of the original effective date would be permitted. The guidance permits companies to either apply the requirements retrospectively to all prior periods presented, or apply the requirements in the year of adoption, through a cumulative adjustment.

During 2016, the FASB issued ASU No. 2016-08, Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net), ASU No. 2016-10, Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing and ASU No. 2016-12, Revenue from Contracts with Customers (Topic 606): Narrow Scope Improvements and Practical Expedients. These standards were issued to address implementation issues raised by the FASB-IASB Joint Transition Resource Group for Revenue Recognition (TRG).

We are currently evaluating the impact the adoption of the new revenue guidance and related updates will have on our consolidated financial statements and related disclosures.

In August 2014, the FASB issued ASU 2014-15, Disclosures of Uncertainties About an Entity’s Ability to Continue as a Going Concern. This standard provides guidance on how and when reporting entities must disclose going-concern uncertainties in their financial statements. The guidance is effective for us beginning in the first quarter of 2017. Early adoption is permitted. The adoption of this standard is not expected to have an impact on our consolidated financial statements and related disclosures.

2. Fair Value Measurements

The accounting guidance for fair value measurements provides a framework for measuring fair value on either a recurring or nonrecurring basis, whereby the inputs used in our valuation techniques are assigned a hierarchical level. The following are the three levels of inputs to measure fair value:

- Level 1: Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2: Inputs that reflect quoted prices for identical assets or liabilities in less active markets; quoted prices for similar assets or liabilities in active markets; benchmark yields, reported trades, broker/dealer quotes, inputs other than quoted prices that are observable for the assets or liabilities; or inputs that are derived principally from or corroborated by observable market data by correlation or other means.
- Level 3: Unobservable inputs that reflect our own assumptions incorporated in valuation techniques used to measure fair value. These assumptions are required to be consistent with market participant assumptions that are reasonably available.

We consider an active market to be one in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis, and consider an inactive market to be one in which there are infrequent or few transactions for the asset or liability, the prices are not current, or price quotations vary substantially either over time or among market makers. Where appropriate, our own or the counterparty’s non-performance risk is considered in measuring the fair values of assets.

The following table presents our assets and liabilities measured at fair value on a recurring basis using the above input categories (in thousands):

	As of September 30, 2016				As of December 31, 2015			
Description	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets								
Cash equivalents:								
Money market funds	$525	$—	$—	$525	$210,533	$—	$ —	$210,533
U.S. Government agencies	—	9,301	—	9,301	—	—	—	—
Total cash equivalents	525	9,301	—	9,826	210,533	—	—	210,533
Short-term investments:								
Certificates of deposit	—	11,024	—	11,024	—	19,124	—	19,124
Commercial paper	—	29,818	—	29,818	—	—	—	—
Corporate notes and bonds	—	419,888	—	419,888	—	447,267	—	447,267
U.S. Government agencies	—	241,739	—	241,739	—	301,384	—	301,384
Total short-term investments	—	702,469	—	702,469	—	767,775	—	767,775
Total assets measured at fair value	$525	$711,770	$—	$712,295	$210,533	$767,775	$ —	$978,308
Liabilities								
Contingent earn-out	$—	$—	$40,757	$40,757	$—	$—	$ —	$—
Total liabilities measured at fair value	$—	$—	$40,757	$40,757	$—	$—	$ —	$—

The estimated fair value of the contingent earn-out incurred in connection with our acquisition of iSIGHT is considered to be a Level 3 measurement due to the use of significant unobservable inputs. The value was determined using a discounted risk-adjusted expected (probability-weighted) cash flow methodology, by applying a real options approach model. The real options approach incorporated management's estimates of expected quarterly growth rates in bookings (63% on average), which could not be corroborated by observable market data, with the volatility of revenue for comparable companies (16.5% on average) and the correlation between comparable companies' quarterly revenue growth and that of the S&P 500 Index (44.7% on average), which are observable in the market, to determine the probability of achieving estimated bookings within the earn-out period of performance (2.5 years). The resulting expected earn-out payment was discounted back to present value using our cost of debt (ranging from 6.3% to 7.1%).

The following is a reconciliation of the Level 3 contingent earn-out liability for the nine months ended September 30, 2016 (in thousands):

	Amount
Balance at acquisition (January 14, 2016)	$35,588
Measurement period adjustments (1)	3,500
Changes in fair value (2)	1,756
Cash payments	(87)
Balance as of September 30, 2016	$40,757

(1) See Note 5 Business Combinations for adjustments made to initial amounts recorded in our acquisition of iSIGHT.

(2) Changes in fair value are recorded in general and administrative expenses in our condensed consolidated statements of operations.

Additionally, we have a restructuring liability related to certain real estate facilities which was calculated based on the present value of future lease payments, less estimated sublease income, discounted at a rate commensurate with our current cost of financing. This non-recurring fair value measurement is considered to be a Level 3 measurement due to the use of significant unobservable inputs. To the extent that actual sublease income or the timing of subleasing these facilities is different than initial estimates, we will adjust the restructuring liability in the period during which such information becomes known. See Note 6 Restructuring Charges for a reconciliation of this liability.

We measure certain assets, including goodwill, intangible assets and our equity-method investment in a private company at fair value on a nonrecurring basis when there are identifiable events or changes in circumstances that may have a significant adverse impact on the fair value of these assets. No such events or changes occurred during the nine months ended September 30, 2016.

The estimated fair value of the Convertible Senior Notes as of September 30, 2016 was determined to be $844.3 million, based on quoted market prices. We consider the fair value of the Convertible Senior Notes to be a Level 2 measurement as they are not actively traded.

3. Investments

Our investments consisted of the following (in thousands):

	As of September 30, 2016					
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value	Cash and Cash Equivalent	Short-Term Investment
Certificates of deposit	$11,000	$ 25	$ (1)	$11,024	$ —	$ 11,024
Commercial paper	29,856	—	(38)	29,818	—	29,818
Corporate notes and bonds	420,244	136	(492)	419,888	—	419,888
U.S. Government agencies	251,127	41	(128)	251,040	9,301	241,739
Total	$712,227	$ 202	$ (659)	$711,770	$ 9,301	$ 702,469

	As of December 31, 2015					
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value	Cash and Cash Equivalent	Short-Term Investment
Certificates of deposit	$19,160	$ —	$ (36)	$19,124	$ —	$ 19,124
Corporate notes and bonds	448,688	—	(1,421)	447,267	—	447,267
U.S. Government agencies	302,152	2	(770)	301,384	—	301,384
Total	$770,000	$ 2	$ (2,227)	$767,775	$ —	$ 767,775

The following tables present the gross unrealized losses and related fair values of our investments that have been in a continuous unrealized loss position (in thousands):

	As of September 30, 2016					
	Less Than 12 Months		Greater Than 12 Months		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Certificates of deposit	$199	$ (1)	$—	$ —	$199	$ (1)
Commercial paper	29,818	(38)	—	—	29,818	(38)
Corporate notes and bonds	248,389	(403)	95,971	(89)	344,360	(492)
U.S. Government agencies	128,697	(128)	3,000	—	131,697	(128)
Total	$407,103	$ (570)	$98,971	$ (89)	$506,074	$ (659)

	As of December 31, 2015					
	Less Than 12 Months		Greater Than 12 Months		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Certificates of deposit	$18,404	$ (36)	$—	$ —	$18,404	$ (36)
Corporate notes and bonds	430,466	(1,407)	16,801	(15)	447,267	(1,422)
U.S. Government agencies	266,541	(761)	8,992	(8)	275,533	(769)
Total	$715,411	$ (2,204)	$25,793	$ (23)	$741,204	$ (2,227)

Unrealized losses related to these investments are due to interest rate fluctuations as opposed to credit quality. In addition, we do not intend to sell, and it is not more likely than not that we would be required to sell, these investments before recovery of their cost basis. As a result, there is no other-than-temporary impairment for these investments as of September 30, 2016 and December 31, 2015.

The following table summarizes the contractual maturities of our investments at September 30, 2016 (in thousands):

	Amortized Cost	Fair Value
Due within one year	$381,818	$381,612
Due within one to two years	330,409	330,158
Total	$712,227	$711,770

All available-for-sale securities have been classified as current, based on management's intent and ability to use the funds in current operations.

During 2015, we invested in a privately held company, obtaining an initial 12.5% ownership interest. This investment is accounted for under the equity method based on our ability to exercise significant influence over operating and financial policies of the investee, and is classified within deposits and other long-term assets on our condensed consolidated balance sheets. The carrying value of this investment was $1.2 million and $1.8 million as of September 30, 2016 and December 31, 2015, respectively.

4. Property and Equipment

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

	As of September 30, 2016	As of December 31, 2015
Computer equipment and software	$140,851	$120,886
Leasehold improvements	41,134	41,626
Furniture and fixtures	13,805	13,470
Machinery and equipment	447	447
Total property and equipment	196,237	176,429
Less: accumulated depreciation	(129,018)	(98,061)
Total property and equipment, net	$67,219	$78,368

During the three and nine months ended September 30, 2016, we capitalized $1.4 million and $9.4 million, respectively, of software development costs related to our cloud subscription offerings. Amortization expense related to capitalized software development costs during the three and nine months ended September 30, 2016 was $0.8 million and $1.7 million, respectively. Software development costs capitalized during the three and nine months ended September 30, 2015 were not material.

Depreciation and amortization expense related to property and equipment and demonstration units during the three months ended September 30, 2016 and 2015 was $12.6 million and $15.1 million, respectively. Depreciation and amortization expense related to property and equipment and demonstration units during the nine months ended September 30, 2016 and 2015 was $39.8 million and $44.6 million, respectively.

During the nine months ended September 30, 2015, we recognized $1.1 million in accelerated depreciation expense associated with changes in the estimated useful life of certain assets which were replaced in the first quarter of 2016.

5. Business Combinations

Acquisition of iSIGHT

On January 14, 2016, we acquired all of the outstanding shares of privately held iSIGHT, one of the world's leading providers of cyber threat intelligence for global enterprises. The acquisition extends our intelligence network to create an advanced and comprehensive private cyber threat intelligence operation, providing customers with higher fidelity alerts, context to prioritize threats and the strategic insights to proactively prepare for threats that might target their industry or region.

In connection with this acquisition, we paid upfront cash consideration of $192.8 million, incurred liabilities of $39.1 million contingent upon the achievement of a threat intelligence bookings target on or before the end of the second quarter of 2018, and issued 1,793,305 shares of our common stock with an estimated fair value of $29.9 million, which will be released to former stockholders of iSIGHT upon the achievement of the same threat intelligence bookings target stated above. This resulted in total purchase consideration of $261.8 million. The number of shares was fixed at the completion of the acquisition and is the maximum number of shares that can be released. The contingent earn-out liability is included in accrued compensation on the condensed consolidated balance sheet as of September 30, 2016, and will result in a cash payment of $41.3 million, if and when the threat intelligence bookings target is achieved. We currently expect this target to be achieved as of the end of the fourth quarter of 2016, with subsequent payment to be made in the first quarter of 2017.

