

FIREEYE, INC.

FORM 10-K (Annual Report)

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

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2016

or

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

For the transition period from to

Commission File Number 001-36067

FireEye, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

20-1548921

(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)

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

Title of each class	Name of each exchange on which registered
Common Stock, par value \$0.0001 per share	The NASDAQ Global Select Market

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

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act"). Yes No

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

Indicate by check mark whether the registrant has submitted electronically 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 No

Indicate by a check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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	<input checked="" type="checkbox"/>		Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	(Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>

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

As of June 30, 2016, the last business day of the registrant’s most recently completed second fiscal quarter, the aggregate market value of the registrant’s common stock held by non-affiliates was approximately \$2.5 billion, based on the closing price of such stock reported for such date on The NASDAQ Global Select Market. This calculation does not reflect a determination that persons are affiliates for any other purposes.

The number of outstanding shares of the registrant’s common stock was 177,507,475 as of February 21, 2017.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant’s Proxy Statement for the 2017 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission within 120 days after the end of the registrant’s fiscal year ended December 31, 2016 are incorporated by reference into Part III of this Annual Report on Form 10-K.

PART I

Item 1.	Business	6
Item 1A.	Risk Factors	13
Item 1B.	Unresolved Staff Comments	38
Item 2.	Properties	38
Item 3.	Legal Proceedings	38
Item 4.	Mine Safety Disclosures	38

PART II

Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	39
Item 6.	Selected Consolidated Financial Data	41
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	42
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	64
Item 8.	Financial Statements and Supplementary Data	65
Item 9.	Changes in and Disagreements With Accountants on Accounting and Financial Disclosure	99
Item 9A.	Controls and Procedures	99
Item 9B.	Other Information	101

PART III

Item 10.	Directors, Executive Officers and Corporate Governance	102
Item 11.	Executive Compensation	102
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	102
Item 13.	Certain Relationships and Related Transactions, and Director Independence	102
Item 14.	Principal Accountant Fees and Services	102

PART IV

Item 15.	Exhibits, Financial Statement Schedules	103
	Signatures	104
	Exhibit Index	105

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, including the sections entitled “Business,” “Risk Factors,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” 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. The words “believe,” “may,” “will,” “potentially,” “estimate,” “continue,” “anticipate,” “intend,” “could,” “would,” “project,” “plan” “expect,” the negative and plural forms of these words and similar expressions that convey uncertainty of future events or outcomes are intended to identify forward-looking statements. These forward-looking statements include, but are not limited to, statements concerning the following:

- the evolution of the threat landscape facing our customers and prospects;
- our ability to educate the market regarding the advantages of our security solutions;
- our ability to continue to grow revenues;
- our future financial and operating results;
- our business plan and our ability to effectively manage our growth and associated investments;
- beliefs and objectives for future operations;
- our ability to expand our leadership position in advanced network security;
- our ability to attract and retain customers and to expand our solutions footprint within each of these customers;
- our expectations concerning renewal rates for subscriptions and services by existing customers;
- our ability to maintain our competitive technological advantages against new entrants in our industry;
- our ability to timely and effectively scale and adapt our existing technology;
- our ability to innovate new products and bring them to market in a timely manner;
- our ability to maintain, protect, and enhance our brand and intellectual property;
- our ability to expand internationally;
- the effects of increased competition in our market and our ability to compete effectively;
- cost of revenue, including changes in costs associated with products, manufacturing and customer support;
- operating expenses, including changes in research and development, sales and marketing, and general and administrative expenses;
- anticipated income tax rates;
- potential attrition and other impacts associated with restructuring;
- sufficiency of cash to meet cash needs for at least the next 12 months;
- our ability to generate cash flows from operations and free cash flows;
- our ability to capture new, and renew existing, contracts with the United States and international governments;
- costs associated with defending intellectual property infringement and other claims, such as those claims discussed in “Business—Legal Proceedings”;
- our expectations concerning relationships with third parties, including channel partners and logistics providers;
- the release of new products;
- economic and industry trends or trend analysis;
- the attraction and retention of qualified employees and key personnel;
- future acquisitions of or investments in complementary companies, products, subscriptions or technologies; and
- the effects of seasonal trends on our results of operations.

These forward-looking statements are subject to a number of risks, uncertainties, and assumptions, including those described in “Risk Factors” included in Part

I, Item 1A and elsewhere in this Annual Report on Form 10-K. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties,

and assumptions, the forward-looking events and circumstances discussed in this Annual Report on Form 10-K may not occur, or unanticipated events or circumstances that we did not foresee may materialize, either of which could cause actual results to differ materially and adversely from those anticipated or implied in our forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances described in the forward-looking statements will be achieved or occur. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this Annual Report on Form 10-K to conform these statements to actual results or to changes in our expectations, except as required by law.

You should read this Annual Report on Form 10-K and the documents that we reference in this Annual Report on Form 10-K and have filed with the SEC as exhibits to this Annual Report on Form 10-K with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

PART I

Item 1. Business

General

We provide comprehensive intelligence-based cybersecurity solutions that allow organizations to prepare for, prevent, respond to and remediate cyber attacks. Our portfolio of cybersecurity products and services is designed to detect and prevent attacks as well as enable rapid discovery and response when a breach occurs. We accomplish this through the “productization” of our three core competitive advantages:

- Our high efficacy detection of known and unknown threats by our proprietary Multi-vector Virtual Execution (MVX) engine and intelligence-driven analysis (IDA) technologies,
- Our intelligence on threats and threat actors, based on the continuous flow of new attack data from our global network of sensors and virtual machines, as well as intelligence gathered by our security researchers and incident responders, and
- Our accumulated security expertise derived from responding to thousands of significant breaches over the past decade.

Our MVX-based detection and prevention solutions encompass web, email, endpoint, cloud and content (file) attack vectors, and provide the first line of defense against known and unknown attacks. These products are complemented by our network forensics, cloud-based intelligence and threat analytics, managed security services, cybersecurity consulting and incident response offerings. In combination, our products and services enable a proactive approach to cybersecurity that extends across the security operations cycle to reduce organizations’ overall cyber-risk at a lower total cost of ownership.

We were founded in 2004 to address the inability of signature-based security solutions to detect the new generation of dynamic, stealthy and targeted cyberattacks, known as advanced persistent threats (APTs). To meet the challenges of detecting these previously unknown threats, for which there were no signatures, we developed our MVX engine, a purpose-built virtual machine-based threat detection and analysis engine. MVX employs a two-phased approach to deliver high fidelity alerts -- anomaly detection using our IDA technologies to capture suspicious content, followed by virtual machine validation to minimize costly false positive alerts. MVX generates a continuous flow of real-time “victim-based” threat data to our Dynamic Threat Intelligence (DTI) cloud, allowing our solutions to be updated in near-real time as new threats emerge.

We have expanded our business from a narrow focus on the detection of advanced threats to helping our customers improve their resilience to attacks using our technologies, intelligence and expertise. In the fourth quarter of 2016, we announced an early adopter program for our FireEye Helix cybersecurity platform. Helix integrates our network and endpoint security technologies, advanced threat intelligence, threat analytics, and orchestration capabilities in a single subscription offering designed to simplify security operations. The cloud-based Helix console provides a unified, customized view of an organization’s attack surface, enriching alerts from FireEye and third party security products with contextual threat intelligence on attackers’ identity, tools and techniques. Helix also includes pre-determined threat response “playbooks” based on Mandiant expertise and best practices. Helix allows security analysts to prioritize critical alerts, rapidly pivot from detection to response, and reduce the business impact of an attack.

As of December 31, 2016, we had approximately 5,600 end-customers, including more than 40% of the Forbes Global 2000. Our customers include leading enterprises in a diverse set of industries, including telecommunications, technology, financial services, public utilities, healthcare and oil and gas, as well as leading U.S. and international governmental agencies.

For 2016, 2015 and 2014, our revenue was \$714.1 million, \$623.0 million and \$425.7 million, respectively, representing year-over-year growth of 15% for 2016, 46% for 2015 and 163% for 2014, and our net losses were \$480.1 million, \$539.2 million and \$443.8 million, respectively.

Our business is geographically diversified, with 69% of our total revenue from the United States, 14% from Europe, the Middle East, and Africa (EMEA), 13% from Asia Pacific and Japan (APAC), and 4% from other regions in 2016. See Note 15 contained in “Notes to Consolidated Financial Statements” in Item 8 of Part II of this Annual Report on Form 10-K for more information about our customers, revenue and long-lived assets by geographic region.

We were incorporated in Delaware in February 2004 under the name NetForts, Inc., and changed our name to FireEye, Inc. in September 2005. Our principal executive offices are located at 1440 McCarthy Blvd, Milpitas, California 95035, and our telephone number is (408) 321-6300. Our website is www.fireeye.com. Information contained on, or that can be accessed through, our website is not incorporated by reference into this report, and you should not consider information on our website to be part of this report. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, are available free of charge on the Investors portion of our web site as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

We are organized and operate in a single segment. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in Part II, Item 7 of this Annual Report on Form 10-K.

Our Products, Subscriptions and Services

Our products are designed to address security requirements for small-to-mid sized businesses, remote offices, large enterprises, governments and service providers. We offer multiple appliance models and form factors, each with various features and capabilities. All our detection and prevention appliance products require subscriptions to threat intelligence and support, which are typically priced as a percentage of the appliance price in one or three year subscriptions. Our security-as-a-service offerings are offered in one or three year subscriptions and are priced based on appropriate use metrics. We typically invoice customers for the full term of subscriptions up front. Professional services are invoiced according to pre-determined contract terms for consulting services and on a time-and-materials basis for incident response. We recognize revenue as our services are delivered.

Products

- **Threat Detection and Prevention Solutions.** Our detection and prevention products consist of vector-specific appliance and cloud-based solutions to detect and block known and unknown cyber attacks. Our portfolio encompasses products for network, email, cloud, endpoint, and file (content) threat vectors.
- **Network security products (NX and MVX Compute Node Series).** Our network security products detect and block known and unknown threats hidden in Internet traffic. They are typically deployed behind traditional signature- and policy-based defenses to detect and validate attacks missed by those products, and are available in a variety of form factors, deployment options and performance/capacity levels.
 - Integrated network security appliances. Our NX Series of integrated appliances combine our IDA rules engines and MVX validation in a single, standalone appliance to secure an Internet access point at a single site. NX Series capacity scales from 50 megabits per second (Mbps) to multiple gigabits per second (Gbps) of throughput.
 - Distributed network security appliances. In November 2016, we introduced new appliances that separated the two primary detection and prevention processes to enable distributed, cloud and hybrid deployments. Network traffic capture and anomaly detection is performed by our virtual and physical Smart Node appliances installed at Internet access points on the customers' premise. MVX virtual machine-based analysis and validation is performed by the highly scalable, centrally shared MVX Smart Grid. Existing NX Series appliances can be configured to operate as Smart Nodes, allowing organizations to migrate their on-premise security infrastructures seamlessly to hybrid and cloud-based architectures.
- **Email security products (EX Series and ETP).** Our email security solutions detect and stop spear phishing, ransomware, sender impersonation, credential phishing, typo-squatting, and other email-based attacks. Our EX Series appliances and ETP cloud-based solution inspect emails for zero-day exploits, malicious URLs, behavioral anomalies, and malware hidden in attachments. If an attack is confirmed, the malicious email is quarantined for further analysis and deletion. All our email security solutions integrate with FireEye network security through our Central Management System to protect against multi-vector, blended attacks.
- **Endpoint security products (HX Series).** Our HX next generation endpoint security solution equips security organizations to detect, analyze and resolve security incidents, including exploits, on desktops, laptops and other end-user devices using our intelligence-driven analysis engines. Threat intelligence and alerts are correlated between our network security products and endpoint security products to provide visibility across an organization and enable rapid containment. Additionally, the HX agent collects forensic data necessary for investigation and analysis of attacks. In February 2017, we announced an original equipment manufacturer (OEM) relationship with a leading provider of anti-virus software to integrate signature-based malware detection and prevention on HX. The addition of legacy malware detection functionality to our next-generation endpoint security solution provides a comprehensive detection, protection and response solution.
- **Content security products (FX Series) .** Our FX Series of integrated appliances analyze content on network file servers to detect and quarantine malicious content embedded in files brought into the network online file sharing services and portable file storage devices.
- **Security Management and Orchestration Products**
 - **Central Management System (CMS).** Our Central Management System, or CMS, manages the overall deployment of our on-premise integrated NX, EX, FX, and AX security appliances by unifying reporting, configuration, and threat intelligence sharing. Customers generally purchase the CMS appliance to manage multiple FireEye detection and prevention appliances.
 - **FireEye Security Orchestrator (FSO).** FireEye Security Orchestrator accelerates and simplifies security operations by unifying disparate technologies and incident handling into a single console. FSO coordinates the response to critical alerts across the security and IT infrastructure using customized workflows, granular permissions, and bi-directional

command and control plug-ins for many popular security and infrastructure products. FSO also provides an investigative dashboard and is a core enabling technology for the Helix platform.

- **Forensics and Investigation Products** . Our forensics and investigation products provide the tools, threat intelligence, and codified expertise necessary to rapidly prioritize, investigate and respond to threat alerts.
 - **Threat Analytics Platform (TAP)**. TAP is a cloud-based detection and incident investigation application that enables security teams to identify and effectively respond to cyber threats in on-premise, cloud and hybrid environments. TAP is designed to enable rapid search of billions of events to identify malicious events. TAP integrates with the FireEye Security Orchestrator and the analytics are key components of the Helix security console.
 - **Malware Analysis (AX Series)**. Our AX Series of appliances are intended for use by forensics experts for detailed analysis and investigation of cyber attacks.
 - **Enterprise Forensics (PX Series and IA Series)**. Our PX Series of appliances captures, stores and indexes full network packets at extremely rapid speeds to allow organizations to investigate and resolve security incidents. Our Investigative Analysis System (IA Series) provides a centralized, easy-to-use analytical interface to our PX Series of appliances to provide data visualization and in-depth analytics in a single workbench.