The acquisition of iSIGHT was accounted for in accordance with the acquisition method of accounting for business combinations with FireEye as the accounting acquirer. Under the acquisition method of accounting, the total purchase consideration is allocated to the tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values, using information currently available to us. During the three months ended June 30, 2016, we finalized our valuation analysis and revised our preliminary estimates of the earn-out liability and related fair value of common stock contingent upon the achievement of a threat intelligence bookings target by $3.5 million and $1.7 million, respectively, resulting in a higher purchase price of $5.2 million. As a result, we also revised our preliminary estimate of customer relationship and content intangible assets by $1.1 million and $1.2 million, respectively, resulting in an additional $0.2 million of intangible amortization. We may continue to adjust the preliminary purchase price allocation after obtaining more information regarding asset valuations, liabilities assumed, and revisions of preliminary estimates.

We expensed the related acquisition costs of $1.9 million in general and administrative expenses. We also assumed and paid liabilities of $7.0 million for transaction costs incurred by iSIGHT prior to acquisition, which were accounted for separate from consideration transferred.

Allocation of the preliminary purchase price of $261.8 million is as follows (in thousands):

	Amount
Net tangible liabilities assumed	$(18,375)
Intangible assets	85,100
Deferred tax liability	(11,637)
Goodwill	206,750
Total preliminary purchase price allocation	$261,838

The preliminary purchase price exceeded the fair value of the net tangible and identifiable intangible assets acquired, resulting in the recognition of goodwill. Goodwill is primarily attributable to expected synergies in our subscription offerings and cross-selling opportunities. None of the goodwill is expected to be deductible for U.S. federal income tax purposes.

Intangible assets consist primarily of customer relationships, content, developed technology and other intangible assets. Customer relationship intangibles relate to iSIGHT's ability to sell current and future content, as well as products built around this content, to its existing customers. Content intangibles represent threat intelligence data gathered through the analysis of cyber-crimes, cyber attacks, hacking, and cyber criminals. Intangible assets attributable to developed technology include a combination of patented and unpatented technology, trade secrets, computer software and research processes that represent the foundation for the existing and planned new products to facilitate the generation of new content. The estimated useful life and fair values of the identifiable intangible assets are as follows (in thousands):

	Preliminary Estimated Useful Life (in years)	Amount
Customer relationships	7	$33,700
Content	4	30,100
Developed technology	4-6	17,100
Trade name	5	3,100
Non-competition agreements	2	1,100
Total identifiable intangible assets		$85,100

The value of customer relationships and content was estimated using the excess earnings method, an income approach (Level 3), which converts projected revenues and costs into cash flows. To reflect the fact that certain other assets contribute to the cash flows generated, the returns for these contributory assets were removed to arrive at estimated cash flows solely attributable to the customer relationships and content, which were discounted at rates of 15% and 14%, respectively.

The value of developed technology and the trade name was estimated using the relief-from-royalty method, an income approach (Level 3), which estimates the cost savings that accrue to the owner of the intangible asset that would otherwise be payable as royalties or license fees on revenues earned through the use of the asset. A royalty rate is applied to the projected revenues associated with the intangible asset to determine the amount of savings, which is then discounted to determine the fair value. The developed technology and trade name were valued using royalty rates of 10% and 1%, respectively, and discounted at rates of 14% and 15%, respectively.

The results of operations of iSIGHT have been included in our condensed consolidated statements of operations from the acquisition date, and contributed $9.4 million to our consolidated revenues and $2.3 million to our consolidated net loss during the three months ended March 31, 2016. Subsequent to March 31, 2016, the operations of iSIGHT were integrated with the Company's operations. Pro forma results of operations have not been presented because the acquisition was not material to our results of operations.

Acquisition of Invotas

On February 1, 2016, we acquired all of the outstanding shares of privately held Invotas, a provider of security automation and orchestration technology. This acquisition enables us to deliver a premier security orchestration capability as part of our global threat management platform to unify cyber attack detection results, threat intelligence and incident response elements of an organization’s security program into a single console, giving enterprises the ability to respond more quickly to attacks through automation.

In connection with this acquisition, we paid upfront cash consideration of $17.7 million and issued 742,026 shares of our common stock with an estimated fair value of $11.1 million. This resulted in total purchase consideration of $28.8

million. Additionally, we replaced unvested option awards with grants of 95,614 restricted stock units which will vest over the requisite service period of four years, and granted an additional 1,002,748 restricted stock units which will vest upon the achievement of stated performance milestones over a period of approximately three years, subject to continuing service during that time. These awards are being recognized as operating expense over the requisite service periods as they relate to post-combination services.

The acquisition of Invotas was accounted for in accordance with the acquisition method of accounting for business combinations with FireEye as the accounting acquirer. We expensed the related acquisition costs of $0.5 million in general and administrative expenses. We also assumed and paid liabilities of $0.7 million for transaction costs incurred by Invotas prior to acquisition, which were accounted for separate from consideration transferred. Under the acquisition method of accounting, the total purchase consideration is allocated to the tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values. The total purchase price of $28.8 million was allocated using information currently available to us. As a result, we may continue to adjust the preliminary purchase price allocation after obtaining more information regarding asset valuations, liabilities assumed, and revisions of preliminary estimates. Allocation of the preliminary purchase price is as follows (in thousands):

	Amount
Net tangible liabilities assumed	$(306)
Intangible assets	8,400
Deferred tax liability	(688)
Goodwill	21,349
Total preliminary purchase price allocation	$28,755

The preliminary purchase price exceeded the fair value of the net tangible and identifiable intangible assets acquired, resulting in the recognition of goodwill. Goodwill is primarily attributable to increased selling opportunities. None of the goodwill is expected to be deductible for U.S. federal income tax purposes.

Intangible assets consist primarily of developed technology, in-process research and development and other intangible assets. Developed technology intangibles include a combination of patented and unpatented technology, trade secrets, computer software and research processes that represent the foundation for the existing and planned new product offerings. The in-process research and development intangible represents the estimated fair value of acquired research projects which had not reached technological feasibility at acquisition date, but have since been developed into products. The estimated useful life and fair values of the identifiable intangible assets are as follows (in thousands):

	Preliminary Estimated Useful Life (in years)	Amount
Developed technology	4	$ 4,500
In-process research and development	N/A	2,800
Customer relationships	10	800
Non-competition agreements	3	300
Total identifiable intangible assets		$ 8,400

The value of developed technology and in-process research and development (IPR&D) was estimated using the excess earnings method, an income approach (Level 3), which converts projected revenues and costs into cash flows. To reflect the fact that certain other assets contribute to the cash flows generated, the returns for these contributory assets were removed to arrive at estimated cash flows solely attributable to the developed technology and IPR&D, which were discounted at rates of 16% and 17%, respectively.

The results of operations of Invotas have been included in our condensed consolidated statements of operations from the acquisition date, although such results did not have a material impact on our consolidated revenues or net loss during the nine months ended September 30, 2016. Pro forma results of operations have not been presented because the acquisition was not material to our results of operations.

Goodwill and Purchased Intangible Assets

Changes in the carrying amount of goodwill for the nine months ended September 30, 2016 are as follows (in thousands):

	Amount
Balance as of December 31, 2015	$750,288
Goodwill acquired	228,099
Balance as of September 30, 2016	$978,387

Purchased intangible assets consisted of the following (in thousands):

	As of September 30, 2016	As of December 31, 2015
Developed technology	$ 102,593	$ 78,193
Content	158,700	128,600
Customer relationships	109,800	75,300
Contract backlog	12,500	12,500
Trade names	15,500	12,400
Non-competition agreements	1,400	—
Total intangible assets	400,493	306,993
Less: accumulated amortization	(140,382)	(92,433)
Total net intangible assets	$ 260,111	$ 214,560

In-process research and development of $2.8 million obtained in our acquisition of Invotas reached technological feasibility during the three months ended June 30, 2016, resulting in its reclassification to developed technology.
Amortization expense of intangible assets during the three months ended September 30, 2016 and 2015 was $16.3 million and $11.8 million, respectively. Amortization expense of intangible assets during the nine months ended September 30, 2016 and 2015 was $47.9 million and $35.3 million, respectively.
The expected future annual amortization expense of intangible assets as of September 30, 2016 is presented below (in thousands):

Years Ending December 31,	Amount
2016 (remaining three months)	$ 16,079
2017	59,118
2018	47,433
2019	45,547
2020	31,171
2021 and thereafter	60,763
Total	$ 260,111

6. Restructuring Charges
In addition to our restructuring plans initiated in August 2014 and February 2016, our Board of Directors approved a restructuring plan and reduction in workforce in August 2016 designed to reduce operating expenses and align our expense structure with current growth expectations. This resulted in a 10% reduction in our workforce, the consolidation of certain real estate facilities and impairment of certain assets.
The following table sets forth a summary of restructuring activities during the nine months ended September 30, 2016 (in thousands):

	Severance and related costs	Facilities costs	Total costs
Balance, December 31, 2015	$ —	$ 217	$ 217
Provision for restructuring charges	21,529	1,492	23,021
Cash payments	(11,896)	(567)	(12,463)
Other adjustments	—	1,744	1,744
Balance, September 30, 2016	$ 9,633	$ 2,886	$ 12,519

The total provision for restructuring charges during the nine months ended September 30, 2016 of $27.6 million includes $23.0 million of cash charges shown above, as well as non-cash charges of $3.5 million related to fixed asset write-offs and $1.1 million related to stock-based compensation.
Other adjustments of $1.7 million primarily represent a reclassification of deferred rent liabilities related to closed facilities.

The remaining restructuring balance of $12.5 million at September 30, 2016 is composed of $9.6 million of severance payments which we expect to pay during the fourth quarter of 2016, and $2.9 million of non-cancelable lease costs which we expect to pay over the terms of the related obligations through the third quarter of 2024, net of sublease income.

7. Deferred Revenue

Deferred revenue consisted of the following (in thousands):

	As of September 30, 2016	As of December 31, 2015
Product, current	$ 9,248	$ 8,200
Subscription and services, current	352,833	296,969
Total deferred revenue, current	362,081	305,169
Product, non-current	4,520	3,051
Subscription and services, non-current	249,817	218,778
Total deferred revenue, non-current	254,337	221,829
Total deferred revenue	$ 616,418	$ 526,998

8. Convertible Senior Notes

Convertible Senior Notes

In June 2015, we issued $460.0 million principal amount of Series A Notes and $460.0 million principal amount of Series B Notes, including the full exercise of the initial purchasers' over-allotment option, in a private placement to qualified institutional purchasers pursuant to an exemption from registration provided by Section 4(a)(2) and Rule 144A under the Securities Act. The net proceeds after the initial purchasers' discount of $23.0 million and issuance costs of $0.5 million from the Convertible Senior Notes were $896.5 million. The Series A Notes and Series B Notes bear interest at 1.000% per year and 1.625% per year, respectively, payable semiannually in arrears on June 1 and December 1 of each year, beginning December 1, 2015. The Convertible Senior Notes mature on June 1, 2035, unless earlier repurchased, redeemed or converted.

The Convertible Senior Notes are unsecured obligations and rank senior in right of payment to any of our indebtedness that is expressly subordinated in right of payment to the Convertible Senior Notes. They rank equally in right of payment with all of our existing and future liabilities that are not expressly subordinated to the Convertible Senior Notes and effectively rank junior in right of payment to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness. They are structurally junior to all indebtedness and other liabilities (including trade payables) of our subsidiaries.