Subscription and Services

- **Product Subscriptions**
 - **Threat Intelligence Subscriptions**
 - **Dynamic Threat Intelligence (DTI) Cloud**. Our DTI cloud is a bi-directional system that collects security data from our appliances, our global threat gathering network and our security labs, and uses machine-learning and analysis techniques to identify new threats.
 - **Advanced Threat Intelligence (ATI)**. Our Advanced Threat Intelligence augments our Dynamic Threat Intelligence by correlating validated alerts with contextual information on known threat actors, including information on the identity of the attacker, likely motives, and details on attack patterns.
 - **FireEye iSIGHT Intelligence**. FireEye iSIGHT Intelligence is based on active monitoring of threats, threat actors, threat sponsors, and their tools and tactics. Intelligence is codified in reports to enable organizations to proactively defend against new and emerging cyber threats before an attack is launched.
 - **Security-as-a-Service Offerings**
 - **Email Threat Prevention Cloud (ETP)**. Our cloud-based Email Threat Prevention solution (ETP) is a software-as-a-service (SaaS) offering that protects cloud-based mailboxes from advanced threats and provides anti-spam and anti-virus protection.
 - **FireEye Helix**. Our FireEye Helix platform combines our cloud-based network and endpoint detection capabilities, contextual threat intelligence, threat analytics, and orchestration capabilities with a unified cloud-based console. Helix enriches security event data from FireEye and third party security products with our threat intelligence, to enable alert prioritization and rapid response, as well as detailed reporting for compliance purposes.
 - **FireEye-as-a-Service**. Our FireEye-as-a-Service offering is a managed service offering using our threat intelligence and analytics to monitor and analyze network traffic and security alerts from FireEye and third party products.
 - **Customer Support and Maintenance Services**. We offer technical support on our products and subscriptions. We provide multiple levels of support and have regional support centers located across the globe to help customers solve technical challenges that they may encounter. In addition to post-sales support activities, our support organization works with our product management and engineering teams to ensure the attainment of defined pre-requisite quality levels for our products and services prior to release.
 - **Professional Services**
 - **Incident response, compromise assessments and related security consulting services**. Our cybersecurity experts help customers identify and remediate cyber breaches. Additionally, we provide security programs assessments and planning, provide litigation support, and perform forensic analyses. These consulting services are marketed under the Mandiant brand.
 - **Cyber Threat Intelligence Services**. Cyber threat intelligence services design and build cyber threat intelligence processes and solutions within customers' security operations.

- **Training.** We offer training services to our customers and channel partners through our training department and authorized training partners.

For contributions to total revenue by significant class of revenues, see "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Part II, Item 7 of this Annual Report on Form 10-K.

Our Technologies

We have developed proprietary technologies related to threat detection, virtual machine-based threat analysis, endpoint protection, and security orchestration. We believe these technologies, combined with our threat intelligence and security expertise, differentiate our products and services.

Advanced Threat Detection and Prevention Technology . At the core of our network, email, endpoint, and content security solutions is our proprietary, purpose-built Multi-Vector Virtual Execution (MVX) engine. We have developed our MVX engine to provide high efficacy threat protection through high fidelity detection, negligible false-positive rates, and minimal impact on network performance. Our foundational technologies in the MVX engine are: (i) line rate anomaly detection, (ii) proprietary virtual execution, and (iii) multi-flow cross correlation. We have built our technology over 10 years of research and development, and we believe it represents a significant competitive advantage for us. Because we first identify suspicious flows with our line rate anomaly detector, using Intelligent-Driven Analysis (IDA) technologies, and then, through a separate process, use our MVX engine to determine whether such suspicious flows are malicious, our technology can be deployed on a single integrated appliance, as a cloud-based service, or in a hybrid appliance/cloud architecture.

Advanced Endpoint Validation and Containment. Our endpoint security solution includes proprietary technologies that enable (i) automatic creation of indicators of compromise coupled with rapid enterprise-wide search, (ii) exploit detection and prevention, (iii) forensic data capture and (iv) rapid containment and investigation for connected and unconnected endpoints. Additionally, we have developed our endpoint technologies to correlate and consume threat intelligence from our network-based security solutions.

Evolved Network Security Architecture and Security Orchestration. Our solutions are designed to operate as part of a comprehensive security architecture to defend networks against today's advanced threats and minimize the business impact of attacks. The ability to monitor all traffic and file stores is critical to detecting next-generation threats that will enter through multiple vectors and move laterally across the network. We combine this visibility with our dynamic, contextual and strategic threat intelligence to enable rapid, prioritized response to critical alerts across the IT infrastructure using our security orchestration technologies and tools.

Customers

Our customer base has grown from approximately 450 end-customers at the end of 2011 to approximately 5,600 end-customers as of December 31, 2016 , including more than 40% of the Forbes Global 2000. We provide products, subscriptions and services to customers of varying sizes, including enterprises, governmental agencies and educational and nonprofit organizations. Our customers include leading enterprises in a diverse set of industries, including telecommunications providers, financial services entities, Internet search engines, social networking sites, stock exchanges, electrical grid operators, networking vendors, oil and gas companies, healthcare and pharmaceutical companies and leading U.S. and international governmental agencies. Our business is not dependent on any particular end-customer as no end-customer represented more than 10% of our revenue for any of the years ended December 31, 2016 , 2015 or 2014 . For the years ended December 31, 2016 , 2015 and 2014 , one reseller represented 12% , 13% and 11% , respectively, of our total revenue. For the years ended December 31, 2016 and 2015 , one distributor represented 19% and 17% , respectively, of our total revenue. No distributor represented 10% or greater of our total revenue for the year ended December 31, 2014 .

Backlog

Orders for subscriptions and services for multiple years are typically billed in their entirety shortly after receipt of the order and are included in deferred revenue. The timing of revenue recognition for subscriptions and services may vary depending on the contractual service period or when the services are rendered. Products are shipped and billed shortly after receipt of an order. The majority of our product revenue comes from orders that are received and shipped in the same quarter. We do not believe that our product backlog at any particular time is meaningful because it is not necessarily indicative of future revenue in any given period, as the fulfillment of such orders may be delayed.

Sales and Marketing

Sales. Our sales organization consists of in-house sales teams who work in collaboration with external channel partners to identify new sales prospects, sell additional products, subscriptions and services, and provide post-sale support. Our field sales team is organized by territory and is responsible for enterprise and government accounts within their region. Our inside sales organization is responsible for sales to medium-sized and smaller organizations, and for renewal of existing subscriptions.

We also have a dedicated team focused on channel sales who manage the relationships with our value-added reseller and distributor partners and work with these channel partners to win and support customers. We believe this hybrid direct-touch sales approach allows

us to leverage the benefits of broader market coverage provided by a reseller channel while maintaining a face-to-face connection with our customers, including key enterprise accounts.

We have also cultivated alliances with non-traditional partners to generate customer referrals and extend our technologies and sales coverage to new market segments. These relationships include relationships with insurance providers, large systems integrators and managed service providers, and we have engaged in joint solution development with leading providers of engineering services and payment systems.

Our sales organization is supported by sales engineers with deep technical domain expertise who are responsible for pre-sales technical support, solutions engineering for our customers, proof of concept work and technical training for our channel partners. Our sales engineers also act as the liaison between customers and our marketing and product development organizations.

As part of our sales strategy, we often provide prospective customers with our detection and prevention products for a short-term evaluation period. In such cases, our products are deployed within the prospective customer's network, typically for a period ranging from one week to several months. During this period, the prospective customer conducts evaluations with the assistance of our system engineers and members of our security research team. We believe that by providing proof of concept evaluations to potential customers, we are able to contrast the effectiveness of our platform versus our competitors in identifying suspicious and potentially malicious software code in their actual IT environments. Additionally, our Mandiant consultants use our technologies and products in their incident response and consulting engagements, providing de facto proof of concept evaluations in the customer's environment. Our sales cycle varies by industry and can be long and unpredictable, but is typical of large, complex enterprise sales cycles that can last several months or more. However, some transactions can close in a few weeks when an active breach is discovered.

Marketing. Our marketing is focused on building our brand reputation and market awareness for our solutions, driving customer demand and a strong sales pipeline, and working with our channel partners around the globe. Our marketing team consists primarily of corporate marketing, channel marketing, account/lead development, operations and corporate communications. Marketing activities include demand generation, advertising, product launch activities, managing our corporate Website and partner portal, trade shows and conferences, press and analyst relations, and customer awareness. We are also actively engaged in driving global thought leadership programs through blogs and media and developing rich content such as the global cyber maps and threat reports.

Technology Alliance Partners

FireEye has built a robust ecosystem of Technology Alliance Partners who, through integration and joint go-to-market efforts, extend the breadth and depth of cybersecurity and protection customers gain from FireEye. Spanning multiple technology categories, including network monitoring vendors, security information and event management vendors, network equipment vendors, forensic software vendors and web application firewall vendors, these partnerships provide for threat intelligence sharing, cross-vendor technology integrations, and joint solution development. By helping to ease the complications that organizations face when implementing multi-layered security solutions, our technology alliances facilitate integrated solution design, accelerate the time to realize value, and enhance our role as a strategic security partner.

Government Affairs

We maintain relationships with several governments around the globe. Our thought leadership in defending against next-generation threats has helped to shape the legislative, regulatory and policy environment to better enhance these governments' individual and collective cyber posture. As part of this effort, we contribute to the evolving standard-making processes, help define best practices in various jurisdictions and help organizations of all sizes better understand the cyber threat landscape. We also help governments identify future needs and requirements. Through these and related activities, we engage on the front lines of emerging cybersecurity related public policy and use our knowledge and insight to improve the cybersecurity of our government and industry customers.

Manufacturing

The manufacturing of our security products is outsourced to principally one third-party contract manufacturer. This approach allows us to reduce our costs as it reduces our manufacturing overhead and inventory and also allows us to adjust quickly to changing customer demand. Our manufacturing partner assembles our products using design specifications, quality assurance programs, and standards that we establish, and it procures components and assembles our products based on our demand forecasts. These forecasts represent our estimates of future demand for our products based upon historical trends and analysis from our sales and product management functions as adjusted for overall market conditions.

Our primary contract manufacturer is Flextronics Telecom Systems, Ltd., or Flextronics. The manufacturing agreement we have entered into with Flextronics does not provide for any minimum purchase commitments and had an initial term of one year and automatically renews for one-year terms, unless either party gives written notice to the other party not less than 90 days prior to the last day of the applicable term. Additionally, this agreement may be terminated by either party (i) with advance written notice provided to the other party, subject to certain notice period limitations, or (ii) with written notice, subject to applicable cure periods, if the other party has materially breached its obligations under the agreement.

Research and Development

We invest substantial resources in research and development to enhance our virtual execution detection engines and threat intelligence, build add-on functionality to our products and improve our core technologies. We believe that hardware, software and cloud-based technologies are critical to maintaining and expanding our leadership in the security industry. Our engineering teams have deep networking and security expertise and work closely with our customers to identify their current and future needs. Additionally, our Mandiant consultants use our products in their incident response and compromise assessment engagements and provide continual feedback to our engineering teams on product performance, detection efficacy, evasion techniques and attack trends.

In addition to our focus on platform expansion and enhancement, our research and development teams are focused on developing automation tools and machine learning techniques to reduce the time to discover and distribute new threat intelligence, as well as generate efficiencies in our services offerings. We are also investing in security platform management and orchestration capabilities to provide unified reporting and security orchestration features to customers in a single dashboard.

We maintain research and development activities across the globe with teams located in Germany, India, Ireland, Japan, Singapore and the United States.

Research and development expense totaled \$279.6 million, \$279.5 million and \$203.2 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Competition

We operate in the intensely competitive IT security market which is characterized by constant change and innovation. Changes in the threat landscape and broader IT infrastructures result in evolving customer requirements for security. Several vendors have either introduced new products or incorporated new features into existing products that compete with our solutions. Our current and potential future competitors fall into six general categories:

- large networking vendors such as Cisco and Juniper that may emulate or integrate certain features similar to ours into their own products;
- large companies such as Intel, IBM and HPE that have acquired security vendors in recent years and have the technical and financial resources to bring competitive solutions to the market;
- independent security vendors such as Palo Alto Networks and Trend Micro that offer products or features that claim to perform similar functions to our platform;
- small and large companies, including new market entrants, that offer narrow product solutions that compete with some of the features present in our platform;
- providers of traditional signature-based security solutions, such as Symantec; and
- other providers of incident response and compromise assessment services.

As our market grows and IT budgets are allocated to support protection from advanced threats, it will attract more highly specialized vendors as well as larger technology vendors that may continue to acquire or bundle their products more effectively. The principal competitive factors in our market include:

- ability to deliver the combination of technology, intelligence and expertise necessary to combat the current threat landscape;
- ability to detect and prevent known and unknown threats by overcoming the limitations of signature-based approaches, while maintaining a low rate of false-positive alerts;
- scalability, throughput and overall performance of our detection and prevention technologies;
- visibility into all stages of an attack, especially the exploit phase;
- breadth and richness of the shared threat intelligence, including dynamic and contextual threat intelligence on cyber crime, cyber espionage, hacktivism, attacks on critical infrastructure and nation-state attacks;
- flexible deployment options, including on-premise appliances, cloud-based software or a hybrid of both, as well as "as-a-service" options;
- brand awareness and reputation;
- strength and effectiveness of sales and marketing efforts;
- product extensibility and ability to integrate with other technologies in the network infrastructure;
- ease of use;
- price and total cost of ownership; and

- ability to provide an orchestrated solution of products and services for detecting, preventing and resolving advanced cybersecurity threats across multiple attack vectors.

We believe we compete favorably with our competitors on the basis of these factors as a result of the features and performance of our platform, the ease of integration of our products with network infrastructures, the breadth of our services and solution offerings and the relatively low total cost of ownership of our products. However, many of our competitors have substantially greater financial, technical and other resources, greater name recognition, larger sales and marketing budgets, deeper customer relationships, broader distribution, and larger and more mature intellectual property portfolios.

Intellectual Property

Our success depends in part upon our ability to protect our core technology and intellectual property. We rely on, among other things, patents, trademarks, copyrights and trade secret laws, confidentiality safeguards and procedures, and employee non-disclosure and invention assignment agreements to protect our intellectual property rights. We file patent applications to protect our intellectual property and believe that the duration of our issued patents is sufficient when considering the expected lives of our products. We cannot assure you whether any of our patent applications will result in the issuance of a patent or whether the examination process will result in patents of valuable breadth or applicability. In addition, any patents that may issue may be contested, circumvented, found unenforceable or invalidated, and we may not be able to prevent third parties from infringing them. We also license software from third parties for integration into our products, including open source software and other software available on commercially reasonable terms.

We control access to and use of our proprietary software, technology and other proprietary information through the use of internal and external controls, including contractual protections with employees, contractors, end-customers and partners, and our software is protected by U.S. and international copyright, patent and trade secret laws. Despite our efforts to protect our software, technology and other proprietary information, unauthorized parties may still copy or otherwise obtain and use our software, technology and other proprietary information. In addition, we intend to expand our international operations, and effective patent, copyright, trademark, and trade secret protection may not be available or may be limited in foreign countries.

Our industry is characterized by the existence of a large number of patents and frequent claims and related litigation regarding patent and other intellectual property rights. If we become more successful, we believe that competitors will be more likely to try to develop products that are similar to ours and that may infringe our proprietary rights. It may also be more likely that competitors or other third parties will claim that our products infringe their proprietary rights. In particular, large and established companies in the IT security industry have extensive patent portfolios and are regularly involved in both offensive and defensive litigation. From time-to-time, third parties, including certain of these large companies and non-practicing entities, may assert patent, copyright, trademark, and other intellectual property rights against us, our channel partners, or our end-customers, whom our standard license and other agreements obligate us to indemnify against such claims. Successful claims of infringement by a third party, if any, could prevent us from distributing certain products or performing certain services, require us to expend time and money to develop non-infringing solutions, or force us to pay substantial damages (including, in the United States, treble damages if we are found to have willfully infringed patents), royalties or other fees. We cannot assure you that we do not currently infringe, or that we will not in the future infringe, upon any third-party patents or other proprietary rights. For example, we are currently a party to claims alleging, among other things, patent infringement, which are in the early stages of litigation. See "Risk Factors—Risks Related to Our Business and Our Industry—Claims by others that we infringe their proprietary technology or other rights could harm our business" for additional information.

Business Seasonality

For discussion of seasonal trends, see our quarterly results of operations discussion within "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Part II, Item 7 of this Annual Report on Form 10-K.

Employees

As of December 31, 2016, we had approximately 2,900 employees. None of our employees is represented by a labor organization or is a party to any collective bargaining arrangement. We have never had a work stoppage, and we consider our relationship with our employees to be good.

Facilities

We currently lease approximately 221,000 square feet of space for our corporate headquarters in Milpitas, California under lease agreements that expire during the year ended December 31, 2018. In August 2016, we entered into a lease agreement for our new corporate headquarters, expected to commence mid-2017. We maintain additional offices throughout the United States and various international locations including, Australia, Dubai, Germany, India, Ireland, Japan, Singapore and the United Kingdom. We believe that these facilities are adequate to meet our ongoing needs, and that, if we require additional space, we will be able to obtain additional facilities on commercially reasonable terms.

Legal Proceedings

The information set forth under "Litigation" in Note 9 contained in the "Notes to Consolidated Financial Statements" in Item 8 of Part II of this Annual Report on Form 10-K is incorporated herein by reference.

Item 1A. Risk Factors

Our operations and financial results are subject to various risks and uncertainties including those described below. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, also may become important factors that affect us. If any of the following risks or others not specified below materialize, our business, financial condition and results of operations could be materially adversely affected. In that case, the trading price of our common stock could decline.

Risks Related to Our Business and Our Industry

If the IT security market does not continue to adopt our security platforms, our sales will not grow as quickly as anticipated, or at all, and our business, results of operations and financial condition would be harmed.

Our future success depends on market adoption of our unique approach to IT security. We are seeking to disrupt the IT security market with our security platforms. Our platforms interoperate with but do not replace most signature-based IT security products. Enterprises and governments that use signature-based security products, such as firewalls, intrusion prevention systems, or IPS, anti-virus, or AV, and Web and messaging gateways, for their IT security may be hesitant to purchase our security platforms if they believe that signature-based products are more cost effective, provide substantially the same functionality as our platforms or provide a level of IT security that is sufficient to meet their needs. Currently, most enterprises and governments have not allocated a fixed portion of their budgets to protect against next-generation advanced cyber attacks. As a result, to expand our customer base, we need to convince potential customers to allocate a portion of their discretionary budgets to purchase our platforms. However, even if we are successful in doing so, any future deterioration in general economic conditions may cause our customers to cut their overall IT spending, and such cuts may fall disproportionately on products and services like ours, for which no fixed budgetary allocation has been made. If we do not succeed in convincing customers that our platforms should be an integral part of their overall approach to IT security and that a fixed portion of their annual IT budgets should be allocated to our platforms, our sales will not grow as quickly as anticipated, or at all, which would have an adverse impact on our business, results of operations and financial condition.

Even if there is significant demand for security solutions like ours, if our competitors include functionality that is, or is perceived to be, better than or equivalent to that of our platforms, we may have difficulty increasing the market penetration of our platforms. Furthermore, even if the functionality offered by other IT security providers is different and more limited than the functionality of our platforms, organizations may elect to accept such limited functionality in lieu of adding products from additional vendors like us, especially if competitor offerings are free or available at a lower cost.

In addition, changes in customer requirements could reduce customer demand for our security solutions. For example, if customers were to reduce their number of web egress points in order to reduce their cyber attack surface, they would not need to purchase as many of our Network Threat Prevention appliances, which currently account for the largest portion of our threat prevention product revenue. Similarly, if one or more governments share, on a free or nearly free basis, threat intelligence with other governmental agencies or organizations, such as critical infrastructure companies, then those agencies or organizations might have less demand for additional threat intelligence and may purchase less of our threat intelligence offerings.

If enterprises and governments do not continue to adopt our security platforms for any of the reasons discussed above or for other reasons not contemplated, our sales would not grow as quickly as anticipated, or at all, and our business, results of operations and financial condition would be harmed.

We have had operating losses each year since our inception, and may not achieve or maintain profitability in the future.

We have incurred operating losses each year since 2004, including net losses of \$480.1 million, \$539.2 million and \$443.8 million during the years ended December 31, 2016, 2015 and 2014, respectively. Our revenue growth may slow or our revenue may decline for a number of reasons, including reduced demand for our platform, increased competition, a decrease in the growth or size of the IT security market, particularly the market for solutions that target the next generation of advanced cyber attacks, or any failure to capitalize on growth opportunities. Any failure to increase our revenue as we grow our business could prevent us from achieving or, if achieved, maintaining profitability. If we are unable to meet these risks and challenges as we encounter them, our business, financial condition and results of operations may suffer.

In addition, we may have difficulty achieving profitability under U.S. GAAP, due to stock-based compensation, intangible amortization and other non-cash charges.

We face intense competition and could lose market share to our competitors, which could adversely affect our business, financial condition and results of operations.

The market for security products and services is intensely competitive and characterized by rapid changes in technology, customer requirements, industry standards and frequent new product introductions and improvements. We anticipate continued challenges from current competitors, which in many cases are more established and enjoy greater resources than us, as well as by new entrants into the industry. If we are unable to anticipate or effectively react to these competitive challenges, our competitive position could weaken, and we could experience a decline in our growth rate or revenue that could adversely affect our business and results of operations.

Our competitors and potential competitors include large networking vendors such as Cisco Systems, Inc. and Juniper Networks, Inc. that may emulate or integrate virtual-machine features similar to ours into their own products; large companies such as Intel, IBM, and HPE that have acquired large IT security specialist vendors in recent years and have the technical and financial resources and broad customer bases needed to bring competitive solutions to the market; independent IT security vendors such as Sourcefire (which was acquired by Cisco Systems, Inc.) and Palo Alto Networks that offer products that claim to perform similar functions to our platform; small and large companies that offer point solutions that compete with some of the features present in our platform; and other providers of incident response and compromise assessment services. Other IT providers offer, and may continue to introduce, security features that compete with our platform, either in stand-alone security products or as additional features in their network infrastructure products. Many of our existing competitors have, and some of our potential competitors could have, substantial competitive advantages such as:

- greater name recognition, longer operating histories and larger customer bases;
- larger sales and marketing budgets and resources;
- broader distribution and established relationships with channel and distribution partners and customers;
- greater customer support resources;
- greater resources to make acquisitions;
- lower labor and research and development costs;
- larger and more mature intellectual property portfolios; and
- substantially greater financial, technical and other resources.

In addition, some of our larger competitors have substantially broader product offerings and may be able to leverage their relationships with distribution partners and customers based on other products or incorporate functionality into existing products to gain business in a manner that discourages users from purchasing our products, subscriptions and services, including by selling at zero or negative margins, product bundling or offering closed technology platforms. Potential customers may also prefer to purchase from their existing suppliers rather than a new supplier regardless of product performance or features. As a result, even if the features of our platform are superior, customers may not purchase our products. In addition, new innovative start-up companies, and larger companies that are making significant investments in research and development, may invent similar or superior products and technologies that compete with our platform. Our current and potential competitors may also establish cooperative relationships among themselves or with third parties that may further enhance their resources.

Some of our competitors have made or could make acquisitions of businesses that allow them to offer more competitive and comprehensive solutions. As a result of such acquisitions, our current or potential competitors may be able to accelerate the adoption of new technologies that better address end-customer needs, devote greater resources to bring these products and services to market, initiate or withstand substantial price competition, or develop and expand their product and service offerings more quickly than we do. These competitive pressures in our market or our failure to compete effectively may result in price reductions, fewer orders, reduced revenue and gross margins, and loss of market share.

If we are unable to compete successfully, or if competing successfully requires us to take costly actions in response to the actions of our competitors, our business, financial condition and results of operations could be adversely affected.

Real or perceived defects, errors or vulnerabilities in our products or services, the misconfiguration of our products, the failure of our products or services to block malware or prevent a security breach, or the failure of customers to take action on attacks identified by our products could harm our reputation and adversely impact our business, financial position and results of operations.

Because our products and services are complex, they have contained and may contain design or manufacturing defects or errors that are not detected until after their deployment. Our products also provide our customers with the ability to customize a multitude of settings, and it is possible that a customer could misconfigure our products or otherwise fail to configure our products in an optimal manner. Such defects and misconfigurations of our products could cause our products or services to be vulnerable to security attacks, cause them to fail to secure networks and detect and block threats, or temporarily interrupt the networking traffic of our customers. In addition, because the techniques used by computer hackers to access or sabotage networks change frequently and generally are not

recognized until launched against a target, there is a risk that an advanced attack could emerge that our products and services are unable to detect or prevent. Moreover, as our products and services are adopted by an increasing number of enterprises and governments, it is possible that the individuals and organizations behind advanced malware attacks will begin to focus on finding ways to defeat our products and services. If this happens, our networks, products, services and subscriptions could be targeted by attacks specifically designed to disrupt our business and undermine the perception that our products and services are capable of providing superior IT security, which, in turn, could have a serious impact on our reputation as a provider of virtual machine-based security solutions. Any breach or perceived security breaches of our network could materially and adversely affect our business, financial condition and results of operations.

If any of our customers becomes infected with malware after using our products or services, such customer could be disappointed with our products and services, regardless of whether our products or services blocked the theft of any of such customer's data or would have blocked such theft if configured properly. Similarly, if our products detect attacks against a customer but the customer has not permitted our products to block the theft of customer data, customers and the public may erroneously believe that our products were not effective. For any security breaches against customers that use our services, such as customers that have hired us to monitor their networks and endpoints through our own or our co-branded security operation centers, breaches against those customers may result in customers and the public believing that our products and services failed. Furthermore, if any enterprises or governments that are publicly known to use our products or services are the subject of an advanced cyber attack that becomes publicized, our other current or potential customers may look to our competitors for alternatives to our products and services. Real or perceived security breaches of our customers' networks could cause disruption or damage to their networks or other negative consequences and could result in negative publicity to us, damage to our reputation, declining sales, increased expenses and customer relations issues.

Furthermore, our products and services may fail to detect or prevent malware, viruses, worms or similar threats for any number of reasons, including our failure to enhance and expand our products and services to reflect industry trends, new technologies and new operating environments, the complexity of the environment of our clients and the sophistication of malware, viruses and other threats. In addition, from time to time, firms test our products against other security products. Our products may fail to detect or prevent threats in any particular test for a number of reasons, including misconfiguration. To the extent potential customers, industry analysts or testing firms believe that the occurrence of a failure to detect or prevent any particular threat is a flaw or indicates that our products or services do not provide significant value, our reputation and business could be harmed. Failure to keep pace with technological changes in the IT security industry and changes in the threat landscape could adversely affect our ability to protect against security breaches and could cause us to lose customers. In addition, in the event that a customer suffers a cyber attack, we could be subject to claims based on a misunderstanding of the scope of our contractual warranties or the protection afforded by the Support Anti-Terrorism by Fostering Effective Technologies Act of 2002, or the SAFETY Act.

Any real or perceived defects, errors or vulnerabilities in our products and services, or any other failure of our products and services to detect an advanced threat, could result in:

- a loss of existing or potential customers or channel partners;
- delayed or lost revenue and harm to our financial condition and results of operations;
- a delay in attaining, or the failure to attain, market acceptance;
- the expenditure of significant financial and product development resources in efforts to analyze, correct, eliminate, or work around errors or defects, to address and eliminate vulnerabilities, or to identify and ramp up production with alternative third-party manufacturers;
- an increase in warranty claims, or an increase in the cost of servicing warranty claims, either of which would adversely affect our gross margins;
- harm to our reputation or brand; and
- litigation, regulatory inquiries, or investigations that may be costly and further harm our reputation.

Our results of operations are likely to vary significantly from period to period, which could cause the trading price of our common stock to decline.

Our results of operations have varied significantly from period to period, and we expect that our results of operations, including, but not limited to our GAAP and non-GAAP measures, will continue to vary as a result of a number of factors, many of which are outside of our control and may be difficult to predict, including:

- our ability to attract new and retain existing customers;
- changes in our mix of products, subscriptions and services sold;
- the timing and success of new product, subscription or service introductions by us or our competitors;
- real or perceived reductions in our product efficacy by our customers or in the marketplace;

- the budgeting cycles, seasonal buying patterns and purchasing practices of customers;
- the timing of shipments of our products and length of our sales cycles;
- changes in customer or reseller requirements or market needs;
- changes in the growth rate of the IT security market, particularly the market for threat protection solutions like ours that target next-generation advanced cyber attacks;
- the impact of our restructuring plan, whether the estimated cost savings associated with our restructuring plan are achieved, and any disruptions in our business caused by the implementation of our restructuring plan;
- any change in the competitive landscape of the IT security market, including consolidation among our customers or competitors;
- the level of awareness of IT security threats, particularly advanced cyber attacks, and the market adoption of our platform;
- deferral of orders from customers in anticipation of new products or product enhancements announced by us or our competitors;
- our ability to successfully expand our business domestically and internationally;
- reductions in customer renewal rates for our subscriptions and support;
- decisions by organizations to purchase IT security solutions from larger, more established security vendors or from their primary IT equipment vendors;
- changes in our pricing policies or those of our competitors;
- any disruption in, or termination of, our relationships with channel partners;
- our inability to fulfill our customers' orders due to supply chain delays or events that impact our manufacturers or their suppliers;
- insolvency or credit difficulties confronting our customers, affecting their ability to purchase or pay for our products, subscriptions and services, or confronting our key suppliers, particularly our sole source suppliers, which could disrupt our supply chain;
- the cost and potential outcomes of existing and future litigation, including, without limitation, the purported stockholder lawsuits described under the "Litigation" subheading in Note 9 Commitments and Contingencies contained in the "Notes to Consolidated Financial Statements" in Item 8 of Part II of this Annual Report on Form 10-K;
- seasonality in our business;
- general economic and political conditions, both domestic and in our foreign markets, including economic and political uncertainty caused by the recent U.S. presidential election;
- future accounting pronouncements or changes in our accounting policies or practices;
- the amount and timing of operating costs and capital expenditures related to the expansion of our business; and
- increases or decreases in our revenues and expenses caused by fluctuations in foreign currency exchange rates.