The Convertible Senior Notes do not contain any financial covenants and do not restrict us from paying dividends or issuing or repurchasing our other securities.

The initial conversion rate on each series of Convertible Senior Notes is 16.4572 shares of our common stock per $1,000 principal amount of Convertible Senior Notes, which is equivalent to an initial conversion price of approximately $60.76 per share of common stock. The conversion rate of each series of Convertible Senior Notes may be adjusted upon the occurrence of certain specified events, but not for accrued and unpaid interest.

Holders may convert the Convertible Senior Notes at their option in multiples of $1,000 principal amount prior to March 1, 2035, excluding the period from March 1, 2020 to June 1, 2020 in the case of the Series A Notes and March 1, 2022 to June 1, 2022 in the case of the Series B Notes, only under the following circumstances:

- during any calendar quarter commencing after the calendar quarter ended on September 30, 2015 (and only during such calendar quarter), if the last reported sale price of the common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price for the Convertible Senior Notes of the relevant series on each applicable trading day;
- during the five business day period after any five consecutive trading day period in which the trading price per $1,000 principal amount of Series A Notes or Series B Notes, as applicable, for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate for the notes of the relevant series on each such trading day;
- if we call any or all of the Convertible Senior Notes of a series for redemption, at any time prior to the close of business on the scheduled trading day immediately preceding the relevant redemption date; or
-

upon the occurrence of specified corporate events, as specified in each indenture governing the Convertible Senior Notes.

Regardless of the foregoing conditions, holders may convert their Convertible Senior Notes at their option in multiples of $1,000 principal amount at any time during the period from March 1, 2020 to June 1, 2020 in the case of the Series A Notes and during the period from March 1, 2022 to June 1, 2022 in the case of the Series B Notes, or after March 1, 2035 until maturity for either series of Convertible Senior Notes. Upon conversion, the Convertible Senior Notes can be settled in cash, shares of our common stock or any combination thereof at our option.

We may be required by holders of the Convertible Senior Notes to repurchase all or any portion of their Convertible Senior Notes at 100% of the principal amount plus accrued and unpaid interest, on each of June 1, 2020, June 1, 2025 and June 1, 2030, in the case of the Series A Notes, and each of June 1, 2022, June 1, 2025 and June 1, 2030 in the case of the Series B Notes. Holders may also require us to repurchase the Convertible Senior Notes if we undergo a "fundamental change," as defined in each indenture governing the Convertible Senior Notes, at a purchase price equal to 100% of the principal amount, plus accrued and unpaid interest.

Additionally, we may redeem for cash all or any portion of the Series B Notes on or after June 1, 2020 until June 1, 2022 if the last reported sale price of our common stock has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading day period (including the last trading day of such period) ending not more than three trading days immediately preceding the date we provide notice of redemption. We also may redeem for cash all or any portion of the Series A Notes on or after June 1, 2020 until maturity and all or any portion of the Series B Notes on or after June 1, 2022 until maturity, regardless of the foregoing sale price condition.

In accordance with accounting for debt with conversions and other options, we allocated the principal amount of the Convertible Senior Notes into liability and equity components. We also allocated the total amount of initial purchasers' discount and transaction costs incurred to the liability and equity components using the same proportions as the proceeds from the Convertible Senior Notes. Transaction costs of $0.4 million and $0.1 million and initial purchasers' discount of $17.6 million and $5.4 million were attributable to the liability component and equity component of the Convertible Senior Notes, respectively.

The liability and equity components of the Convertible Senior Notes consisted of the following (in thousands):

	As of September 30, 2016		As of December 31, 2015	
	Series A Notes	Series B Notes	Series A Notes	Series B Notes
Liability component:				
Principal	$460,000	$460,000	$460,000	$460,000
Less: Convertible senior notes discounts and issuance costs, net of amortization	(79,055)	(108,077)	(93,469)	(120,333)
Net carrying amount	$380,945	$351,923	$366,531	$339,667
Equity component, net of issuance costs	$92,567	$117,834	$92,567	$117,834

The unamortized discounts and issuance costs as of September 30, 2016 will be amortized over a weighted-average remaining period of approximately five years.

Interest expense for the three and nine months ended September 30, 2016 related to the Convertible Senior Notes consisted of the following (in thousands):

	Three Months Ended September 30, 2016		Nine Months Ended September 30, 2016	
	Series A Notes	Series B Notes	Series A Notes	Series B Notes
Coupon interest	$1,150	$1,869	$3,450	$5,606
Amortization of convertible senior notes discounts and issuance costs	4,867	4,133	14,414	12,256
Total interest expense recognized	$6,017	$6,002	$17,864	$17,862
Effective interest rate on the liability component	6.4 %	6.9 %	6.5 %	7.0 %

Interest expense for the three and nine months ended September 30, 2015 related to the Convertible Senior Notes consisted of the following (in thousands):

	Three Months Ended September	Nine Months Ended September

	30, 2015 Series A Notes	Series B Notes	30, 2015 Series A Notes	Series B Notes
Coupon interest	$1,150	$1,869	$1,533	$2,492
Amortization of convertible senior notes discounts and issuance costs	4,623	3,942	6,150	5,247
Total interest expense recognized	$5,773	$5,811	$7,683	$7,739
Effective interest rate on the liability component	6.5 %	7.0 %	6.5 %	7.0 %

Prepaid Forward Stock Purchase

In connection with the issuance of the Convertible Senior Notes, we also entered into privately negotiated Prepaid Forwards with one of the initial purchasers of the Convertible Senior Notes (the "Forward Counterparty"), pursuant to which we paid approximately $150.0 million. The amount of the prepaid is equivalent to approximately 3.3 million shares which are to be settled on or around June 1, 2020 and June 1, 2022, respectively, subject to any early settlement, in whole or in part, of each Prepaid Forward. The Prepaid Forwards are intended to facilitate privately negotiated derivative transactions by which investors in the Convertible Senior Notes will be able to hedge their investment in the Convertible Senior Notes. In the event we pay any cash dividends on our common stock, the Forward Counterparty will pay an equivalent amount back to us.

The related shares were accounted for as a repurchase of common stock, and are presented as Treasury Stock in the unaudited condensed consolidated balance sheets. The 3.3 million shares of common stock purchased under the Prepaid Forwards are excluded from weighted-average shares outstanding for basic and diluted EPS purposes although they remain legally outstanding.

9. Commitments and Contingencies

Leases

We lease our facilities under various non-cancelable operating leases, which expire on various dates through the year ending December 31, 2027. In August 2016, we entered into a lease agreement for our new corporate headquarters, expected to commence mid-2017. Rent expense is recognized using the straight-line method over the term of the lease. Rent expense, net of sublease income, was $3.0 million and $3.7 million for the three months ended September 30, 2016 and 2015, respectively. Rent expense, net of sublease income, was $10.9 million and $10.5 million for the nine months ended September 30, 2016 and 2015, respectively.

The aggregate future non-cancelable minimum rental payments on our operating leases, as of September 30, 2016, are as follows (in thousands):

Years Ending December 31,	Amount
2016 (remaining three months)	$3,244
2017	17,192
2018	15,780
2019	12,235
2020	12,271
2021 and thereafter	49,891
Total	$110,613

Total future non-cancelable minimum rental payments have not been reduced by future minimum sublease rentals totaling $7.0 million.

We are party to letters of credit totaling $2.0 million and $1.2 million as of September 30, 2016 and December 31, 2015, respectively, issued primarily in support of operating leases at several of our facilities. These letters of credit are collateralized by a line with our bank. No amounts have been drawn against these letters of credit.

Contract Manufacturer Commitments

Our independent contract manufacturers procure components and assemble our products based on our forecasts. These forecasts are based on estimates of future demand for our products, which are in turn based on historical trends and an analysis from our sales and product marketing organizations, adjusted for overall market conditions. In order to reduce manufacturing lead times and plan for adequate supply, we may issue forecasts and orders for components and products that are non-cancelable. As of September 30, 2016 and December 31, 2015, we had non-cancelable open orders of $15.1 million and $16.9 million, respectively. We are required to record a liability for firm, non-cancelable and unconditional purchase commitments with contract manufacturers and suppliers for quantities in excess of our future demand forecasts. As of September 30, 2016, we have not accrued any significant costs for such non-cancelable commitments.

Purchase Obligations

As of September 30, 2016, we had approximately $23.0 million of non-cancelable firm purchase commitments primarily for purchases of software and services. In those situations in which we have received delivery of the goods or services as of September 30, 2016 under purchase orders outstanding as of the same date, such amounts are reflected in the condensed consolidated balance sheet as accounts payable or accrued liabilities, and are excluded from the $23.0 million.

Litigation

We accrue for contingencies when we believe that a loss is probable and that we can reasonably estimate the amount of any such loss. We have made an assessment of the probability of incurring any such losses and whether or not those losses are estimable.

On June 20, 2014, a purported stockholder class action lawsuit was filed in the Superior Court of California, County of Santa Clara, against the Company, current and former members of our Board of Directors, current and former officers, and the underwriters of our March 2014 follow-on public offering. On July 17, 2014, a substantially similar lawsuit was filed in the same court against the same defendants. The actions were consolidated and, on March 4, 2015, an amended complaint was filed, alleging violations of the federal securities laws on behalf of a purported class consisting of purchasers of the Company's common stock pursuant or traceable to the registration statement and prospectus for the follow-on public offering, and seeking unspecified compensatory damages and other relief. On April 20, 2015, defendants filed demurrers seeking that the amended complaint be dismissed. On August 11, 2015, the court overruled defendants' demurrers. On January 6, 2016, the Company and the individual defendants filed a motion for judgment on the pleadings seeking that the action be dismissed for lack of subject-matter jurisdiction, which the court denied on April 1, 2016. On May 19, 2016, the Company and the individual defendants filed a petition for a writ of mandate seeking the overturning of the court's denial of the motion for judgment on the pleadings. On September 8, 2016, the court of appeal denied the petition. On September 16, 2016, the Company and the individual defendants filed a petition for review with the Supreme Court of California. On November 16, 2015, plaintiffs filed a motion seeking certification of the putative class, which the court granted in part and denied in part on July 11, 2016. The Company intends to defend the litigation vigorously. Based on information currently available, the Company has determined that the amount of any possible loss or range of possible loss is not reasonably estimable.

On November 24, 2014, a purported stockholder class action lawsuit was filed in the United States District Court for the Northern District of California against the Company and certain of its officers. On June 29, 2015, plaintiffs filed a consolidated complaint alleging violations of the federal securities laws on behalf of a putative class of all persons who purchased or otherwise acquired the Company's securities between January 2, 2014, and November 4, 2014. Plaintiffs seek, among other things, compensatory damages and attorneys' fees and costs on behalf of the putative class. On August 21, 2015, defendants filed a motion to dismiss, which was heard on November 12, 2015. No ruling has been issued on the motion. The Company intends to defend the litigation vigorously. Based on information currently available, the Company has determined that the amount of any possible loss or range of possible loss is not reasonably estimable.