Any of the above factors, individually or in the aggregate, may result in significant fluctuations in our financial and other operating results from period to period. For example, as we offer more and more solutions through subscriptions and services, it becomes increasingly difficult for us to predict whether customers will purchase our solutions as a product, a subscription or a service. If customers purchase our solutions through subscriptions and services that have less profit associated with them than our products, our operating results could be harmed. Changes in the mix of offerings sold impacts the timing of recognition of revenue for our sales. Consequently, given the different revenue recognition policies associated with sales of our products, subscriptions and services, customers purchasing more of our subscription and services offerings and less of our product offerings than we anticipated could result in our actual revenue falling below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in our stock price.

As a result of this variability, our historical results of operations should not be relied upon as an indication of future performance. Moreover, this variability and unpredictability could result in our failure to meet our operating plan or the expectations of investors or analysts for any period. If we fail to meet such expectations for these or other reasons, the market price of our common stock could fall substantially, and we could face costly lawsuits, including securities class action suits.

Fluctuating economic conditions make it difficult to predict revenue for a particular period, and a shortfall in revenue may harm our operating results.

Our revenue depends significantly on general economic conditions and the demand for products in the IT security market. Economic weakness, customer financial difficulties, and constrained spending on IT security may result in decreased revenue and earnings. Such factors could make it difficult to accurately forecast our sales and operating results and could negatively affect our ability to provide accurate forecasts to our contract manufacturers and manage our inventory purchases, contract manufacturer relationships and other costs and expenses. In addition, concerns regarding the impact of the recent U.S. presidential election or the impact of the "Brexit" referendum in which voters in the U.K. in June 2016 approved the withdrawal of the U.K. from the EU, as well as continued budgetary challenges in the United States and Europe and geopolitical turmoil in many parts of the world, have and may continue to put pressure on global economic conditions and overall spending on IT security. General economic weakness may also lead to longer collection cycles for payments due from our customers, an increase in customer bad debt, restructuring initiatives and associated expenses, and impairment of investments. Furthermore, the continued weakness and uncertainty in worldwide credit markets, including the sovereign debt situation in certain countries in the EU may adversely impact the ability of our customers to adequately fund their expected capital expenditures, which could lead to delays or cancellations of planned purchases of our platform.

Uncertainty about future economic conditions also makes it difficult to forecast operating results and to make decisions about future investments. Future or continued economic weakness for us or our customers, failure of our customers and markets to recover from such weakness, customer financial difficulties, and reductions in spending on IT security could have a material adverse effect on demand for our platform and consequently on our business, financial condition and results of operations.

If we fail to effectively manage our growth, our business, financial condition and results of operations would be harmed.

Although our business has experienced significant growth in the past, we cannot provide any assurance that our business will continue to grow at the same rate or at all. To improve our infrastructure, we continue to enhance our enterprise resource planning system, including revenue recognition and management software, and implement and enhance additional systems and controls. There is no assurance that we will be able to successfully scale improvements to our enterprise resource planning system or implement or scale improvements to our other systems, processes and controls in a manner that keeps pace with our growth or that such systems, processes and controls will be effective in preventing or detecting errors, omissions or fraud.

As part of our efforts to improve our internal systems, processes and controls, we have licensed technology from third parties. The support services available for such third-party technology are outside of our control and may be negatively affected by consolidation in the software industry. In addition, if we do not receive adequate support for the software underlying our systems, processes and controls, our ability to provide products and services to our customers in a timely manner may be impaired, which may cause us to lose customers, limit us to smaller deployments of our platform or increase our technical support costs.

Many of our expenses are relatively fixed, at least in the short term. If our projections or assumptions on which we base our projections are incorrect, we may not be able to adjust our expenses rapidly enough to avoid an adverse impact on our profitability or cash flows.

To manage this growth effectively, we must continue to improve our operational, financial and management systems and controls by, among other things:

- effectively attracting, training and integrating new employees, particularly members of our sales and management teams;
- further improving our key business applications, processes and IT infrastructure, including our data centers, to support our business needs;
- continuing to refine our ability to forecast our bookings, billings, revenues, expenses and cash flows;
- enhancing our information and communication systems to ensure that our employees and offices around the world are well coordinated and can effectively communicate with each other and our growing base of channel partners and customers;
- improving our internal control over financial reporting and disclosure controls and procedures to ensure timely and accurate reporting of our operational and financial results; and
- appropriately documenting and testing our IT systems and business processes.

These and other improvements in our systems and controls will require significant capital expenditures and the allocation of valuable management and employee resources. If we fail to implement these improvements effectively, our ability to manage our expected growth, ensure uninterrupted operation of key business systems and comply with the rules and regulations applicable to public reporting companies would be impaired, and our business, financial condition and results of operations would be harmed.

Recent and future acquisitions and investments could disrupt our business and harm our financial condition and operating results.

Our success will depend, in part, on our ability to expand our platform and grow our business in response to changing technologies, customer demands and competitive pressures. In some circumstances, we may decide to do so through the acquisition of complementary businesses and technologies rather than through internal development, including, for example, our acquisition of iSIGHT Security, Inc. (d/b/a iSIGHT Partners, Inc.), or iSIGHT, and our acquisition of Invotas International Corporation, or Invotas. The identification of suitable acquisition candidates can be difficult, time-consuming and costly, and we may not be able to successfully complete acquisitions that we target in the future. The risks we face in connection with acquisitions, including our acquisitions of iSIGHT and Invotas, include:

- diversion of management time and focus from operating our business to addressing acquisition integration challenges;
- coordination of research and development and sales and marketing functions;
- integration of product and service offerings;
- retention of key employees from the acquired company;
- changes in relationships with strategic partners as a result of product acquisitions or strategic positioning resulting from the acquisition;
- cultural challenges associated with integrating employees from the acquired company into our organization;
- integration of the acquired company's accounting, management information, human resources and other administrative systems;
- the need to implement or improve controls, procedures, and policies at a business that prior to the acquisition may have lacked sufficiently effective controls, procedures and policies;
- financial reporting, revenue recognition or other financial or control deficiencies of the acquired company that we don't adequately address and that cause our reported results to be incorrect;
- liability for activities of the acquired company before the acquisition, including intellectual property infringement claims, violations of laws, commercial disputes, tax liabilities and other known and unknown liabilities;
- unanticipated write-offs or charges; and
- litigation or other claims in connection with the acquired company, including claims from terminated employees, customers, former stockholders or other third parties.

Our failure to address these risks or other problems encountered in connection with our past or future acquisitions and investments could cause us to fail to realize the anticipated benefits of these acquisitions or investments, cause us to incur unanticipated liabilities, and harm our business generally. Future acquisitions could also result in dilutive issuances of equity securities. For example, in January 2016, we issued 1,793,305 shares of common stock in connection with our acquisition of iSIGHT, and in February 2016, we issued 742,026 shares of common stock in connection with our acquisition of Invotas. There is also a risk that future acquisitions will result in the incurrence of debt, contingent liabilities, amortization expenses, incremental operating expenses or the write-off of goodwill, any of which could harm our financial condition or operating results.

Actions that we are taking to restructure our business to better align with our business model transition strategy may be costly and may not be as effective as anticipated.

On August 2, 2016, our board of directors approved a restructuring plan and reduction in workforce to reduce operating expenses and align the company's expense structure with current growth expectations. We recognized restructuring charges of \$27.6 million during the year ended December 31, 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 \$21.5 million being paid during 2016. The actions associated with the restructuring plan taken in 2016 are expected to result in annualized savings of at least \$80 million. However, there may be adverse consequences related to such actions which include unwanted employee attrition, various charges for severance and severance-related costs and the loss of proprietary information and in-house knowledge in connection with the planned reduction in our workforce. This type of restructuring activity may result in business disruptions and may not produce the full efficiency and cost reduction benefits anticipated. Further, the benefits may be realized later than expected and the cost of implementing these measures may be greater than anticipated. If these measures are not successful, we may need to undertake additional cost reduction efforts, which could result in future charges. Moreover, the restructuring plan may cause business disruptions with customers and elsewhere if our cost reduction efforts prove ineffective, and our business may not be more efficient or effective than prior to implementation of the plan. Our restructuring activities, including the related charges and the impact of the related workforce reduction, could have a material adverse effect on our business, operating results and financial condition.

If we are unable to maintain successful relationships with our channel partners and technology alliance partners, or if our channel partners or technology alliance partners fail to perform, our ability to market, sell and distribute our platform will be limited, and our business, financial position and results of operations will be harmed.

In addition to our direct sales force, we rely on our indirect channel partners to sell and support our platform. We derive a substantial portion of our revenue from sales of our products, subscriptions and services through, or with the assistance of, our indirect channel, and we expect that sales through channel partners will continue to be a significant percentage of our revenue. We also partner with our technology alliance partners to design go-to-market strategies that combine our platform with products or services provided by our technology alliance partners.

Our agreements with our channel partners and our technology alliance partners are generally non-exclusive, meaning our partners may offer customers products from several different companies, including products that compete with ours. If our channel partners do not effectively market and sell our platform, choose to use greater efforts to market and sell their own products or those of our competitors, or fail to meet the needs of our customers, our ability to grow our business and sell our platform may be adversely affected. Our channel partners and technology alliance partners may cease marketing our platform with limited or no notice and with little or no penalty, and new channel partners require extensive training and may take several months or more to achieve productivity. The loss of a substantial number of our channel partners, our possible inability to replace them, or the failure to recruit additional channel partners could materially and adversely affect our results of operations. In addition, sales by channel partners are more likely than direct sales to involve collectability concerns, particularly in developing markets. Our channel partner structure could also subject us to lawsuits or reputational harm if, for example, a channel partner misrepresents the functionality of our platform to customers or violates applicable laws or our corporate policies.

Our ability to achieve revenue growth in the future will depend in part on our success in maintaining successful relationships with our channel partners, and in training our channel partners to independently sell and deploy our platform. If we are unable to maintain our relationships with these channel partners or otherwise develop and expand our indirect sales channel, or if our channel partners fail to perform, our business, financial position and results of operations could be adversely affected.

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

From the year ended December 31, 2010 to the year ended December 31, 2016, our revenue grew from \$11.8 million to \$714.1 million, which represents a compounded annual growth rate of approximately 98%. Although we have experienced rapid growth historically and currently have high renewal rates, we may not continue to grow in the future and our renewal rates may decline. Any success that we may experience in the future will depend, in large part, on our ability to, among other things:

- maintain and expand our customer base;
- increase revenues from existing customers through increased use of our products, subscriptions and services within their organizations;
- improve the capabilities of our products and subscriptions through research and development;
- continue to develop our cloud-based solutions;
- maintain the rate at which customers purchase our subscriptions and support;
- continue to successfully expand our business domestically and internationally; and
- successfully compete with other companies.

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

If the general level of advanced cyber attacks declines, or is perceived by our current or potential customers to have declined, our business could be harmed.

Our business is substantially dependent on enterprises and governments recognizing that advanced cyber attacks are pervasive and are not effectively prevented by legacy security solutions. High visibility attacks on prominent enterprises and governments have increased market awareness of the problem of advanced cyber attacks and help to provide an impetus for enterprises and governments to devote resources to protecting against advanced cyber attacks, such as testing our platform, purchasing it, and broadly deploying it within their organizations. If advanced cyber attacks were to decline, or enterprises or governments perceived that the general level of advanced cyber attacks have declined, our ability to attract new customers and expand our offerings within existing customers could be materially and adversely affected. A reduction in the threat landscape, for example, as a result of the 2015 cybersecurity agreement between China and the U.S., may reduce the demand from customers or prospects for our solutions, and therefore could increase our sales cycles and harm our business, results of operations and financial condition.

Seasonality may cause fluctuations in our revenue.

We believe there are significant seasonal factors that may cause us to record higher revenue in some quarters compared with others. We believe this variability is largely due to (i) our customers' budgetary and spending patterns, as many customers spend the unused portions of their discretionary budgets prior to the end of their fiscal years, and (ii) our sales compensation plans, which are typically structured around annual quotas and stair step commission rates. For example, we have historically recorded our highest level of revenue in our fourth quarter, which we believe corresponds to the fourth quarter of a majority of our customers. Similarly, we have historically recorded our second-highest level of revenue in our third quarter, which corresponds to the fourth quarter of U.S. federal agencies and other customers in the U.S. federal government. Our rapid growth rate over the last couple years may have made seasonal fluctuations more difficult to detect. If our rate of growth slows over time, seasonal or cyclical variations in our operations may become more pronounced, and our business, results of operations and financial position may be adversely affected.

We rely on our management team and other key employees and will need additional personnel to grow our business, and the loss of one or more key employees or our inability to attract and retain qualified personnel, including members for our board of directors, could harm our business.

Our future success is substantially dependent on our ability to attract, retain and motivate the members of our management team and other key employees throughout our organization, including key employees obtained through our acquisitions. Competition for highly skilled personnel is intense, especially in the San Francisco Bay Area and the Washington D.C. Area, where we have a substantial presence and need for highly skilled personnel. We may not be successful in attracting or retaining qualified personnel to fulfill our current or future needs. We are also substantially dependent on the continued service of our existing engineering personnel because of the complexity of our platform. Our competitors may be successful in recruiting and hiring members of our management team or other key employees, including key employees obtained through our acquisitions, and it may be difficult for us to find suitable replacements on a timely basis, on competitive terms, or at all. Also, to the extent we hire employees from mature public companies with significant financial resources, we may be subject to allegations that such employees have been improperly solicited, or that they have divulged proprietary or other confidential information or that their former employers own such employees' inventions or other work product.

The workforce reductions made in connection with our restructuring plans may adversely affect our ability to attract and retain highly skilled employees. Even if our key personnel are not directly affected by these reductions, the termination of others may have a negative impact on morale and our ability to retain current personnel, as well as our ability to attract qualified new personnel in the future.

Our recently announced changes in our sales leadership may also adversely affect our ability to attract and retain highly skilled employees. In addition, if we fail to integrate a new head of worldwide sales and a new head of EMEA, and create effective working relationships among them, other members of management and our sales personnel, our business, financial condition and results of operations could be adversely affected. Moreover, if the sales leadership changes or our workforce reductions have a negative impact on sales productivity or sales execution, our business, financial condition and results of operations could be negatively impacted.

We recently announced the resignations of our former Executive Chairman of the Board and former Chief Financial Officer and Chief Operating Officer, the appointment of our new Chief Financial Officer, and other recent leadership appointments. Leadership transitions and management changes can be inherently difficult to manage and may cause uncertainty or a disruption to our business or may increase the likelihood of turnover in key officers and employees. Our success depends in part on having a successful leadership team. If we cannot effectively manage the leadership transitions and management changes, it could make it more difficult to successfully operate our business and pursue our business goals.

In addition, we believe that it is important to establish and maintain a corporate culture that facilitates the maintenance and transfer of institutional knowledge within our organization and also fosters innovation, teamwork, a passion for customers and a focus on execution. Our Chief Executive Officer, our President, our Chief Financial Officer, our Executive Vice President of Worldwide Sales, our Executive Vice President of Global Services and Intelligence and our Executive Vice President of Global Engineering & Security Products and certain other key members of our management and finance teams have only been working together for a relatively short period of time. If we are not successful in integrating these key employees into our organization, such failure could delay or hinder our product development efforts and the achievement of our strategic objectives, which could adversely affect our business, financial condition and results of operations.

Our employees, including our executive officers, work for us on an "at-will" basis, which means they may terminate their employment with us at any time. We do not maintain key person life insurance policies on any of our key employees. If one or more of our key employees resigns or otherwise ceases to provide us with their service, our business could be harmed.

If we do not effectively hire and train our direct sales force, we may be unable to add new customers or increase sales to our existing customers, and our business will be adversely affected.

We continue to be substantially dependent on our direct sales force to obtain new customers and increase sales with existing customers. There is significant competition for sales personnel with the skills and technical knowledge that we require. Our ability

to achieve significant revenue growth will depend, in large part, on our success in recruiting, training and retaining sufficient numbers of sales personnel to support our growth, particularly in international markets. New hires require significant training and may take significant time before they achieve full productivity. Our recent hires and planned hires may not become productive as quickly as we expect, and we may be unable to hire or retain sufficient numbers of qualified individuals in the markets where we do business or plan to do business. In addition, a large percentage of our sales force is new to our Company. If we are unable to hire and train a sufficient number of effective sales personnel, or the sales personnel we hire are not successful in obtaining new customers or increasing sales to our existing customer base, our business will be adversely affected.

Our sales cycles can be long and unpredictable, and our sales efforts require considerable time and expense. As a result, our sales, billings and revenue are difficult to predict and may vary substantially from period to period, which may cause our results of operations to fluctuate significantly.

Our results of operations may fluctuate, in part, because of the resource intensive nature of our sales efforts, the length and variability of our sales cycle and the short-term difficulty in adjusting our operating expenses. Our results of operations depend in part on sales to large organizations. The length of our sales cycle, from proof of concept to delivery of and payment for our platform, is typically three to nine months but can be more than a year. To the extent our competitors develop products that our prospective customers view as equivalent to ours, our average sales cycle may increase. Because the length of time required to close a sale varies substantially from customer to customer, it is difficult to predict exactly when, or even if, we will make a sale with a potential customer. As a result, large individual sales have, in some cases, occurred in quarters subsequent to or in advance of those we anticipated, or have not occurred at all. We are billing a number of large deals and the loss or delay of one or more of these large transactions in a quarter could impact our results of operations for that quarter and any future quarters for which revenue from that transaction is delayed. Furthermore, some sales (such as product sales) generally result in immediate recognition of revenue, while other sales, such as product subscription sales, require the recognition of revenue over periods of one year or longer typically. As a result of these factors, it is difficult for us to forecast our revenue accurately in any quarter based on our internal forecasts of billings. Because a substantial portion of our expenses are relatively fixed in the short term, our results of operations will suffer if our revenue falls below our or analysts' expectations in a particular quarter, which could cause the price of our common stock to decline.

If we are unable to sell additional products, subscriptions and services, as well as renewals of our subscriptions and services, to our customers, our future revenue and operating results will be harmed.

Our future success depends, in part, on our ability to expand the deployment of our platform with existing customers by selling them additional products, subscriptions and services. This may require increasingly sophisticated and costly sales efforts and may not result in additional sales. In addition, the rate at which our customers purchase additional products, subscriptions and services depends on a number of factors, including the perceived need for additional IT security, general economic conditions, and our customers' satisfaction with our existing solutions they have previously purchased. If our efforts to sell additional products, subscriptions and services to our customers are not successful, our business may suffer.

Further, existing customers that purchase our platform have no contractual obligation to renew their subscriptions and support and maintenance services after the initial contract period, and given our limited operating history, we may not be able to accurately predict our renewal rates. Our customers' renewal rates may decline or fluctuate as a result of a number of factors, including the level of their satisfaction with our platform, our customer support, customer budgets and the pricing of our platform compared with the products and services offered by our competitors. If our customers renew their subscriptions, they may renew for shorter contract lengths or on other terms that are less economically beneficial to us. We cannot assure you that our customers will renew their subscriptions, and if our customers do not renew their subscriptions or renew on less favorable terms, our revenue may grow more slowly than expected, not grow at all, or even decline.

We also depend on our installed customer base for future support and maintenance revenue. We offer our support and maintenance agreements for terms that generally range between one and five years. If customers choose not to renew their support and maintenance agreements or seek to renegotiate the terms of their support and maintenance agreements prior to renewing such agreements, our revenue may grow more slowly than expected, not grow at all, or even decline.

We rely on revenue from subscriptions and service contracts, and because we recognize revenue from subscriptions and service contracts over the term of the relevant subscription or service period, downturns or upturns in sales are not immediately reflected in full in our results of operations.

Subscription and services revenue accounts for a significant portion of our total revenue, comprising 79% , 65% and 58% for the years ended December 31, 2016 , 2015 and 2014 , respectively. Sales of new or renewal subscription and service contracts may decline or fluctuate as a result of a number of factors, including customers' level of satisfaction with our products and subscriptions, the actual or perceived efficacy of our security solutions, the prices of our products and subscriptions, the prices of products and subscriptions offered by our competitors or reductions in our customers' spending levels. If our sales of new or renewal subscription and service contracts decline, our revenue and revenue growth rate may decline and adversely affect our business. In addition, we recognize subscription and service revenue ratably over the term of the relevant service period, which is generally between one to five years. As a result, much of the subscription and service revenue we report each quarter is derived from subscription and service contracts

that we sold in prior quarters. Consequently, a decline in new or renewed subscription or service contracts in any one quarter will not be fully reflected in revenue in that quarter but will negatively affect our revenue in future quarters. Accordingly, the effect of significant decreases in the market acceptance of, or demand for, our subscriptions or services may not be immediately apparent from our results of operations until future periods. Also, it is difficult for us to rapidly increase our subscription revenue through additional sales in any period, as revenue from new and renewal subscription contracts must be recognized ratably over the applicable service period. Furthermore, any increases in the average term of subscriptions contracts would result in revenue for those subscription contracts being recognized over longer periods of time.

Reliance on shipments at the end of each quarter could cause our revenue for the applicable period to fall below expected levels.

As a result of customer buying patterns and the efforts of our sales force and channel partners to meet or exceed their sales objectives, we have historically received a substantial portion of sales orders and generated a substantial portion of revenue during the last few weeks and days of each quarter. A significant interruption in our IT systems, which manage critical functions such as order processing, revenue recognition, financial forecasts, inventory and supply chain management, and trade compliance reviews, or our supply chain could result in delayed order fulfillment and decreased revenue for that quarter. If expected revenue at the end of any quarter is delayed for any reason, including the failure of anticipated purchase orders to materialize, our logistics or channel partners' inability to ship products prior to quarter-end to fulfill purchase orders received near the end of the quarter, our failure to manage inventory to meet demand, our inability to release new products on schedule, any failure of our systems related to order review, processing and licensing, or any delays in shipments based on trade compliance requirements, our revenue for that quarter could fall below our expectations and the estimates of market analysts, which could adversely impact our business and results of operations and cause a decline in the trading price of our common stock.

If we do not accurately anticipate and respond promptly to changes in our customers' technologies, business plans or security needs, our competitive position and prospects could be harmed.

The IT security market has grown quickly and is expected to continue to evolve rapidly. Moreover, many of our customers operate in markets characterized by rapidly changing technologies and business plans, which require them to add numerous network access points and adapt to increasingly complex IT networks, incorporating a variety of hardware, software applications, operating systems and networking protocols. As their technologies and business plans grow more complex, we expect these customers to face new and increasingly sophisticated methods of attack. We face significant challenges in ensuring that our platform effectively identifies and responds to these advanced and evolving attacks without disrupting our customers' network performance. As a result of the continued rapid innovations in the technology industry, including the rapid growth of smart phones, tablets and other devices, the trend of "bring your own device" in enterprises, and the rapidly evolving Internet of Things ("IOT"), we expect the networks of our customers to continue to change rapidly and become more complex.

We have identified a number of new products and enhancements to our platform that we believe are important to our continued success in the IT security market. There can be no assurance that we will be successful in developing and marketing, on a timely basis, such new products or enhancements or that our new products or enhancements will adequately address the changing needs of the marketplace. In addition, some of our new products and enhancements may require us to develop new hardware architectures that involve complex, expensive and time-consuming research and development processes. Although the market expects rapid introduction of new products and enhancements to respond to new threats, the development of these products and enhancements is difficult and the timetable for commercial release and availability is uncertain, as there can be significant time lags between initial beta releases and the commercial availability of new products and enhancements. We may experience unanticipated delays in the availability of new products and enhancements to our platform and fail to meet customer expectations with respect to the timing of such availability. If we do not quickly respond to the rapidly changing and rigorous needs of our customers by developing, releasing and making available on a timely basis new products and enhancements to our platform that can adequately respond to advanced threats and our customers' needs, our competitive position and business prospects will be harmed. Furthermore, from time to time, we or our competitors may announce new products with capabilities or technologies that could have the potential to replace or shorten the life cycles of our existing products. There can be no assurance that announcements of new products will not cause customers to defer purchasing our existing products.

Additionally, the process of developing new technology is expensive, complex and uncertain. The success of new products and enhancements depends on several factors, including appropriate component costs, timely completion and introduction, differentiation of new products and enhancements from those of our competitors, and market acceptance. To maintain our competitive position, we must continue to commit significant resources to developing new products or enhancements to our platform before knowing whether these investments will be cost-effective or achieve the intended results. There can be no assurance that we will successfully identify new product opportunities, develop and bring new products or enhancements to market in a timely manner, or achieve market acceptance of our platform, or that products and technologies developed by others will not render our platform obsolete or noncompetitive. If we expend significant resources on researching and developing products or enhancements to our platform and such products or enhancements are not successful, our business, financial position and results of operations may be adversely affected.

Disruptions or other business interruptions that affect the availability of our Dynamic Threat Intelligence, or DTI, cloud or other cloud-based products and services we offer or may offer could adversely impact our customer relationships as well as our overall business.

When a customer purchases one or more of our threat prevention appliances, it must also purchase a subscription to our DTI cloud for a term of either one or three years. Our DTI cloud enables global sharing of threat intelligence uploaded by any of our customers' cloud-connected FireEye appliances. We also offer additional cloud-based platforms such as our Email Threat Prevention, Mobile Threat Prevention and Threat Analytics Platforms and provide security solutions through our own and our co-branded security operation centers.

Our customers depend on the continuous availability of our DTI and other cloud-based products and services. Our cloud-based products and services are vulnerable to damage or interruption from a variety of sources, including damage or interruption caused by fire, earthquake, power loss, telecommunications or computer systems failure, cyber attack, human error, terrorist acts and war. Our data centers and networks may experience technical failures and downtime, may fail to distribute appropriate updates, or may fail to meet the increased requirements of a growing customer base, any of which could temporarily or permanently expose our customers' networks, leaving their networks unprotected against the latest security threats or, in the case of technical failures and downtime of security operation centers, all security threats.

In addition, there may also be system or network interruptions if new or upgraded systems are defective or not installed properly. Moreover, interruptions in our subscription updates could result in a failure of our DTI cloud to effectively update customers' hardware products and thereby leave our customers more vulnerable to attacks. Interruptions or failures in our service delivery could cause customers to terminate their subscriptions with us, could adversely affect our renewal rates, and could harm our ability to attract new customers. Our business would also be harmed if our customers believe that our DTI cloud or other cloud-based products and services are unreliable.

In addition, we provide our cloud-based products and services through third-party data center hosting facilities located in the United States and other countries. While we control and have access to our servers and all of the components of our network that are located in our data centers, we do not control the operation of these facilities. The owners of the data center facilities have no obligation to renew their agreements with us on commercially reasonable terms, or at all. If we are unable to renew these agreements on commercially reasonable terms, or if one of our data center operators is acquired, we may be required to transfer our servers and other infrastructure to new data center facilities, and we may incur significant costs and possible service interruption in connection with doing so.

Our current research and development efforts may not produce successful products or enhancements to our platform that result in significant revenue, cost savings or other benefits in the near future, if at all.

We must continue to dedicate significant financial and other resources to our research and development efforts if we are to maintain our competitive position. However, developing products and enhancements to our platform is expensive and time consuming, and there is no assurance that such activities will result in significant new marketable products or enhancements to our platform, design improvements, cost savings, revenue or other expected benefits. If we spend significant resources on research and development and are unable to generate an adequate return on our investment, our business and results of operations may be materially and adversely affected.

If we are unable to increase sales of our platform to large organizations while mitigating the risks associated with serving such customers, our business, financial position and results of operations may suffer.

Our growth strategy is dependent, in part, upon increasing sales of our platform to large enterprises and governments. Sales to large customers involve risks that may not be present (or that are present to a lesser extent) with sales to smaller entities. These risks include:

- increased purchasing power and leverage held by large customers in negotiating contractual arrangements with us;
- more stringent or costly requirements imposed upon us in our support service contracts with such customers, including stricter support response times and penalties for any failure to meet support requirements;
- more complicated implementation processes;
- longer sales cycles and the associated risk that substantial time and resources may be spent on a potential customer that ultimately elects not to purchase our platform or purchases less than we hoped;
- closer relationships with, and dependence upon, large technology companies who offer competitive products; and
- more pressure for discounts and write-offs.

In addition, because security breaches with respect to larger, high-profile enterprises are likely to be heavily publicized, there is increased reputational risk associated with serving such customers. If we are unable to increase sales of our platform to large enterprise

and government customers while mitigating the risks associated with serving such customers, our business, financial position and results of operations may suffer.

The sales prices of our products, subscriptions and services may decrease, which may reduce our gross profits and adversely impact our financial results.

The sales prices for our products, subscriptions and services may decline for a variety of reasons, including competitive pricing pressures, discounts, a change in our mix of products, subscriptions and services, anticipation of the introduction of new products, subscriptions or services, or promotional programs. Competition continues to increase in the market segments in which we participate, and we expect competition to further increase in the future, thereby leading to increased pricing pressures. Larger competitors with more diverse product and service offerings may reduce the price of products or subscriptions that compete with ours or may bundle them with other products and subscriptions. Additionally, although we price our products and subscriptions worldwide in U.S. dollars, currency fluctuations in certain countries and regions may negatively impact actual prices that partners and customers are willing to pay in those countries and regions, or the effective prices we realize in our reporting currency. Furthermore, we anticipate that the sales prices and gross profits for our products will decrease over product life cycles. We cannot assure you that we will be successful in developing and introducing new offerings with enhanced functionality on a timely basis, or that our new product and subscription offerings, if introduced, will enable us to maintain our prices and gross profits at levels that will allow us to maintain positive gross margins and achieve profitability.