On January 28, 2015, certain of the Company's officers and directors were named as defendants in a putative derivative action filed in the Superior Court of California, County of Santa Clara. On April 21, 2015, a substantially similar lawsuit was filed in the same court against the same defendants. The Company is named as a nominal defendant in both actions. The actions were consolidated and a consolidated complaint was filed on June 15, 2015, purporting to allege claims for breach of fiduciary duty and unjust enrichment. On July 15, 2015, defendants filed demurrers to the consolidated complaint. On December 4, 2015, the court sustained, with leave to amend, defendants' demurrers on the basis that plaintiffs had failed adequately to allege derivative standing. Plaintiffs filed an amended complaint on May 3, 2016. On June 8, 2016, defendants filed demurrers to the amended complaint, which the court sustained on August 29, 2016, dismissing the case with prejudice. Plaintiffs filed a notice of appeal on October 27, 2016. Based on information currently available, the Company has determined that the amount of any possible loss or range of possible loss is not reasonably estimable.

In February 2016, a lawsuit was filed in the Superior Court of California, County of Santa Clara, by one of the plaintiffs in the aforementioned putative derivative action against the Company, seeking production of certain books and records pursuant to Delaware and California law. On May 16, 2016, the court sustained the Company's demurrer to the petition, without leave to amend. Plaintiff filed a notice of appeal on October 27, 2016.

We are also subject to legal proceedings, claims and litigation, including intellectual property litigation, arising in the ordinary course of business. Such matters are subject to many uncertainties and outcomes, and are not predictable with assurance.

To the extent there is a reasonable possibility that a loss exceeding amounts already recognized may be incurred, and the amount of such additional loss would be material, we will either disclose the estimated additional loss or state that such an estimate cannot be made. We do not currently believe that it is reasonably possible that additional losses in connection with litigation arising in the ordinary course of business would be material.

Indemnification

Under the indemnification provisions of our standard sales related contracts, we agree to defend our customers against third-party claims asserting infringement of certain intellectual property rights, which may include patents, copyrights, trademarks, or trade secrets, and to pay judgments entered on such claims. Our exposure under these indemnification provisions is generally limited to the total amount paid by our customer under the agreement. However, certain agreements include indemnification provisions that could potentially expose us to losses in excess of the amount received under the agreement. In addition, we indemnify our officers, directors, and certain key employees for actions taken while they are or were serving in good faith in such capacities. Through September 30, 2016, there have been no claims under any indemnification provisions.

10. Common Shares Reserved for Issuance

We have 100,000,000 shares of convertible preferred stock with a par value of $0.0001 per share authorized, none of which were issued and outstanding as of September 30, 2016 or December 31, 2015.

Under our amended and restated certificate of incorporation, we are authorized to issue 1,000,000,000 shares of common stock with a par value of $0.0001 per share as of September 30, 2016 and December 31, 2015. Each share of common stock outstanding is entitled to one vote. The holders of common stock are also entitled to receive dividends whenever funds are legally available and when declared by our Board of Directors, subject to the prior rights of holders of all classes of convertible preferred stock outstanding.

We had reserved shares of common stock for issuance as follows (in thousands):

	As of September 30, 2016	As of December 31, 2015
Reserved under stock award plans	40,340	38,500
Convertible Senior Notes	15,141	15,141
ESPP	3,693	3,214
Total	59,174	56,855

11. Equity Award Plans

We have operated under our 2013 Equity Incentive Plan ("2013 Plan") since our initial public offering ("IPO") in September 2013. Our 2013 Plan provides for the issuance of restricted stock and the granting of options, stock appreciation rights, performance shares, performance units and restricted stock units to our employees, officers, directors and consultants. Our 2013 Plan provides for annual increases in the number of shares available for issuance on the first day of each fiscal year. Awards granted under the 2013 Plan vest over the periods determined by our Board of Directors or compensation committee of our Board of Directors, generally four years, and stock options granted under the 2013 Plan expire no more than ten years after the date of grant. In the case of an incentive stock option granted to an employee who at the time of grant owns stock representing more than 10% of the total combined voting power of all classes of stock, the exercise price shall be no less than 110% of the fair value per share on the date of grant, and the award shall expire five years from the date of grant. For options granted to any other employee, the per share exercise price shall be no less than 100% of the fair value per share on the date of grant. In the case of non-statutory stock options and options granted to consultants, the per share exercise price shall be no less than 100% of the fair value per share on the date of grant. Stock that is purchased prior to vesting is subject to our right of repurchase at any time following termination of the participant's service for so long as such stock remains unvested. Approximately 8.6 million shares and 7.2 million shares of our common stock were reserved for future grants as of September 30, 2016 and December 31, 2015, respectively, under the 2013 Plan.

Our 2013 Employee Stock Purchase Plan ("ESPP") allows eligible employees to acquire shares of our common stock at 85% of the lower of the fair market value of our common stock on the first trading day of each offering period or on the exercise date. Our ESPP provides for annual increases in the number of shares available for issuance on the first day of each fiscal year. An aggregate of 3,693,348 shares and 3,214,287 shares of common stock were available for future issuance as of September 30, 2016 and December 31, 2015, respectively, under our ESPP.

From time to time, we also grant restricted common stock or restricted stock awards outside of our equity incentive plans to certain employees in connection with acquisitions.

Stock Option Activity

A summary of the activity for our stock option changes during the reporting period and a summary of information related to options vested and options exercisable are presented below (in thousands, except per share amounts and contractual life years):

	Options Outstanding				
	Number of Shares	Weighted-Average Exercise Price	Weighted-Average Grant Date Fair Value (per share)	Weighted-Average Contractual Life (years)	Aggregate Intrinsic Value
Balance — December 31, 2015	11,494	$ 10.67		6.9	$ 149,157
Granted	—	—	$ —		
Exercised	(1,888)	5.55			19,297
Cancelled	(695)	23.15			

Balance — September 30, 2016	8,911	$ 10.78	5.9	$ 65,938
Options exercisable — September 30, 2016	7,463	$ 9.64	5.8	$ 59,415

Restricted Stock Award (RSA) and Restricted Stock Unit (RSU) Activity

A summary of the activity for our restricted common stock, RSAs and RSUs during the reporting period and a summary of information related to unvested restricted common stock, RSAs and RSUs and those expected to vest based on the achievement of a performance condition are presented below (in thousands, except per share amounts and contractual life years):

	Number of Shares	Weighted-Average Grant Date Fair Value (per share)	Weighted-Average Contractual Life (years)	Aggregate Intrinsic Value
Unvested balance — December 31, 2015	20,054	$ 33.68	1.6	$ 415,912
Granted	11,764	13.86		
Vested	(3,989)	38.21		
Cancelled	(4,571)	27.30		
Unvested balance — September 30, 2016	23,258	$ 23.68	1.5	$ 342,594
Unvested awards for which the requisite service period has not been rendered but that are expected to vest based on the achievement of a performance condition — September 30, 2016	6,299	$ 21.34	1.8	$ 92,781

Included in the approximately 11.8 million shares granted in the table above are 3.6 million shares granted to employees in connection with acquisitions consummated in 2016.

Stock-Based Compensation

We record stock-based compensation based on the fair value as determined on the date granted. We determine the fair value of stock options and shares of common stock to be issued under the ESPP using the Black-Scholes option-pricing model. The fair value of restricted stock units and restricted stock awards equals the market value of the underlying stock on the date of grant. We grant performance-based restricted stock units and restricted stock awards to certain employees which vest upon the achievement of certain performance conditions, subject to the employees' continued service relationship with us. We assess the probability of vesting at each reporting period and adjust our compensation cost based on this probability assessment. We recognize such compensation expense on a straight-line basis over the service provider's requisite service period.

The following table summarizes the assumptions used in the Black-Scholes option-pricing model to determine fair value of our common shares to be issued under the ESPP for the offering period beginning May 15, 2016:

	Three and Nine Months Ended September 30, 2016	Three and Nine Months Ended September 30, 2015
Fair value of common stock	$11.15	$35.16
Risk-free interest rate	0.38% - 0.57%	0.09% - 0.23%
Expected term (in years)	0.5 - 1.0	0.5 - 1.0
Volatility	61%	39%
Dividend yield	—%	—%

Stock-based compensation expense related to stock options, ESPP and restricted stock units and awards is included in the condensed consolidated statements of operations as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Cost of product revenue	$ 516	$ 560	$ 1,797	$ 1,214
Cost of subscription and services revenue	7,759	8,221	25,013	21,762

Research and development	11,422	18,852	54,877	51,412
Sales and marketing	13,915	18,612	47,675	54,424
General and administrative	11,815	12,120	37,440	35,839
Restructuring	1,144	—	1,144	—
Total	$46,571	$58,365	$167,946	$164,651

As of September 30, 2016, total compensation cost related to stock-based awards not yet recognized was $388.1 million, which is expected to be amortized on a straight-line basis over the weighted-average remaining vesting period of approximately 2.4 years.

12. Income Taxes

We account for income taxes under the asset and liability method. Under this method, deferred income tax assets and liabilities are determined based upon the difference between the financial statement carrying amounts and the tax basis of assets and liabilities and are measured using the enacted tax rate expected to apply to taxable income in the years in which the differences are expected to be reversed.

We recognized a provision for income taxes of $1.2 million and $0.6 million during the three months ended September 30, 2016 and 2015, respectively. The tax provision during both the three months ended September 30, 2016 and 2015 is primarily due to foreign and state income taxes.

We recognized a benefit from income taxes of $8.5 million during the nine months ended September 30, 2016 and a provision for income taxes of $2.5 million during the nine months ended September 30, 2015. The tax benefit during the nine months ended September 30, 2016 is primarily due to the release of the U.S. valuation allowance on the U.S. deferred tax assets resulting from recording a deferred tax liability on the acquisition-related intangibles for which no benefit will be derived, partially offset by foreign and state income taxes. The tax provision during the nine months ended September 30, 2015 is primarily due to foreign and state income taxes.

13. Net Loss per Share

Basic net loss per share is calculated by dividing net loss by the weighted average number of common shares outstanding during the period, less shares subject to repurchase, and excludes any dilutive effects of employee share based awards and warrants. Diluted net income per common share is computed giving effect to all potentially dilutive common shares, including common stock issuable upon exercise of stock options, conversion of the Convertible Senior Notes, and unvested restricted common stock and stock units. As we had net losses for the three and nine months ended September 30, 2016 and 2015, all potential common shares were determined to be anti-dilutive.