Because we depend on a limited number of manufacturers to build the appliances used in our platform, we are susceptible to manufacturing delays and pricing fluctuations that could prevent us from shipping customer orders on time, or on a cost-effective basis, which may result in the loss of sales and customers.

We depend on a limited number of third-party manufacturers, primarily Flextronics Telecom Systems, Ltd., as sole source manufacturers for our appliances used in our platform. Our reliance on third-party manufacturers reduces our control over the manufacturing process and exposes us to risks, including reduced control over quality assurance, product costs, product supply and timing. Any manufacturing disruption by these third-party manufacturers could severely impair our ability to fulfill orders on time. If we are unable to manage our relationships with these third-party manufacturers effectively, or if these manufacturers suffer delays or disruptions for any reason, experience increased manufacturing lead-times, capacity constraints or quality control problems in their manufacturing operations, or fail to meet our future requirements for timely delivery, our ability to ship products to our customers would be severely impaired, and our business and results of operations would be harmed.

In addition, our reliance on third-party manufacturers exposes us to the risk that certain minerals, known as “conflict minerals,” that are contained in our products have originated in the Democratic Republic of the Congo or an adjoining country. As a result of the passage of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the SEC adopted disclosure requirements for public companies whose products contain conflict minerals that are necessary to the functionality or production of such products. We have incurred and expect to incur additional costs to comply with the disclosure requirements, including costs related to determining the source of the conflict minerals used in our products. Moreover, the implementation of these new requirements could adversely affect the sourcing, availability and pricing of materials used in the manufacture of our products to the extent that there may be only a limited number of suppliers offering “conflict free” minerals that can be used in our products. There can be no assurance that we will be able to obtain such minerals in sufficient quantities or at competitive prices. We may also encounter customers who require that all of the components of our products be certified as conflict free. If we are not able to meet customer requirements, such customers may choose to not purchase our products, which could impact our sales.

Our third-party manufacturers typically fulfill our supply requirements on the basis of individual orders. We are subject to a risk of supply shortages and changes in pricing terms because we do not have long-term contracts with our third-party manufacturers that guarantee capacity, the continuation of particular pricing terms or the extension of credit limits. Our contract with our primary manufacturer permits it to terminate such contract at its convenience, subject to prior notice requirements. Any production interruptions for any reason, such as a natural disaster, epidemic, capacity shortages, or quality problems at one of our manufacturing partners would negatively affect sales of our products and adversely impact our business and results of operations.

We may be unable to protect our intellectual property adequately, which could harm our business, financial condition and results of operations.

We believe that our intellectual property is an essential asset of our business. We rely on a combination of patent, copyright, trademark and trade secret laws, as well as confidentiality procedures and contractual provisions, to establish and protect our intellectual property rights in the United States and abroad. The efforts we have taken to protect our intellectual property may not be sufficient or effective, and our trademarks, copyrights and patents may be held invalid or unenforceable. Any U.S. or other patents issued to us may not be sufficiently broad to protect our proprietary technologies, and given the costs of obtaining patent protection, we may choose not to seek patent protection for certain of our proprietary technologies. We may not be effective in policing unauthorized use of our intellectual property, and even if we do detect violations, litigation may be necessary to enforce our intellectual property rights. Any enforcement efforts we undertake, including litigation, could be time-consuming and expensive, could divert management’s

attention and may result in a court determining that our intellectual property rights are unenforceable. If we are not successful in cost-effectively protecting our intellectual property rights, our business, financial condition and results of operations could be harmed.

Claims by others that we infringe their proprietary technology or other rights could harm our business.

Technology companies frequently enter into litigation based on allegations of patent infringement or other violations of intellectual property rights. In addition, patent holding companies seek to monetize patents they have purchased or otherwise obtained. As we face increasing competition and gain an increasingly higher profile, the possibility of intellectual property rights claims against us grows. From time to time, third parties have asserted, and we expect that third parties will continue to assert, claims of infringement of intellectual property rights against us. For example, we are currently a party to a suit by a non-practicing entity alleging, among other things, patent infringement, which is in the early stages of litigation. Third parties may in the future also assert claims against our customers or channel partners, whom our standard license and other agreements obligate us to indemnify against claims that our products infringe the intellectual property rights of third parties. While we intend to increase the size of our patent portfolio, many of our competitors and others may now and in the future have significantly larger and more mature patent portfolios than we have. In addition, future litigation may involve patent holding companies or other patent owners who have no relevant product offerings or revenue and against whom our own patents may therefore provide little or no deterrence or protection. Any claim of intellectual property infringement by a third party, even a claim without merit, could cause us to incur substantial costs defending against such claim, could distract our management from our business and could require us to cease use of such intellectual property. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by the discovery process.

Although third parties may offer a license to their technology or other intellectual property, the terms of any offered license may not be acceptable, and the failure to obtain a license or the costs associated with any license could cause our business, financial condition and results of operations to be materially and adversely affected. In addition, some licenses may be non-exclusive, and therefore our competitors may have access to the same technology licensed to us. If a third party does not offer us a license to its technology or other intellectual property on reasonable terms, or at all, we could be enjoined from continued use of such intellectual property. As a result, we may be required to develop alternative, non-infringing technology, which could require significant time (during which we could be unable to continue to offer our affected products, subscriptions or services), effort, and expense and may ultimately not be successful. Furthermore, a successful claimant could secure a judgment or we may agree to a settlement that prevents us from distributing certain products, providing certain subscriptions or performing certain services or that requires us to pay substantial damages, royalties or other fees. Any of these events could harm our business, financial condition and results of operations.

We incorporate technology from third parties into our products, and our inability to obtain or maintain rights to the technology could harm our business.

We incorporate technology from third parties into our products. We cannot be certain that our suppliers and licensors are not infringing the intellectual property rights of third parties or that the suppliers and licensors have sufficient rights to the technology in all jurisdictions in which we may sell our products. Some of our agreements with our suppliers and licensors may be terminated for convenience by them. If we are unable to obtain or maintain rights to any of this technology because of intellectual property infringement claims brought by third parties against our suppliers and licensors or against us, or if we are unable to continue to obtain such technology or enter into new agreements on commercially reasonable terms, our ability to develop and sell products, subscriptions and services containing such technology could be severely limited, and our business could be harmed. Additionally, if we are unable to obtain necessary technology from third parties, including certain sole suppliers, we may be forced to acquire or develop alternative technology, which may require significant time, cost and effort and may be of lower quality or performance standards. This would limit and delay our ability to offer new or competitive products and increase our costs of production. If alternative technology cannot be obtained or developed, we may not be able to offer certain functionality as part of our products, subscriptions and services. As a result, our margins, market share and results of operations could be significantly harmed.

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

Our products and subscriptions contain software modules licensed to us by third-party authors under “open source” licenses. The use and distribution of open source software may entail greater risks than the use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. Some open source licenses contain requirements that we make available source code for modifications or derivative works we create based upon the type of open source software we use. If we combine our proprietary software with open source software in a certain manner, we could, under certain open source licenses, be required to release the source code of our proprietary software to the public. This would allow our competitors to create similar products with lower development effort and time and ultimately could result in a loss of sales for us.

Although we monitor our use of open source software to avoid subjecting our products and subscriptions to conditions, the terms of many open source licenses have not been interpreted by U.S. courts, and there is a risk that these licenses could be construed in ways that could impose unanticipated conditions or restrictions on our ability to commercialize products and subscriptions incorporating

such software. Moreover, we cannot assure you that our processes for controlling our use of open source software in our products and subscriptions will be effective. From time to time, we may face claims from third parties asserting ownership of, or demanding release of, the open source software or derivative works that we developed using such software (which could include our proprietary source code), or otherwise seeking to enforce the terms of the applicable open source license. These claims could result in litigation. If we are held to have breached the terms of an open source software license, we could be required to seek licenses from third parties to continue offering our products on terms that are not economically feasible, to re-engineer our products, to discontinue the sale of our products if re-engineering could not be accomplished on a timely or cost-effective basis, or to make generally available, in source code form, our proprietary code, any of which could adversely affect our business, results of operations and financial condition.

U.S. federal, state and local government sales are subject to a number of challenges and risks that may adversely impact our business.

Sales to U.S. federal, state, and local governmental agencies have accounted for, and may in the future account for, a significant portion of our revenue. Sales to such government entities are subject to the following risks:

- selling to governmental agencies can be highly competitive, expensive and time consuming, often requiring significant upfront time and expense without any assurance that such efforts will generate a sale;
- government certification requirements applicable to our products may change and, in doing so, restrict our ability to sell into the U.S. federal government sector until we have attained the revised certification;
- government demand and payment for our products and services may be impacted by public sector budgetary cycles and funding authorizations, with funding reductions or delays adversely affecting public sector demand for our products and services;
- we sell our platform to governmental agencies through our indirect channel partners, and these agencies may have statutory, contractual or other legal rights to terminate contracts with our distributors and resellers for convenience or due to a default, and any such termination may adversely impact our future results of operations;
- governments routinely investigate and audit government contractors' administrative processes, and any unfavorable audit could result in the government refusing to continue buying our platform, which would adversely impact our revenue and results of operations, or institute fines or civil or criminal liability if the audit were to uncover improper or illegal activities; and
- governments may require certain products purchased by it to be manufactured in the United States and other relatively high-cost manufacturing locations, and we may not manufacture all products in locations that meet these requirements, affecting our ability to sell these products to governmental agencies.

Our ability to maintain customer satisfaction depends in part on the quality of our professional service organization and technical and other support services, including the quality of the support provided on our behalf by certain channel partners. Failure to maintain high-quality customer support could have a material adverse effect on our business, financial condition and results of operations.

Once our platform is deployed within our customers' networks, our customers depend on our technical and other support services, as well as the support of our channel partners, to resolve any issues relating to the implementation and maintenance of our platform. If we or our channel partners do not effectively assist our customers in deploying our platform, succeed in helping our customers quickly resolve post-deployment issues, or provide effective ongoing support, our ability to sell additional products, subscriptions or services as part of our platform to existing customers would be adversely affected and our reputation with potential customers could be damaged. Many larger organizations have more complex networks and require higher levels of support than smaller customers. If we fail to meet the requirements of our larger customers, it may be more difficult to execute on our strategy of upselling and cross selling with these customers. Additionally, if our channel partners do not effectively provide support to the satisfaction of our customers, we may be required to provide this level of support to those customers, which would require us to hire additional personnel and to invest in additional resources. It can take significant time and resources to recruit, hire, and train qualified technical support employees. We may not be able to hire such resources fast enough to keep up with demand. To the extent that we or our channel partners are unsuccessful in hiring, training, and retaining adequate support resources, our ability and the ability of our channel partners to provide adequate and timely support to our customers will be negatively impacted, and our customers' satisfaction with our platform will be adversely affected. Additionally, to the extent that we need to rely on our sales engineers to provide post-sales support, our sales productivity will be negatively impacted, which would harm our results of operations.

Our limited operating history makes it difficult to evaluate our current business and prospects and may increase the risk that we will not be successful.

We were founded in 2004, and our first commercially successful product was shipped in 2008. Since then, we have continued to expand our platform, both organically and through acquisitions, including through the addition of Mandiant Corporation's endpoint threat detection, response and remediation products; advanced threat intelligence capabilities; and incident response and security consulting services. The majority of our revenue growth began in 2010. Our limited operating history makes it difficult to evaluate our current business and prospects and plan for and model our future growth. We have encountered and will continue to encounter risks and uncertainties frequently encountered by rapidly growing companies in developing markets.

If our assumptions regarding these risks and uncertainties are incorrect or change in response to changes in the IT security market, our results of operations and financial results could differ materially from our plans and forecasts. Although we have experienced rapid growth in the past, there is no assurance that such growth will continue. Any success we may experience in the future will depend in large part on our ability to, among other things:

- maintain and expand our customer base and the ways in which customers use our products and services;
- expand revenue from existing customers through increased or broader use of our products and services within their organizations;
- convince customers to allocate a fixed portion of their annual IT budgets to our products and services;
- improve the performance and capabilities of our platform through research and development;
- effectively expand our business domestically and internationally, which will require that we fill key management positions, particularly internationally; and
- successfully compete with other companies that currently provide, or may in the future provide, solutions like ours that protect against next-generation advanced cyber attacks.

If we are unable to achieve our key objectives, including the objectives listed above, our business and results of operations will be adversely affected and the fair market value of our common stock could decline.

Managing the supply of our products and their components is complex. Insufficient supply and inventory may result in lost sales opportunities or delayed revenue, while excess inventory may harm our gross margins.

Our third-party manufacturers procure components and build our products based on our forecasts, and we generally do not hold inventory for a prolonged period of time. These forecasts are based on estimates of future demand for our products, which are in turn based on historical trends and analyses from our sales and marketing organizations, adjusted for overall market conditions. In order to reduce manufacturing lead times and plan for adequate component supply, from time to time we may issue forecasts for components and products that are non-cancelable and non-returnable.

Our inventory management systems and related supply chain visibility tools may be inadequate to enable us to make accurate forecasts and effectively manage the supply of our products and product components. Supply management remains an area of increasing focus as we balance the need to maintain supply levels that are sufficient to ensure competitive lead times against the risk of obsolescence because of rapidly changing technology and customer requirements. If we ultimately determine that we have excess supply, we may have to reduce our prices and write-down inventory, which in turn could result in lower gross margins. Alternatively, insufficient supply levels may lead to shortages that result in delayed revenue or loss of sales opportunities altogether as potential customers turn to competitors' products that may be readily available. Additionally, any increases in the time required to manufacture or ship our products could result in supply shortfalls. If we are unable to effectively manage our supply and inventory, our results of operations could be adversely affected.

Because some of the key components in our products come from limited sources of supply, we are susceptible to supply shortages or supply changes, which could disrupt or delay our scheduled product deliveries to our customers and may result in the loss of sales and customers.

Our platform relies on key components, including a motherboard and chassis, which our third-party manufacturers purchase on our behalf from a sole source provider. The manufacturing operations of some of our component suppliers are geographically concentrated in Asia, which makes our supply chain vulnerable to regional disruptions. A localized health risk affecting employees at these facilities, such as the spread of a pandemic influenza, could impair the total volume of components that we are able to obtain, which could result in substantial harm to our results of operations. Similarly, a fire, flood, earthquake, tsunami or other disaster, condition or event such as political instability, terrorist act, civil unrest or a power outage that adversely affects any of these component suppliers' facilities could significantly affect our ability to obtain the components needed for our products, which could result in a substantial loss of sales and revenue and a substantial harm to our results of operations.

We do not have volume purchase contracts with any of our component suppliers, and they could cease selling to us at any time. In addition, our component suppliers change their selling prices frequently in response to market trends, including industry-wide increases in demand, and because we do not have contracts with these suppliers, we are susceptible to price fluctuations related to raw materials and components. If we are unable to pass component price increases along to our customers or maintain stable pricing, our gross margins and results of operations could be negatively impacted. If we are unable to obtain a sufficient quantity of these components in a timely manner for any reason, sales of our products could be delayed or halted or we could be forced to expedite shipment of such components or our products at dramatically increased costs, which would negatively impact our revenue and gross margins. Additionally, poor quality in any of the sole-sourced components in our products could result in lost sales or lost sales opportunities. If the quality of the components does not meet our or our customers' requirements, if we are unable to obtain components from our existing suppliers on commercially reasonable terms, or if any of our sole source providers cease to remain in business or continue to manufacture such components, we could be forced to redesign our products and qualify new components from alternate suppliers. The resulting stoppage or delay in selling our products and the expense of redesigning our products could result in lost sales opportunities and damage to customer relationships, which would adversely affect our business and results of operations.

Our failure to adequately protect personal information could have a material adverse effect on our business.

A wide variety of provincial, state, national, and international laws and regulations apply to the collection, use, retention, protection, disclosure, transfer and other processing of personal data. These data protection and privacy-related laws and regulations are evolving and may result in ever-increasing regulatory and public scrutiny and escalating levels of enforcement and sanctions. Our failure to comply with applicable laws and regulations, or to protect such data, could result in enforcement action against us, including fines, imprisonment of company officials and public censure, claims for damages by customers and other affected individuals, damage to our reputation and loss of goodwill (both in relation to existing customers and prospective customers), any of which could have a material adverse effect on our operations, financial performance and business. Evolving and changing definitions of personal data and personal information within the European Union, the United States, and elsewhere, especially relating to classification of IP addresses, machine identification, location data and other information, may limit or inhibit our ability to operate or expand our business, including limiting technology alliance partners that may involve the sharing of data. Even the perception of privacy concerns, whether or not valid, may harm our reputation, inhibit adoption of our products by current and future customers, or adversely impact our ability to attract and retain workforce talent.

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

We have entered, and intend to continue to enter, into technology alliance partnerships with third parties to support our future growth plans. Such relationships include technology licensing, joint technology development and integration, research cooperation, co-marketing activities and sell-through arrangements. We face a number of risks relating to our technology alliance partnerships that could prevent us from realizing the desired benefits from such partnerships on a timely basis or at all, which, in turn, could have a negative impact on our business and financial results.

Technology alliance partnerships require significant coordination between the parties involved, particularly if a partner requires that we integrate its products with our products. This could involve a significant commitment of time and resources by our technical staff and their counterparts within our technology alliance partner. The integration of products from different companies may be more difficult than we anticipate, and the risk of integration difficulties, incompatible products and undetected programming errors or defects may be higher than the risks normally associated with the introduction of new products. It may also be more difficult to market and sell products developed through technology alliance partnerships than it would be to market and sell products that we develop on our own. Sales and marketing personnel may require special training, as the new products may be more complex than our other products.

We invest significant time, money and resources to establish and maintain relationships with our technology alliance partners, but we have no assurance that any particular relationship will continue for any specific period of time. Generally, our agreements with these technology alliance partners are terminable without cause with no or minimal notice or penalties. If we lose a significant technology alliance partner, we could lose the benefit of our investment of time, money and resources in the relationship. In addition, we could be required to incur significant expenses to develop a new strategic alliance or to determine and implement an alternative plan to pursue the opportunity that we targeted with the former partner.

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

The preparation of financial statements in conformity with generally accepted accounting principles, or GAAP, requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, as provided in the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations," the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity,

revenue and expenses that are not readily apparent from other sources. Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in our stock price. Significant assumptions and estimates used in preparing our consolidated financial statements include those related to assets, liabilities, revenue, expenses and related disclosures.

We are exposed to the credit risk of some of our distributors, resellers and customers and to credit exposure in weakened markets, which could result in material losses.

Most of our sales are on an open credit basis. Although we have programs in place that are designed to monitor and mitigate these risks, we cannot assure you these programs will be effective in reducing our credit risks, especially as we expand our business internationally. If we are unable to adequately control these risks, our business, results of operations and financial condition could be harmed.

Our failure to raise additional capital or generate the significant capital necessary to expand our operations and invest in new products could reduce our ability to compete and could harm our business.

We intend to continue to make investments to support our business growth and may require additional funds to respond to business challenges, including the need to develop new products and enhancements to our platform, improve our operating infrastructure or acquire complementary businesses and technologies. Accordingly, we may need to engage in equity or debt financings to secure additional funds. If we raise additional equity financing, our stockholders may experience significant dilution of their ownership interests and the per share value of our common stock could decline. Furthermore, if we engage in additional debt financing, the holders of debt would have priority over the holders of common stock, and we may be required to accept terms that restrict our ability to incur additional indebtedness. We may also be required to take other actions that would otherwise be in the interests of the debt holders and force us to maintain specified liquidity or other ratios, any of which could harm our business, results of operations, and financial condition. If we need additional capital and cannot raise it on acceptable terms, we may not be able to, among other things:

- develop or enhance our products and subscriptions;
- continue to expand our sales and marketing and research and development organizations;
- acquire complementary technologies, products or businesses;
- expand operations, in the United States or internationally;
- hire, train and retain employees; or
- respond to competitive pressures or unanticipated working capital requirements.

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

If our products do not effectively interoperate with our customers' IT infrastructure, installations could be delayed or cancelled, which would harm our business.

Our products must effectively interoperate with our customers' existing or future IT infrastructure, which often has different specifications, utilizes multiple protocol standards, deploys products from multiple vendors, and contains multiple generations of products that have been added over time. As a result, when problems occur in a network, it may be difficult to identify the sources of these problems. If we find errors in the existing software or defects in the hardware used in our customers' infrastructure or problematic network configurations or settings, we may have to modify our software or hardware so that our products will interoperate with our customers' infrastructure. In such cases, our products may be unable to provide significant performance improvements for applications deployed in our customers' infrastructure. These issues could cause longer installation times for our products and could cause order cancellations, either of which would adversely affect our business, results of operations and financial condition. In addition, government and other customers may require our products to comply with certain security or other certifications and standards. If our products are late in achieving or fail to achieve compliance with these certifications and standards, or our competitors achieve compliance with these certifications and standards, we may be disqualified from selling our products to such customers, or may otherwise be at a competitive disadvantage, either of which would harm our business, results of operations, and financial condition.

We generate a significant amount of revenue from sales to resellers, distributors and customers outside of the United States, and we are therefore subject to a number of risks associated with international sales and operations.

We have a limited history of marketing, selling, and supporting our platform internationally. As a result, we must hire and train experienced personnel to staff and manage our foreign operations. To the extent that we experience difficulties in recruiting, training, managing, and retaining international employees, particularly managers and other members of our international sales team, we may experience difficulties in sales productivity in, or market penetration of, foreign markets. We also enter into strategic distributor and reseller relationships with companies in certain international markets where we do not have a local presence. If we are not able to maintain successful strategic distributor relationships with our international channel partners or recruit additional channel partners,

our future success in these international markets could be limited. Business practices in the international markets that we serve may differ from those in the United States and may require us to include non-standard terms in customer contracts, such as extended payment or warranty terms. To the extent that we enter into customer contracts in the future that include non-standard terms related to payment, warranties, or performance obligations, our results of operations may be adversely impacted.

Additionally, our international sales and operations are subject to a number of risks, including the following:

- greater difficulty in enforcing contracts and managing collections, as well as longer collection periods;
- higher costs of doing business internationally, including costs incurred in establishing and maintaining office space and equipment for our international operations;
- fluctuations in exchange rates between the U.S. dollar and foreign currencies in markets where we do business, such as the British Pound Sterling, which experienced a sharp decline in value compared to the U.S. dollar and other currencies;
- management communication and integration problems resulting from cultural and geographic dispersion;
- risks associated with trade restrictions and foreign legal requirements, including any importation, certification, and localization of our platform that may be required in foreign countries and any changes in trade relations and restrictions as a result of the recent U.S. presidential election;
- greater risk of unexpected changes in tariffs and tax laws and treaties;
- compliance with anti-bribery laws, including, without limitation, compliance with the U.S. Foreign Corrupt Practices Act of 1977, as amended, the U.S. Travel Act and the UK Bribery Act 2010, violations of which could lead to significant fines, penalties and collateral consequences for our Company;
- heightened risk of unfair or corrupt business practices in certain geographies and of improper or fraudulent sales arrangements that may impact financial results and result in restatements of, or irregularities in, financial statements;
- the uncertainty of protection for intellectual property rights in some countries;
- general economic and political conditions in these foreign markets;
- foreign exchange controls or tax regulations that might prevent us from repatriating cash earned outside the United States;
- political and economic instability in some countries, such as those caused by the recent U.S. presidential election and the referendum on June 23, 2016, in which voters in the U.K. approved an exit from the EU, commonly referred to as "Brexit"; and
- double taxation of our international earnings and potentially adverse tax consequences due to changes in the tax laws of the United States or the foreign jurisdictions in which we operate.

Further, the interpretation and application of foreign laws and regulations in many cases is uncertain, and our legal and regulatory obligations in foreign jurisdictions are subject to frequent and unexpected changes, including the potential for various regulatory or other governmental bodies to enact new or additional laws or regulations or to issue rulings that invalidate prior laws or regulations.

For example, with regard to transfers of personal data from our European customers and employees to the U.S., we have historically relied on compliance with the U.S.-EU and U.S.-Swiss Safe Harbor Frameworks as agreed to by the U.S. Department of Commerce, and the EU and Switzerland, which established means for legitimizing the transfer of personal data by U.S. companies from the European Economic Area, or EEA, to the U.S. In a recent ruling by the EU Court of Justice in Case C-362/14 (*Schrems v. Data Protection Commissioner*), the U.S.-EU Safe Harbor Framework was deemed an invalid method of compliance with restrictions under EU law regarding the transfer of personal data outside of the EEA. EU and U.S. political authorities reached political agreement in February 2016 regarding the U.S.-EU Privacy Shield, which would provide a new mechanism for companies to transfer EU personal data to the United States. Although the U.S.-EU Privacy Shield was granted an adequacy decision by the EU College of Commissioners on July 12, 2016, and became available to U.S. companies on August 1, 2016, it has been challenged and may be suspended or invalidated. It is uncertain that the U.S.-EU Privacy Shield will continue to remain intact and serve as an appropriate means for us to meet EU requirements for personal data transfers from the EEA to the United States. In particular, it is unclear whether the new Administration may pursue changes to, or withdrawal from, the U.S.-EU Privacy Shield Framework. Policy positions and executive orders of President Trump may cause European officials to pursue changes to, or withdrawal from, the U.S.-EU Privacy Shield. The invalidation of the U.S.-EU Safe Harbor or subsequent developments in the legal landscape affecting the transfer of personal data from the EEA may cause us to find it necessary or desirable to modify our data handling practices, and may serve as a basis for our personal data handling practices, or those of our customers and vendors, to be challenged and may otherwise adversely impact our business, financial condition and operating results.

These and other factors could harm our ability to generate future international revenue and, consequently, materially impact our business, results of operations and financial condition.

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

Our sales contracts are denominated in U.S. dollars, and therefore our revenue is not subject to foreign currency risk. However, strengthening of the U.S. dollar increases the real cost of our products, subscriptions and services to our customers outside of the United States, which could lead to delays in the purchase of our products and services and the lengthening of our sales cycle. If the U.S. dollar continues to strengthen, this could adversely affect our financial condition and results of operations. In addition, we are incurring an increasing portion of our operating expenses outside the United States. These expenses are denominated in foreign currencies and are subject to fluctuations due to changes in foreign currency exchange rates.

Additionally, on June 23, 2016, the U.K. held a referendum in which British voters approved an exit from the EU, commonly referred to as "Brexit." This resulted in an adverse impact to currency exchange rates, notably the British Pound Sterling which experienced a sharp decline in value compared to the U.S. dollar and other currencies. Continued volatility in currency exchange rates is expected in the near term as the U.K. negotiates its exit from the EU. A significantly weaker British Pound Sterling compared to the U.S. dollar could have a significantly negative effect on our financial condition and results of operations.

We do not currently hedge against the risks associated with currency fluctuations but may do so in the future.

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

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

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

Our products are subject to U.S. export controls, specifically the Export Administration Regulations and economic sanctions enforced by the Office of Foreign Assets Control. We incorporate standard encryption algorithms into our products, which, along with the underlying technology, may be exported outside of the U.S. only with the required export authorizations, including by license, license exception or other appropriate government authorizations, which may require the filing of an encryption registration and classification request. Furthermore, U.S. export control laws and economic sanctions prohibit the shipment of certain products and services to countries, governments, and persons targeted by U.S. sanctions. While we have taken precautions to prevent our products and services from being exported in violation of these laws, in certain instances in the past we shipped our encryption products prior to obtaining the required export authorizations and/or submitting the required requests, including a classification request and request for an encryption registration number, resulting in an inadvertent violation of U.S. export control laws. As a result, in February 2013, we filed a Voluntary Self Disclosure with the U.S. Department of Commerce's Bureau of Industry and Security, or BIS, concerning these potential violations. In June 2013, BIS notified us that it had completed its review of this matter and closed its review with the issuance of a warning letter. No monetary penalties were assessed. Even though we take precautions to ensure that our channel partners comply with all relevant regulations, any failure by our channel partners to comply with such regulations could have negative consequences, including reputational harm, government investigations and penalties.

In addition, various countries regulate the import of certain encryption technology, including through import permit and license requirements, and have enacted laws that could limit our ability to distribute our products or could limit our customers' ability to implement our products in those countries. Changes in our products or changes in export and import regulations may create delays in the introduction of our products into international markets, prevent our customers with international operations from deploying our products globally or, in some cases, prevent the export or import of our products to certain countries, governments or persons altogether. Any change in export or import regulations, economic sanctions or related legislation, shift in the enforcement or scope of existing regulations, or change in the countries, governments, persons or technologies targeted by such regulations, could result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or potential customers with international operations. Any decreased use of our products or limitation on our ability to export to or sell our products in international markets would likely adversely affect our business, financial condition and results of operations.