The following table sets forth the computation of net loss per common share (in thousands, except per share amounts):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Numerator:				
Net loss	$(123,373)	$(135,530)	$(418,593)	$(403,067)
Denominator:				
Weighted average number of shares outstanding—basic and diluted	164,728	154,523	161,862	153,440
Net loss per share—basic and diluted	$(0.75)	$(0.88)	$(2.59)	$(2.63)

The following outstanding options and unvested shares were excluded (as common stock equivalents) from the computation of diluted net loss per common share for the periods presented as their effect would have been anti-dilutive (in thousands):

	As of September 30,	
	2016	2015
Options to purchase common stock	8,911	12,182
Unvested early exercised common shares	139	1,236
Unvested restricted stock awards and units	23,258	13,403
Convertible senior notes	15,141	15,141
ESPP shares	802	343

14. Employee Benefit Plan

401(k) Plan

We have established a 401(k) tax-deferred savings plan (the “401(k) Plan”) which permits participants to make contributions by salary deduction pursuant to Section 401(k) of the Internal Revenue Code of 1986, as amended. All participants’ interests in their deferrals are 100% vested when contributed. We are responsible for administrative costs of the 401(k) Plan and have made no matching contributions into our 401(k) Plan since inception. Under the 401(k) Plan, pre-tax contributions are allocated to each participant’s individual account and are then invested in selected investment alternatives according to the participants’ directions. The 401(k) Plan is intended to qualify under Sections 401(a) and 501(a) of the Code. As a tax-qualified retirement plan, contributions to the 401(k) Plan and earnings on those contributions are not taxable to the employees until distributed, and all contributions are deductible by us when and if made.

15. Segment and Major Customers Information

We conduct business globally and are primarily managed on a geographic basis. Our Chief Executive Officer, who is our chief operating decision maker, reviews financial information presented on a consolidated basis accompanied by information about revenue by geographic region for purposes of allocating resources and evaluating financial performance. There are no segment managers who are held accountable for operations, operating results, and plans for levels, components, or types of products or services below the consolidated unit level. Accordingly, we are considered to be in a single reportable segment and operating unit structure.

Revenue by geographic region based on the billing address is as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Revenue:				
United States	$129,619	$119,934	$366,502	$315,254
EMEA	24,900	17,574	73,307	53,337
APAC	24,447	19,878	69,650	49,208
Other	7,445	8,230	19,959	20,394
Total revenue	$186,411	$165,616	$529,418	$438,193

Long lived assets by geographic region based on physical location is as follows (in thousands):

	As of September 30, 2016	As of December 31, 2015
Property and Equipment, net:		
United States	$ 48,417	$ 57,537
International	18,802	20,831
Total property and equipment, net	$ 67,219	$ 78,368

For the three months ended September 30, 2016 and 2015, one distributor represented 19% and 15%, respectively, and one reseller represented 14% and 15%, respectively, of the Company's total revenue. For the nine months ended September 30, 2016 and 2015, one distributor represented 19% and 14%, respectively, and one reseller represented 13%, respectively, of the Company's total revenue. As of September 30, 2016, no customer represented 10% or more of the Company's net accounts receivable balance. As of December 31, 2015, two distributors represented 20% and 12%, respectively, of the Company's net accounts receivable balance.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations
The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our condensed consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q and our Annual Report on Form 10-K filed with the SEC on February 26, 2016. The following discussion and analysis contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements include, but are not limited to, statements regarding:

- beliefs and objectives for future operations, financial condition and prospects, including trends in revenue, gross margin, operating expenses and other financial metrics;
- our restructuring plan, including workforce reductions and related charges, as well as anticipated cost savings;
- our business plan and our ability to effectively manage our growth and associated investments;
- our ability to timely and effectively scale and adapt our existing technology;
- our ability to pursue opportunities in new and existing markets;
- our ability to innovate new products and bring them to market in a timely manner;
- our ability to expand internationally;
- our ability to further penetrate our existing customer base;
- our expectations concerning renewal rates for subscriptions and services by existing customers as well as cancellations;
- cost of revenue, including changes in costs associated with production, manufacturing and customer support;
- operating expenses, including changes in research and development, sales and marketing, and general and administrative expenses;
- our expectations concerning relationships with third parties, including channel partners and logistics providers;
- our expectations concerning investments in our product development organization and in the development of our sales and marketing teams;
- economic and industry trends or trend analysis;
- the effects of seasonal trends on our results of operations;
- the attraction and retention of qualified employees and key personnel;
- future acquisitions of or investments in complementary companies, products, subscriptions or technologies; and
- the sufficiency of our existing cash and investments to meet our cash needs for at least the next 12 months

as well as other statements regarding our future operations, financial condition and prospects, and business strategies. Forward-looking statements generally can be identified by words such as “anticipates,” “believes,” “estimates,” “expects,” “intends,” “plans,” “predicts,” “projects,” “will be,” “will continue,” “will likely result,” and similar expressions. These forward-looking statements are based on current expectations and assumptions that are subject to risks and uncertainties, which could cause our actual results to differ materially from those reflected in the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in this Quarterly Report on Form 10-Q, and in particular, the risks discussed under the caption “Risk Factors” in Item 1A of Part II of this Quarterly Report on Form 10-Q and those discussed in other documents we file with the SEC. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements.
Overview
We provide a comprehensive cybersecurity solution for detecting, preventing, analyzing and resolving today's advanced cyber attacks that evade legacy signature-based security products. To address the shortcomings of signature-based security solutions, we developed a threat prevention platform based on our purpose-built, virtual machine-based detection engine, MVX. Our comprehensive platform combines our MVX virtual execution engine and our cloud-based threat intelligence network to identify previously unknown threats and protect organizations at all stages of the attack lifecycle. Our cybersecurity platform includes a family of software-based appliances, endpoint agents, cloud-based subscription services, support and maintenance and professional consulting services. Our principal threat prevention appliance families address critical vectors of attack: Web, email, file, endpoint and mobile. Our products initially require a mandatory subscription agreement that provides access to our DTI cloud which

distributes updated intelligence throughout the network to provide real-time detection of advanced attacks, and we offer optional subscription services that provide additional support and functionality. We also offer a cloud-based threat analysis platform that allows IT security analysts to analyze and prioritize attack alerts from security devices utilizing our repository of dynamic and contextual threat intelligence. Additionally, we provide a family of forensic and analysis appliances and agents to enable investigation and remediation of breaches. With our team of highly skilled professional services experts, we provide incident response, security program assessment and other consulting services, as well as our FireEye-as-a-Service subscription services for management of our devices and comprehensive monitoring of attacks based on our threat intelligence and security expertise. Our adaptive approach to cybersecurity represents a paradigm shift in how IT security has been conducted since the earliest days of the information technology industry, and we believe it is imperative for organizations to invest in this new approach to protect their critical assets from the global pandemic of cybercrime, hacktivism, cyber-espionage and cyber-warfare.

On August 2, 2016, our Board of Directors approved a restructuring plan and reduction in workforce to reduce operating expenses and align our expense structure with current growth expectations. We recognized restructuring charges of $22.4 million during the three months ended September 30, 2016, which consisted of employee severance and other termination benefits associated with a 10% reduction in our workforce, costs to consolidate certain real estate facilities and impairment charges for certain assets. These charges are primarily cash-based, with $7.6 million being paid during the third quarter of 2016 and $9.6 million expected to be paid in the fourth quarter of 2016. The actions associated with the restructuring plan taken in 2016 are expected to result in annualized savings of at least $80 million.

Our Business Model

We generate revenue from sales of our products, subscriptions and services. Our product revenue consists primarily of revenue from the sale of our threat prevention platform of vector-specific appliances, consisting of Network Threat Prevention, Email Threat Prevention, Endpoint Threat Prevention, File Content Security and Mobile Threat Prevention. We also offer security management and analysis products including our Central Management System, Threat Analytics Platform and Malware Analysis System, and security forensics products including our Network Forensics Platform, Investigation Analysis System and Mandiant Intelligent Response. We offer this portfolio as a complete solution to protect customers from the next generation of cyber attacks at all stages of the attack lifecycle and across all primary threat vectors, including web, email, file, endpoint and mobile. Because the typical customer has more web entry points to protect than email and file entry points, customers that purchase our threat prevention portfolio generally purchase more Network Threat Prevention appliances than any other appliance. As a result, Network Threat Prevention revenue accounts for the largest portion of our threat prevention product revenue. In addition, because most malicious attacks occur through the web threat vector, smaller customers and customers who do not have the budget to purchase the full threat prevention portfolio often only purchase Network Threat Prevention appliances. Revenue from sales of our appliances is generally recognized at the time of shipment.

We require customers to purchase a subscription to our DTI cloud and support and maintenance services when they purchase any part of our product portfolio. Our customers generally purchase these subscriptions and services for a one or three year term, and revenue from such subscriptions is recognized ratably over the subscription period. Sales of these subscriptions and services have increased our deferred revenue, which totaled $616.4 million and $527.0 million as of September 30, 2016 and December 31, 2015, respectively. Amortization of this growing deferred revenue has contributed to the increase in our subscription and services revenue as a percentage of total revenue. For the three months ended September 30, 2016 and 2015, subscription and services revenue as a percentage of total revenue was 76% and 64%, respectively. For the nine months ended September 30, 2016 and 2015, subscription and services revenue as a percentage of total revenue was 78% and 66%, respectively. While most of the growth in our subscription and services revenue during such years relates to the amortization of the initial subscription and services agreements, renewals of such agreements have also contributed to this growth. Our renewal rate for subscriptions expiring in the 12 months ended September 30, 2016 was in excess of 90%, and we expect to maintain high renewal rates in the future due to the significant value we believe these subscriptions and services add to the efficacy of our product portfolio.

We also offer FireEye-as-a-Service, which, depending on the customer, may include our Network Platform, Endpoint Security Platform and Network Forensics Platform solutions, managed by our security experts through our security operations centers around the world. Revenue from this service is recognized ratably over the period the service is provided; typically one to three years. In addition to our product and subscription services, we offer professional services, including incident response and related consulting services for our customers who have experienced a cybersecurity breach or require assistance assessing the vulnerability of their networks. Revenue from these services is recognized as the services are delivered.

Key Business Metrics

We monitor the key business metrics set forth below to help us evaluate growth trends, establish budgets, measure the effectiveness of our sales and marketing efforts, and assess operational efficiencies. We discuss revenue and gross margin below under "Components of Operating Results." Deferred revenue, billings (a non-GAAP metric), net cash flow provided by (used in) operating activities, and free cash flow (a non-GAAP metric) are discussed immediately below the following table.

	Three Months Ended or As of September 30,		Nine Months Ended or As of September 30,	
	2016	2015	2016	2015
	(Dollars in thousands)			
Product revenue	$43,857	$60,101	$118,340	$150,034
Subscription and services revenue	142,554	105,515	411,078	288,159
Total revenue	$186,411	$165,616	$529,418	$438,193
Year-over-year percentage increase	13 %	45 %	21 %	55 %
Gross margin percentage	63 %	63 %	61 %	61 %
Deferred revenue, current	$362,081	$265,906	$362,081	$265,906
Deferred revenue, non-current	$254,337	$188,961	$254,337	$188,961
Billings (non-GAAP)	$215,378	$210,592	$597,751	$540,517
Net cash provided by (used in) operating activities	$14,131	$(8,273)	$(21,517)	$27,571
Free cash flow (non-GAAP)	$7,200	$(20,928)	$(49,526)	$(9,622)

Deferred revenue. Our deferred revenue consists of amounts that have been invoiced but have not yet been recognized as revenue as of period end. The majority of our deferred revenue consists of the unamortized balance of revenue from subscriptions to our DTI cloud, FireEye-as-a-Service offerings and support and maintenance contracts. Because invoiced amounts for subscriptions and services can be for multiple years, we classify our deferred revenue as current or non-current depending on when we expect to recognize the related revenue. If the deferred revenue is expected to be recognized within 12 months it is classified as current, otherwise, the deferred revenue is classified as non-current. We monitor our deferred revenue balance because it represents a significant portion of revenue to be recognized in future periods.

Billings. Billings are a non-GAAP financial metric that we define as revenue recognized in accordance with generally accepted accounting principles, or GAAP, plus the change in deferred revenue from the beginning to the end of the period. This includes contracts that may be cancelled for a refund of the remaining contract term. However, based on our historical experience, we do not expect any material cancellations. We consider billings to be a useful metric for management and investors, as a supplement to the corresponding GAAP measure, because billings drive deferred revenue, which is an important indicator of the health and visibility of trends in our business, and represents a significant percentage of future revenue. However, it is important to note that other companies, including companies in our industry, may not use billings, may calculate billings differently, may have different billing frequencies, or may use other financial measures to evaluate their performance, all of which could reduce the usefulness of billings as a comparative measure. For the nine months ended September 30, 2016, billings are adjusted to account for $21.1 million of deferred revenue assumed in connection with acquisitions. A reconciliation of billings to revenue, the most directly comparable financial measure calculated and presented in accordance with GAAP, is provided below:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
	(in thousands)			
Revenue	$186,411	$165,616	$529,418	$438,193
Add: Deferred revenue, end of period	616,418	454,867	616,418	454,867
Less: Deferred revenue, beginning of period	587,451	409,891	526,998	352,543
Less: Deferred revenue assumed through acquisitions	—	—	21,087	—

Billings (non-GAAP)	$215,378	$210,592	$597,751	$540,517

Net cash provided by (used in) operating activities. We monitor net cash provided by (used in) operating activities as a measure of our overall business performance. Our net cash provided by (used in) operating activities is driven in large part by sales of our products and from up-front payments for both subscriptions and support and maintenance services. Monitoring net cash provided by (used in) operating activities enables us to analyze our financial performance without the non-cash effects of certain items, such as depreciation, amortization, and stock-based compensation costs, thereby allowing us to better understand and manage the cash needs of our business.

Free cash flow. Free cash flow is a non-GAAP financial measure we define as net cash provided by (used in) operating activities, the most directly comparable GAAP financial measure, less purchases of property and equipment and demonstration units. 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 our business that, after the purchases of property and equipment and demonstration units, can be used by us for strategic opportunities, including investing in our business, making strategic acquisitions and strengthening our balance sheet if and when generated. However, it is important to note that other companies, including companies in our industry, may not use free cash flow, may calculate free cash flow differently, or may use other financial measures to evaluate their performance, all of which could reduce the usefulness of free cash flow as a comparative measure. A reconciliation of free cash flow to cash flow provided by (used in) operating activities is provided below:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
	(In thousands)			
Cash flow provided by (used in) operating activities	$14,131	$(8,273)	$(21,517)	$27,571
Less: purchase of property and equipment and demonstration units	6,931	12,655	28,009	37,193
Free cash flow (non-GAAP)	$7,200	$(20,928)	$(49,526)	$(9,622)
Net cash provided by (used in) investing activities	$21,534	$(284,434)	$(169,979)	$(518,833)
Net cash provided by financing activities	$4,039	$3,128	$13,091	$781,800

Factors Affecting our Performance

Market Adoption. We rely on market education to raise awareness of today’s next-generation cyber attacks and articulate the need for our security solutions and, in particular, the reasons to purchase our products. Our prospective customers often do not have a specific portion of their IT budgets allocated for products that address the next generation of advanced cyber attacks. We invest heavily in sales and marketing efforts to increase market awareness, educate prospective customers and drive adoption of our solution. This market education is critical to creating new IT budget dollars or allocating IT budget dollars across enterprises and governments for next-generation threat protection solutions and, in particular, our platform. Our investment in market education has also increased awareness of us and our solution in international markets. The degree to which prospective customers recognize the mission critical need for next-generation threat protection solutions, and subsequently allocate budget dollars for our platform, will drive our ability to acquire new customers and increase renewals and follow-on sales opportunities, which, in turn, will affect our future financial performance.

Sales Productivity. Our sales organization consists of direct sales teams, each generally made up of field and inside sales personnel, and indirect channel sales teams to support our channel partner sales. We utilize a direct-touch sales model whereby we work with our channel partners to secure prospects, convert prospects to customers, and pursue follow-on sales opportunities. To date, we have primarily targeted large enterprise and government customers, who typically have sales cycles from three to nine months but can be more than a year. We have also expanded our inside sales teams to pursue customers in the small and medium enterprise, or SME, market.

Newly hired sales and marketing resources will require several months to establish prospect relationships and drive overall sales productivity. In addition, sales teams in certain international markets will face local markets that have not had significant market education about advanced security threats that our platform addresses. All of these factors will influence the timing and overall levels of sales productivity, impacting the rate at which we will be able to convert prospects to sales and drive revenue growth.

Renewal Rates. New or existing customers who purchase one of our appliances are required to purchase a one or three year subscription to our DTI cloud and support and maintenance services. New or existing customers who purchase our Security Forensic Products System or Central Management System appliances are required to purchase support and maintenance services for a term of one or three years.

We believe our renewal rate is an important metric to measure the long-term value of customer agreements and our ability to retain our customers. We calculate our renewal rate by dividing the number of renewing customers who were due for renewal in any rolling 12 month period by the number of customers who were due for renewal in that rolling 12 month period. Our renewal rate for subscriptions expiring in the 12 months ended September 30, 2016 was in excess of 90%. These high renewal rates are primarily attributable to the incremental value added to our appliances by our cloud subscriptions, support and maintenance services and other professional services. As cloud subscriptions, support and maintenance services and other professional services represented 76% and 64% of our total revenue during the three months ended September 30, 2016 and 2015, respectively, and 78% and 66% of our total revenue during the nine months ended September 30, 2016 and 2015, respectively, we expect our ability to maintain high renewal rates for these subscriptions and services to have a material impact on our future financial performance.

Follow-On Sales. After the initial sale to a new customer, we focus on expanding our relationship with such customer to sell additional products, subscriptions and services. To grow our revenue, it is important that our customers make additional purchases of our products, subscriptions and services. Sales to our existing customer base can take the form of incremental sales of appliances, subscriptions and services, either to deploy our platform into additional parts of their network or to protect additional threat vectors. Our opportunity to expand our customer relationships through follow-on sales will increase as we add new customers, broaden our product portfolio to support more threat vectors, add new services, increase network performance and enhance functionality. Follow-on sales lead to increased revenue over the lifecycle of a customer relationship and can significantly increase the return on our sales and marketing investments. With some of our most significant customers, we have realized follow-on sales that were multiples of the value of their initial purchases.

Components of Operating Results

Revenue

We generate revenue from the sales of our products, subscriptions and services. As discussed further in “Critical Accounting Policies and Estimates−Revenue Recognition” under “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC on February 26, 2016, revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectability is reasonably assured.

- Product revenue. Our product revenue is generated from sales of our appliances, which we generally recognize at the time of shipment, provided that all other revenue recognition criteria have been met.
- Subscription and services revenue. Subscription and services revenue is generated primarily from our cloud subscriptions, FireEye-as-a-Service, support and maintenance services and other professional services. We recognize revenue from subscriptions and support and maintenance services over the one or three year contract term, as applicable. Professional services revenue, which includes incident response and compromise assessments, is offered on a time-and-material basis or through a fixed fee arrangement and is recognized as the services are delivered.

Cost of Revenue

Our total cost of revenue consists of cost of product revenue and cost of subscription and services revenue. Personnel costs associated with our operations and global customer support organizations consist of salaries, benefits, bonuses and stock-based compensation. Overhead costs consist of certain facilities, depreciation and information technology costs.

- Cost of product revenue. Cost of product revenue primarily consists of costs paid to our third-party contract manufacturers for our appliances and personnel and other costs in our manufacturing operations department. Our cost of product revenue also includes product testing costs, shipping costs and allocated overhead costs. We expect our cost of product revenue to decrease as our product revenue decreases, as customers' buying preferences shift away from on premise appliance-based solutions and towards cloud-based and cloud-enabled solutions. Our cost of product revenue may increase as a percentage of product revenue, due to the fixed nature of a portion of these costs.
- Cost of subscription and services revenue. Cost of subscription and services revenue consists of personnel costs for our global customer support and services organization and allocated overhead costs. We expect our cost of subscription and services revenue to decrease as a percentage of total revenue.

Gross Margin

Gross margin, or gross profit as a percentage of revenue, has been and will continue to be affected by a variety of factors, including our average selling price, manufacturing costs, the mix of products sold, and the mix of revenue among products, subscriptions and services. We expect our gross margins to fluctuate over time depending on these factors.

Operating Expenses

Our operating expenses consist of research and development, sales and marketing and general and administrative expenses, as well as restructuring charges. Personnel costs are the most significant component of operating expenses and consist of salaries, benefits, bonuses, stock-based compensation and, with regard to sales and marketing expense, sales commissions. Operating expenses also include allocated overhead costs consisting of certain facilities, depreciation and information technology costs.

- Research and development. Research and development expense consists primarily of personnel costs and allocated overhead. Research and development expense also includes prototype related expenses. We expect research and development expense to decrease as a percentage of total revenue.
- Sales and marketing. Sales and marketing expense consists primarily of personnel costs, partner referral fees, incentive commission costs and allocated overhead. We expense commission costs as incurred. Sales and marketing expense also includes costs for market development programs, promotional and other marketing activities, travel, office equipment, depreciation of proof-of-concept evaluation units and outside consulting costs. We expect sales and

marketing expense to decrease as a percentage of total revenue.

- General and administrative. General and administrative expense consists of personnel costs, professional services and allocated overhead. General and administrative personnel include our executive, finance, human resources, facilities and legal organizations. Professional services consist primarily of legal, auditing, accounting and other consulting costs. We expect general and administrative expense to decrease as a percentage of total revenue.

- Restructuring charges. In February 2016, we initiated a series of business restructuring plans to reduce our cost structure and improve efficiency. In August 2016, we initiated a further business restructuring plan to reduce operating expenses and align the company’s expense structure with current growth expectations. In both cases, the expenses incurred primarily consisted of employee severance charges and other termination benefits, as well as real estate and related fixed asset charges for the consolidation of certain leased facilities. We do not expect to incur significant additional restructuring costs. We did not incur any expenses related to restructuring activities in 2015.

Interest Income

Interest income consists of interest earned on our cash and cash equivalent and investment balances. We have historically invested our cash in money-market funds and other short-term, high quality securities. We expect interest income to vary each reporting period depending on our average investment balances during the period, types and mix of investments and market interest rates.

Interest Expense

Interest expense is primarily a result of our convertible senior notes, consisting of interest at the stated rate (coupon) and amortization of discounts and issuance costs.

Other Income (Expense), Net

Other income (expense), net includes gains or losses on the disposal of fixed assets, gains or losses from our equity-method investment, foreign currency re-measurement gains and losses and foreign currency transaction gains and losses. We expect other income (expense), net to fluctuate depending primarily on foreign exchange rate movements.

Provision for (Benefit from) Income Taxes

Provision for (benefit from) income taxes consists primarily of federal and state income taxes in the United States and income taxes in certain foreign jurisdictions in which we conduct business. Income in certain countries may be taxed at statutory tax rates that are lower than the U.S. statutory tax rate. As a result, our overall effective tax rate over the long term may be lower than the U.S. federal statutory tax rate due to a larger proportion of net income that was subject to foreign income tax rates that are lower than the U.S. federal statutory rate.

Results of Operations

The following tables summarize our results of operations for the periods presented and as a percentage of our total revenue for those periods. The period-to-period comparison of results is not necessarily indicative of results for future periods.

	Three Months Ended September 30,			
	2016		2015	
	Amount	% of total Revenue	Amount	% of total Revenue
	(Dollars In thousands)			
Revenue:				
Product	$43,857	24 %	$60,101	36 %
Subscription and services	142,554	76	105,515	64
Total revenue	186,411	100	165,616	100
Cost of revenue:				
Product	16,675	9	21,265	13
Subscription and services	52,378	28	40,606	24
Total cost of revenue	69,053	37	61,871	37
Total gross profit	117,358	63	103,745	63
Operating expenses:				
Research and development	62,665	34	73,374	44
Sales and marketing	110,756	59	117,131	71
General and administrative	32,860	18	36,518	22
Restructuring charges	22,423	12	—	—
Total operating expenses	228,704	123	227,023	137
Operating loss	(111,346)	(60)	(123,278)	(74)
Interest income	1,687	1	956	1
Interest expense	(12,019)	(7)	(11,587)	(7)
Other expense, net	(467)	—	(985)	(1)
Loss before income taxes	(122,145)	(66)	(134,894)	(81)
Provision for income taxes	1,228	—	636	1
Net loss attributable to common stockholders	$(123,373)	(66)%	$(135,530)	(82)%

	Nine Months Ended September 30,			
	2016		2015	
	Amount	% of total Revenue	Amount	% of total Revenue
	(Dollars In thousands)			
Revenue:				
Product	$118,340	22 %	$150,034	34 %
Subscription and services	411,078	78	288,159	66
Total revenue	529,418	100	438,193	100
Cost of revenue:				
Product	49,767	9	53,566	12
Subscription and services	158,143	30	116,463	27
Total cost of revenue	207,910	39	170,029	39
Total gross profit	321,508	61	268,164	61
Operating expenses:				
Research and development	225,020	43	207,777	47
Sales and marketing	355,189	67	340,734	78
General and administrative	108,925	21	103,812	24
Restructuring charges	27,630	5	—	—
Total operating expenses	716,764	136	652,323	149
Operating loss	(395,256)	(75)	(384,159)	(88)
Interest income	4,779	1	1,616	—
Interest expense	(35,737)	(7)	(15,425)	(3)
Other expense, net	(843)	—	(2,559)	—
Loss before income taxes	(427,057)	(81)	(400,527)	(91)
Provision for (benefit from) income taxes	(8,464)	(2)	2,540	1
Net loss attributable to common stockholders	$(418,593)	(79)%	$(403,067)	(92)%

Comparison of the Three Months Ended September 30, 2016 and 2015

Revenue

	Three Months Ended September 30,					
	2016		2015		Change	
	Amount	% of Total Revenue	Amount	% of Total Revenue	Amount	%
	(Dollars in thousands)					
Revenue:						
Product	$43,857	24 %	$60,101	36 %	$(16,244)	(27)%
Subscription and services	142,554	76	105,515	64	37,039	35
Total revenue	$186,411	100 %	$165,616	100 %	$20,795	13 %
Revenue by geographic region:						
United States	$129,619	70 %	$119,934	72 %	$9,685	8 %
EMEA	24,900	13	17,574	11	7,326	42
APAC	24,447	13	19,878	12	4,569	23
Other	7,445	4	8,230	5	(785)	(10)
Total revenue	$186,411	100 %	$165,616	100 %	$20,795	13 %

Product revenue decreased by $16.2 million, or 27%, during the three months ended September 30, 2016 compared to the three months ended September 30, 2015. The decrease in product revenue was primarily due to a shift in customer buying preferences away from on premise appliance-based solutions to cloud-based and cloud-enabled subscriptions, including security delivered as a service. As a result, revenue from sales of our threat prevention appliances has declined as revenue from our cloud-based solutions has increased. Our Network Threat Prevention product continued to account for the largest portion of our product revenue. This reflects the fact that

customers who purchase our product portfolio generally purchase more Network Threat Prevention appliances than our other appliances, as their networks typically have more Web entry points than email or file entry points to protect.
Subscription and services revenue increased by $37.0 million, or 35%, during the three months ended September 30, 2016 compared to the three months ended September 30, 2015. This increase was comprised of an increase in subscription revenue of $27.3 million, an increase in support and maintenance revenue of $8.8 million and an increase in professional services revenue of $0.9 million. The increase in subscription revenue of $27.3 million and the increase in support and maintenance revenue of $8.8 million was primarily due to an increase in initial customer purchases of $18.0 million and an increase in the amortization of deferred subscription and support and maintenance revenue related to renewals of $18.1 million during the three months ended September 30, 2016 compared to the three months ended September 30, 2015. Given our high renewal rate, we expect revenue from the amortization of deferred subscription and services revenue related to renewals to increase as a percentage of our total revenue from deferred subscription and services revenue. Our renewal rate for subscription and services agreements expiring in the 12 months ended September 30, 2016 was in excess of 90%.
Our international revenue increased $11.1 million, or 24%, during the three months ended September 30, 2016 compared to the three months ended September 30, 2015, which reflects our increasing international market presence.
Cost of Revenue and Gross Margin

	Three Months Ended September 30,					
	2016		2015		Change	
	Amount	Gross Margin	Amount	Gross Margin	Amount	%
	(Dollars in thousands)					
Cost of revenue:						
Product	$16,675		$21,265		$(4,590)	(22)%
Subscription and services	52,378		40,606		11,772	29
Total cost of revenue	$69,053		$61,871		$7,182	12 %
Gross margin:						
Product		62 %		65 %		
Subscription and services		63 %		62 %		
Total gross margin		63 %		63 %		

The cost of product revenue decreased $4.6 million, or 22%, during the three months ended September 30, 2016 compared to the three months ended September 30, 2015. The decrease in cost of product revenue was primarily driven by fewer product shipments which drove lower hardware costs and software licensing costs, partially offset by greater inventory reserves.
The cost of subscription and services revenue increased $11.8 million, or 29%, during the three months ended September 30, 2016 compared to the three months ended September 30, 2015. The increase in cost of subscription and services revenue was due to a $6.5 million increase in personnel costs, largely driven by increased headcount, including those attributable to our recent acquisitions. Additionally, $3.0 million of the increase is due to the amortization of intangible assets obtained through our recent acquisitions, and $1.0 million of the increase was for higher facility and IT costs.
Gross margin was consistent for the three months ended September 30, 2016 compared to the three months ended September 30, 2015, due to a decrease in product margins offset by an increase in subscription and services margins. The decreased product margins were driven by decreased shipments and the mix of products sold. The increased subscription and services margins were driven by lower depreciation due to fully amortized service assets and lower stock-based compensation charges.

Operating Expenses

	Three Months Ended September 30,					
	2016		2015		Change	
	Amount	% of Total Revenue	Amount	% of Total Revenue	Amount	%
	(Dollars in thousands)					
Operating expenses:						
Research and development	$62,665	34 %	$73,374	44 %	$(10,709)	(15)%
Sales and marketing	110,756	59	117,131	71	(6,375)	(5)
General and administrative	32,860	18	36,518	22	(3,658)	(10)
Restructuring charges	22,423	12	—	—	22,423	100
Total operating expenses	$228,704	123 %	$227,023	137 %	$1,681	1 %
Includes stock-based compensation expense of:						
Research and development	$11,422		$18,852			
Sales and marketing	13,915		18,612			
General and administrative	11,815		12,120			
Total	$37,152		$49,584			

Research and Development

Research and development expense decreased $10.7 million, or 15%, during the three months ended September 30, 2016 compared to the three months ended September 30, 2015. The decrease was due to an $8.8 million decrease in personnel costs, driven by a $7.4 million decrease in stock-based compensation charges, offset by higher average headcount during the year, including those attributable to our recent acquisitions. Additionally, $1.2 million of the decrease was due to lower facility and IT costs.

Sales and Marketing

Sales and marketing expense decreased $6.4 million, or 5%, during the three months ended September 30, 2016 compared to the three months ended September 30, 2015. The decrease was due to a $5.7 million decrease in personnel costs, largely comprised of a $4.7 million decrease in stock-based compensation charges, both driven by decreased headcount. Additionally, $1.3 million of the decrease was for lower travel costs and $1.0 million of the decrease was for lower depreciation expense associated with demonstration units. These costs were partially offset by increased amortization expense from intangible assets obtained through our recent acquisitions of $1.3 million.

General and Administrative

General and administrative expense decreased $3.7 million, or 10%, during the three months ended September 30, 2016 compared to the three months ended September 30, 2015. The decrease was driven by lower legal expenses of $3.4 million, partially offset by a $0.7 million increase in personnel costs, largely driven by increased headcount.

Restructuring Charges

During the three months ended September 30, 2016, we incurred restructuring charges of approximately $22.4 million, which primarily related to employee severance charges and other termination benefits under our August 2016 restructuring plan. We incurred no restructuring expenses during the three months ended September 30, 2015.

Interest Income

	Three Months Ended September 30,		Change	
	2016	2015	Amount	%
	(Dollars in thousands)			
Interest income	$1,687	$956	$731	76%

Interest income increased for the three months ended September 30, 2016 compared to the three months ended September 30, 2015, primarily due to a higher rate of return on our investments.

Interest Expense

	Three Months Ended September 30,		Change	
	2016	2015	Amount	%
	(Dollars in thousands)			
Interest expense	$(12,019)	$(11,587)	$432	4%

Interest expense increased for the three months ended September 30, 2016 compared to the three months ended September 30, 2015 due to greater amortization of discount and issuance costs on the Convertible Senior Notes issued in June 2015.

Other Expense, Net

	Three Months Ended September 30,		Change	
	2016	2015	Amount	%
	(Dollars in thousands)			
Other expense, net	$(467)	$(985)	$(518)	(53)%

Other expense, net decreased for the three months ended September 30, 2016 compared to the three months ended September 30, 2015, primarily due to foreign currency transaction gains and lower non-income related taxes.

Provision for Income Taxes

	Three Months Ended September 30,	
	2016	2015
	(Dollars in thousands)	
Provision for income taxes	$1,228	$636
Effective tax rate	(1)%	— %

The provision for income taxes during both the three months ended September 30, 2016 and the three months ended September 30, 2015 was primarily due to foreign and state income taxes. During the three months ended September 30, 2016, the provision for income taxes was partially offset by the release of the U.S. valuation allowance on the U.S. deferred tax assets resulting from recording a deferred tax liability on the acquisition-related intangibles for which no benefit will be derived.

Comparison of the Nine Months Ended September 30, 2016 and 2015

Revenue

	Nine Months Ended September 30,				Change	
	2016		2015			
	Amount	% of Total Revenue	Amount	% of Total Revenue	Amount	%
	(Dollars in thousands)					
Revenue:						
Product	$118,340	22 %	$150,034	34 %	$(31,694)	(21)%
Subscription and services	411,078	78	288,159	66	122,919	43
Total revenue	$529,418	100 %	$438,193	100 %	$91,225	21 %
Revenue by geographic region:						
United States	$366,502	69 %	$315,254	72 %	$51,248	16 %
EMEA	73,307	14	53,337	12	19,970	37
APAC	69,650	13	49,208	11	20,442	42
Other	19,959	4	20,394	5	(435)	(2)
Total revenue	$529,418	100 %	$438,193	100 %	$91,225	21 %

Product revenue decreased by $31.7 million, or 21%, during the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015. The decrease in product revenue was primarily due to a shift in customer buying preferences away from appliance-based solutions to cloud-based and cloud-enabled subscriptions, including security delivered as a service. As a result, revenue from sales of our threat prevention appliances has declined as revenue from our cloud-based solutions has increased. Our Network Threat Prevention product continued to account for the largest portion of our product revenue. This reflects the fact that customers that purchase our product portfolio generally purchase more Network Threat Prevention appliances than our other appliances, as their networks typically have more Web entry points than email or file entry points to protect.

Subscription and services revenue increased by $122.9 million, or 43%, during the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015. This increase was comprised of an increase in subscription revenue of $85.9 million, an increase in support and maintenance revenue of $26.4 million and an increase in professional services revenue of $10.6 million. The increase in subscription revenue of $85.9 million and the increase in support and maintenance revenue of $26.4 million was primarily due to an increase in customer purchases of $61.4 million and an increase in the amortization of deferred subscription and support and maintenance revenue related to renewals of $50.9 million during the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015. Given our high renewal rate, we expect revenue from the amortization of deferred subscription and services revenue related to renewals to increase as a percentage of our total revenue from deferred subscription and services revenue. Our renewal rate for subscription and services agreements expiring in the 12 months ended September 30, 2016 was in excess of 90%.

Our international revenue increased $40.0 million, or 33%, during the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015, which reflects our increasing international market presence.

Cost of Revenue and Gross Margin

	Nine Months Ended September 30,					
	2016		2015		Change	
	Amount	Gross Margin	Amount	Gross Margin	Amount	%
	(Dollars in thousands)					
Cost of revenue:						
Product	$49,767		$53,566		$(3,799)	(7)%
Subscription and services	158,143		116,463		41,680	36
Total cost of revenue	$207,910		$170,029		$37,881	22 %
Gross margin:						
Product		58 %		64 %		
Subscription and services		62 %		60 %		
Total gross margin		61 %		61 %		

The cost of product revenue decreased $3.8 million, or 7%, during the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015. The decrease in cost of product revenue was primarily driven by fewer product shipments which drove lower hardware costs and software licensing costs, partially offset by greater inventory reserves.

The cost of subscription and services revenue increased $41.7 million, or 36%, during the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015. The increase in cost of subscription and services revenue was due to a $31.1 million increase in personnel costs, which includes a $3.3 million increase in stock-based compensation charges, largely driven by increased headcount including those attributable to our recent acquisitions. Additionally, $8.3 million of the increase was from the amortization of intangible assets obtained through our recent acquisitions.

Gross margin for the nine months ended September 30, 2016 was consistent with the nine months ended September 30, 2015, due to a decrease in product margins, offset by an increase in subscription and services margins. The decreased product margins were driven by decreased shipments and the mix of products sold. The increased subscription and services margins were driven by lower depreciation due to fully amortized service assets.

Operating Expenses

	Nine Months Ended September 30,					
	2016		2015		Change	
	Amount	% of Total Revenue	Amount	% of Total Revenue	Amount	%
	(Dollars in thousands)					
Operating expenses:						
Research and development	$225,020	43 %	$207,777	47 %	$17,243	8 %
Sales and marketing	355,189	67	340,734	78	14,455	4
General and administrative	108,925	21	103,812	24	5,113	5
Restructuring charges	27,630	5	—	—	27,630	100
Total operating expenses	$716,764	136 %	$652,323	149 %	$64,441	10 %
Includes stock-based compensation expense of:						
Research and development	$54,877		$51,412			
Sales and marketing	47,675		54,424			
General and administrative	37,440		35,839			
Total	$139,992		$141,675			

Research and Development

Research and development expense increased $17.2 million, or 8%, during the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015. The increase was due to a $16.0 million increase in personnel costs, which includes a $3.5 million increase in stock-based compensation charges, largely driven by increased headcount including those attributable to our recent acquisitions.

Sales and Marketing

Sales and marketing expense increased $14.5 million, or 4%, during the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015. The increase was due to a $5.9 million net increase in personnel costs driven by a $12.6 million increase attributable to greater headcount, partially offset by a $6.7 million decrease in stock-based compensation charges associated with performance-based awards. Additionally, $3.8 million of the increase was from the amortization of intangible assets obtained through our recent acquisitions, $3.2 million of the increase was for greater commissions expense and $2.7 million of the increase was for higher facility and IT costs. These costs were partially offset by lower depreciation expense associated with demonstration units of $3.7 million.

General and Administrative

General and administrative expense increased $5.1 million, or 5%, during the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015. The increase was due to a $7.5 million increase in personnel costs, which includes a $1.6 million increase in stock-based compensation charges, largely driven by increased headcount. Additionally, we recognized a charge of $1.8 million for the change in fair value of the contingent earn-out liability. These costs were partially offset by lower legal expenses of $4.7 million.

Restructuring Charges

During the nine months ended September 30, 2016, we incurred restructuring charges of approximately $27.6 million, related to employee severance charges and other termination benefits, primarily under our August 2016 restructuring plan as well as our February 2016 plan. We incurred no restructuring expenses during the nine months ended September 30, 2015.

Interest Income

	Nine Months Ended September 30,		Change	
	2016	2015	Amount	%
	(Dollars in thousands)			
Interest income	$4,779	$1,616	$3,163	196%

Interest income increased for the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015, primarily due to higher average balances in our cash and cash equivalents and investments, as well as a higher rate of return on our investments.

Interest Expense

	Nine Months Ended September 30,		Change	
	2016	2015	Amount	%
	(Dollars in thousands)			
Interest expense	$(35,737)	$(15,425)	$20,312	132%

Interest expense increased for the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015 due to greater interest expense from the Convertible Senior Notes issued in June 2015.

Other Expense, Net

	Nine Months Ended September 30,		Change	
	2016	2015	Amount	%
	(Dollars in thousands)			
Other expense, net	$(843)	$(2,559)	$(1,716)	(67)%

Other expense, net decreased for the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015, primarily due to foreign currency transaction gains.

Provision for (Benefit from) Income Taxes

	Nine Months Ended September 30,	
	2016	2015
	(Dollars in thousands)	
Provision for (benefit from) income taxes	$(8,464)	$2,540
Effective tax rate	2%	(1)%

The change to a benefit from income taxes during the nine months ended September 30, 2016 from a provision for income taxes during the nine months ended September 30, 2015 was primarily due to the release of the U.S. valuation allowance on the U.S. deferred tax assets resulting from recording a deferred tax liability on the acquisition-related intangibles for which no benefit will be derived, partially offset for foreign and state income taxes. We continue to maintain a full valuation allowance on all of our U.S. and Singapore-based deferred tax assets to the extent that deferred tax liabilities are not available as a source of income as of September 30, 2016.

Liquidity and Capital Resources

	As of September 30, 2016	As of December 31, 2015
	(In thousands)	
Cash and cash equivalents	$223,697	$402,102
Short-term investments	$702,469	$767,775

	Nine Months Ended September 30,	
	2016	2015
	(In thousands)	
Cash provided by (used in) operating activities	$(21,517)	$27,571
Cash used in investing activities	(169,979)	(518,833)
Cash provided by financing activities	13,091	781,800
Net increase (decrease) in cash and cash equivalents	$(178,405)	$290,538

As of September 30, 2016, our cash and cash equivalents of $223.7 million were held for working capital, capital expenditures, investment in technology and business acquisition purposes, of which approximately $57.1 million was held outside of the United States. We consider the undistributed earnings of our foreign subsidiaries as of September

30, 2016 to be indefinitely reinvested outside the United States on the basis of estimates that future domestic cash generation will be sufficient to meet future domestic cash needs and our plan for reinvestment of our foreign subsidiaries' undistributed earnings.

In February 2016, we acquired Invotas, a provider of security automation and orchestration technology. We paid upfront cash consideration of $17.7 million and issued 742,026 shares of our common stock with an estimated fair value of $11.1 million.

In January 2016, we acquired iSIGHT, one of the world's leading providers of cyber threat intelligence for global enterprises. We paid upfront cash consideration of $192.8 million, incurred liabilities of $39.1 million contingent upon the achievement of a threat intelligence bookings target on or before the end of the second quarter of 2018, and issued 1,793,305 shares of our common stock with an estimated fair value of $29.9 million.

In June 2015, we issued $460.0 million principal amount of 1.000% Convertible Senior Notes due 2035 (the "Series A Notes") and $460.0 million principal amount of 1.625% Convertible Senior Notes due 2035 (the "Series B Notes" and together with the Series A Notes, the "Convertible Senior Notes"), in a private placement to qualified institutional purchasers pursuant to an exemption from registration provided by Section 4(a)(2) and Rule 144A under the Securities Act of 1933, as amended. We received total net proceeds after the initial purchasers' discount and issuance costs of $896.5 million. In connection with the issuance of the Convertible Senior Notes, we also entered into privately negotiated prepaid forwards (each a "Prepaid Forward") with one of the initial purchasers of the Convertible Senior Notes, pursuant to which we purchased approximately $150.0 million worth of our common stock (equivalent to approximately 3.3 million shares) for settlement on or around June 1, 2020 and June 1, 2022, respectively, subject to any early settlement in whole or in part of each Prepaid Forward.

We believe that our existing cash and cash equivalents and short-term investments and any cash inflow from operations will be sufficient to meet our anticipated cash needs, including cash we will consume for operations, for at least the next 12 months. Our future capital requirements will depend on many factors, including our growth rate, the timing and extent of spending to support development efforts, the introduction of new and enhanced product and service offerings, the cost of any future acquisitions of technology or businesses, and the continuing market acceptance of our products. In the event that additional financing is required from outside sources, we may not be able to raise such financing on terms acceptable to us or at all. If we are unable to raise additional capital when desired, our business, operating results and financial condition would be adversely affected.

Operating Activities

During the nine months ended September 30, 2016, our operating activities used cash of $21.5 million. We incurred a net loss of $418.6 million, which included net non-cash expenses of $282.5 million, primarily consisting of stock-based compensation charges and depreciation and amortization expense. Our net change in operating assets and liabilities provided cash of $114.5 million, primarily sourced from accounts receivable for $60.4 million, resulting from increased collections which benefited from the restructuring of programs to incentivize early payment, and sourced from deferred revenue for $68.3 million, as a result of increases in sales of subscriptions and support and maintenance services. These sources of cash were partially offset by the use of cash related to current liabilities of $18.2 million