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

A significant natural disaster, such as an earthquake, a fire, a flood, or significant power outage could have a material adverse impact on our business, results of operations, and financial condition. Our corporate headquarters and servers hosting our cloud services are located in California, a region known for seismic activity. In addition, natural disasters could affect our supply chain, manufacturing vendors, or logistics providers' ability to provide materials and perform services such as manufacturing products or assisting with shipments on a timely basis. In the event that our or our service providers' information technology systems or manufacturing or logistics abilities are hindered by any of the events discussed above, shipments could be delayed, resulting in missed financial targets, such as revenue and shipment targets, for a particular quarter. In addition, acts of terrorism and other geo-political unrest could cause disruptions in our business or the business of our supply chain, manufacturers, logistics providers, partners, or customers or the economy as a whole. Any disruption in the business of our supply chain, manufacturers, logistics providers, partners or end-customers that impacts sales at the end of a fiscal quarter could have a significant adverse impact on our financial results. All of the aforementioned risks may be further increased if the disaster recovery plans for us and our suppliers prove to be inadequate. To the extent that any of the above should result in delays or cancellations of customer orders, or the delay in the manufacture, deployment or shipment of our products, our business, financial condition and results of operations would be adversely affected.

If we fail to comply with environmental requirements, our business, financial condition, results of operations and reputation could be adversely affected.

We are subject to various environmental laws and regulations including laws governing the hazardous material content of our products and laws relating to the collection and recycling of electrical and electronic equipment. Examples of these laws and regulations include the EU Restrictions on the Use of certain Hazardous Substances in Electronic Equipment Directive and the EU Waste Electrical and Electronic Equipment Directive as well as the implementing legislation of the EU member states. Similar laws and regulations have been passed or are pending in China, South Korea and Japan and may be enacted in other regions, including in the United States, and we are, or may in the future be, subject to these laws and regulations.

Our failure to comply with past, present, and future laws could result in reduced sales of our products, substantial product inventory write-offs, reputational damage, penalties, and other sanctions, any of which could harm our business and financial condition. We also expect that our products will be affected by new environmental laws and regulations on an ongoing basis. To date, our expenditures for environmental compliance have not had a material impact on our results of operations or cash flows, and although we cannot predict the future impact of such laws or regulations, they will likely result in additional costs and may increase penalties associated with violations or require us to change the content of our products or how they are manufactured, which could have a material adverse effect on our business, results of operations and financial condition.

The enactment of legislation implementing changes in the U.S. taxation of international business activities or the adoption of other tax reform policies could materially impact our financial position and results of operations.

Recent changes to U.S. tax laws, including limitations on the ability of taxpayers to claim and utilize foreign tax credits and the deferral of certain tax deductions until earnings outside of the United States are repatriated to the United States, as well as changes to U.S. tax laws that may be enacted in the future, could impact the tax treatment of our foreign earnings. Due to expansion of our international business activities, any changes in the U.S. taxation of such activities may increase our worldwide effective tax rate and adversely affect our financial condition and operating results.

In addition, Congress and the current administration have indicated a desire to reform the U.S. corporate income tax. As part of any tax reform, it is possible that the current corporate income tax rate may be reduced, and there may be other potential changes including limiting or eliminating various other deductions, credits or tax preferences. At this time, it is not possible to measure the potential impact on the value of our deferred tax assets, business, prospects or results of operations that might result upon enactment.

If we do not achieve increased tax benefits as a result of our corporate structure, our operating results and financial condition may be negatively impacted.

We generally conduct our international operations through wholly-owned subsidiaries and report our taxable income in various jurisdictions worldwide based upon our business operations in those jurisdictions. In 2013, we completed the reorganization of our corporate structure and intercompany relationships to more closely align our corporate organization with the expansion of our international business activities. Although we anticipate achieving a reduction in our overall effective tax rate in the future as a result of this reorganized corporate structure, we may not realize any benefits. Our intercompany relationships are subject to complex transfer pricing regulations administered by taxing authorities in various jurisdictions. The relevant taxing authorities may disagree with our determinations as to the income and expenses attributable to specific jurisdictions. If such a disagreement were to occur, and our position were not sustained, we could be required to pay additional taxes, interest and penalties, which could result in one-time tax charges, higher effective tax rates, reduced cash flows and lower overall profitability of our operations. In addition, if the intended tax treatment of our reorganized corporate structure is not accepted by the applicable taxing authorities, changes in tax law negatively impact the structure or we do not operate our business consistent with the structure and applicable tax laws and regulations, we may

fail to achieve any tax advantages as a result of the reorganized corporate structure, and our future operating results and financial condition may be negatively impacted.

We could be subject to additional tax liabilities.

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

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

In general, under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an “ownership change” is subject to limitations on its ability to utilize its pre-change net operating losses, or NOLs, to offset future taxable income. Our existing NOLs may be subject to limitations arising from previous ownership changes. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change under Section 382 of the Code and adversely affect our ability to utilize our NOLs in the future. Furthermore, our ability to utilize NOLs of companies that we may acquire in the future may be subject to limitations. There is also a risk that due to regulatory changes, such as suspensions on the use of NOLs, or other unforeseen reasons, our existing NOLs could expire or otherwise be unavailable to offset future income tax liabilities. For these reasons, we may not be able to utilize a material portion of the NOLs reflected on our balance sheet, even if we attain profitability.

Risks Related to Our Convertible Senior Notes

We are leveraged financially, which could adversely affect our ability to adjust our business to respond to competitive pressures and to obtain sufficient funds to satisfy our future growth, business needs and development plans.

We have substantial existing indebtedness. In June 2015, we issued \$920.0 million aggregate principal amount of convertible senior notes (the “convertible notes”).

The degree to which we are leveraged could have negative consequences, including, but not limited to, the following:

- we may be more vulnerable to economic downturns, less able to withstand competitive pressures and less flexible in responding to changing business and economic conditions;
- our ability to obtain additional financing in the future for working capital, capital expenditures, acquisitions, general corporate or other purposes may be limited
- a substantial portion of our cash flows from operations in the future may be required for the payment of the principal amount of our existing indebtedness when it becomes due; and
- we may elect to make cash payments upon any conversion of the convertible notes, which would reduce our cash on hand.

Our ability to meet our payment obligations under our convertible notes depends on our ability to generate significant cash flow in the future. This, to some extent, is subject to general economic, financial, competitive, legislative, and regulatory factors as well as other factors that are beyond our control. There can be no assurance that our business will generate cash flow from operations, or that additional capital will be available to us, in an amount sufficient to enable us to meet our debt payment obligations and to fund other liquidity needs. If we are unable to generate sufficient cash flow to service our debt obligations, we may need to refinance or restructure our debt, sell assets, reduce or delay capital investments, or seek to raise additional capital. If we were unable to implement one or more of these alternatives, we may be unable to meet our debt payment obligations, which could have a material adverse effect on our business, results of operations, or financial condition.

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

In the event the conditional conversion feature of the convertible notes is triggered, holders of such convertible notes will be entitled to convert their convertible notes at any time during specified periods at their option. If one or more holders elect to convert their convertible notes, unless we elect to satisfy our conversion obligation by delivering solely shares of our common stock (other

than paying cash in lieu of delivering any fractional share), we would be required to settle a portion or all of our conversion obligation through the payment of cash, which could adversely affect our liquidity. In addition, even if holders do not elect to convert their convertible notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the convertible notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

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

In May 2008, the Financial Accounting Standards Board, which we refer to as FASB, issued FASB Staff Position No. APB 14-1, Accounting for Convertible Debt Instruments That May Be Settled in Cash Upon Conversion (Including Partial Cash Settlement), which has subsequently been codified as Accounting Standards Codification 470-20, Debt with Conversion and Other Options, which we refer to as ASC 470-20. Under ASC 470-20, an entity must separately account for the liability and equity components of the convertible debt instruments (such as the convertible notes) that may be settled entirely or partially in cash upon conversion in a manner that reflects the issuer's economic interest cost. The effect of ASC 470-20 on the accounting for the convertible notes is that the equity component is required to be included in the additional paid-in capital section of stockholders' equity on our consolidated balance sheet and the value of the equity component would be treated as original issue discount for purposes of accounting for the debt component of the convertible notes. As a result, we will be required to record a greater amount of non-cash interest expense in current periods presented as a result of the amortization of the discounted carrying value of the convertible notes to their face amount over the term of the convertible notes. We will report lower net income in our financial results because ASC 470-20 will require interest to include both the current period's amortization of the debt discount and the instrument's non-convertible coupon interest for the convertible notes, which could adversely affect our reported or future financial results and the trading price of our common stock.

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 require us to classify the \$233.9 million of accreted interest as cash used in operating activities in our consolidated financial statements upon cash settlement, which could adversely affect our future financial results.

In addition, under certain circumstances, convertible debt instruments (such as the convertible notes) that may be settled entirely or partly in cash are currently accounted for utilizing the treasury stock method, the effect of which is that any shares issuable upon conversion of the convertible notes are not included in the calculation of diluted earnings per share except to the extent that the conversion value of the convertible notes exceeds their principal amount. Under the treasury stock method, for diluted earnings per share purposes, the transaction is accounted for as if the number of shares of common stock that would be necessary to settle such excess, if we elected to settle such excess in shares, are issued. We cannot be sure that the accounting standards in the future will continue to permit the use of the treasury stock method. If we are unable to use the treasury stock method in accounting for the shares issuable upon conversion of the convertible notes, then our diluted earnings per share would be adversely affected.

Conversion of our convertible notes will dilute the ownership interest of existing stockholders and may depress the price of our common stock.

The conversion of some or all of our convertible notes, if such conversion occurs, will dilute the ownership interests of then-existing stockholders to the extent we deliver shares upon conversion of any of the convertible notes. Any sales in the public market of the common stock issuable upon such conversion could adversely affect prevailing market prices of our common stock. In addition, the existence of the convertible notes may encourage short selling by market participants because the conversion of the convertible notes could be used to satisfy short positions, or anticipated conversion of the convertible notes into shares of our common stock could depress the price of our common stock.

Risks Related to Ownership of Our Common Stock

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

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

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

We have provided and may continue to provide guidance about our business and future operating results. In developing this guidance, our management must make certain assumptions and judgments about our future performance, including the level of anticipated cost savings we expect to achieve as a result of our restructuring plan. Furthermore, analysts and investors may develop and publish their own projections of our business, which may form a consensus about our future performance. Our business results may vary significantly from such guidance or that consensus due to a number of factors, many of which are outside of our control, and which could adversely affect our operations and operating results. Furthermore, if we make downward revisions of our previously announced guidance, or if our publicly announced guidance of future operating results fails to meet expectations of securities analysts, investors or other interested parties, the price of our common stock would decline.

The price of our common stock has been and may continue to be volatile, and the value of your investment could decline.

The trading price of our common stock has been volatile since our initial public offering, and is likely to continue to be volatile. Since the date of our initial public offering, the price of our common stock has ranged from \$10.60 to \$97.35 through February 21, 2017 , and the last reported sale price on February 21, 2017 was \$11.80 . The trading price of our common stock may fluctuate widely in response to various factors, some of which are beyond our control. These factors include:

- whether our results of operations, and in particular, our revenue growth rates, meet the expectations of securities analysts or investors;
- actual or anticipated changes in the expectations of investors or securities analysts, whether as a result of our forward-looking statements, our failure to meet such expectation or otherwise;
- announcements of new products, services or technologies, commercial relationships, acquisitions or other events by us or our competitors;
- changes in how customers perceive the effectiveness of our platform in protecting against advanced cyber attacks or other reputational harm;
- publicity concerning cyber attacks in general or high profile cyber attacks against specific organizations;
- price and volume fluctuations in the overall stock market from time to time;
- significant volatility in the market price and trading volume of technology and/or growth companies in general and of companies in the IT security industry in particular;
- fluctuations in the trading volume of our shares or the size of our public float;
- actual or anticipated changes or fluctuations in our results of operations;
- litigation involving us, our industry, or both;
- regulatory developments in the United States, foreign countries or both;
- general economic conditions and trends;
- major catastrophic events;
- sales of large blocks of our common stock; and
- departures of key personnel.

In addition, if the market for technology stocks or the stock market in general experiences a loss of investor confidence, the trading price of our common stock could decline for reasons unrelated to our business, results of operations or financial condition. The trading price of our common stock might also decline in reaction to events that affect other companies in our industry even if these events do not directly affect us. In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. The price of our common stock has been highly volatile since our

IPO in September 2013, and beginning in June 2014, several lawsuits alleging violations of securities laws were filed against us and certain of our current and former directors and executive officers. This and any future securities litigation could result in substantial costs and divert our management's attention and resources from our business. This could have a material adverse effect on our business, results of operations and financial condition.

Sales of substantial amounts of our common stock in the public markets, or sales of our common stock by our executive officers and directors under Rule 10b5-1 plans, could adversely affect the market price of our common stock.

Sales of a substantial number of shares of our common stock in the public market, or the perception that such sales could occur, could adversely affect the market price of our common stock and may make it more difficult for you to sell your common stock at a time and price that you deem appropriate. In addition, certain of our executive officers and directors have adopted, and other executive officers and directors may in the future adopt, written plans, known as "Rule 10b5-1 Plans," under which they have contracted, or may in the future contract, with a broker to sell shares of our common stock on a periodic basis to diversify their assets and investments. Sales made by our executive officers and directors pursuant to Rule 10b5-1, regardless of the amount of such sales, could adversely affect the market price of our common stock.

The issuance of additional stock in connection with financings, acquisitions, investments, our stock incentive plans, conversion of our convertible notes or otherwise will dilute all other stockholders.

Our amended and restated certificate of incorporation authorizes us to issue up to 1,000,000,000 shares of common stock and up to 100,000,000 shares of preferred stock with such rights and preferences as may be determined by our board of directors. Subject to compliance with applicable rules and regulations, we may issue shares of common stock or securities convertible into our common stock from time to time in connection with a financing, acquisition, investment, our stock incentive plans, the conversion of our convertible notes or otherwise. For example, in December 2013, we issued approximately 16.9 million shares of common stock and assumed options to purchase approximately 4.6 million shares of our common stock in connection with our acquisition of Mandiant; in May 2014, we issued 295,681 shares of common stock and assumed options to purchase 63,490 shares of our common stock in connection with our acquisition of nPulse Technologies; in January 2016, we issued 1,793,305 shares of common stock in connection with our acquisition of iSIGHT; and in February 2016, we issued 742,026 shares of common stock in connection with our acquisition of Invotas. In addition, in June 2015, we issued \$920.0 million aggregate principal amount of convertible senior notes. Any future issuances could result in substantial dilution to our existing stockholders and cause the trading price of our common stock to decline.

We do not intend to pay dividends for the foreseeable future.

We have never declared or paid any dividends on our common stock. We intend to retain any earnings to finance the operation and expansion of our business, and we do not anticipate paying any cash dividends in the future. As a result, you may only receive a return on your investment in our common stock if the market price of our common stock increases.

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

As a public company, we are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, the listing requirements of the NASDAQ Stock Market and other applicable securities rules and regulations. Compliance with these rules and regulations has increased and will continue to increase our legal and financial compliance costs, has made and will continue to make some activities more difficult, time-consuming or costly, and has increased and will continue to increase demand on our systems and resources. Among other things, the Exchange Act requires that we file annual, quarterly and current reports with respect to our business and results of operations and maintain effective disclosure controls and procedures and internal control over financial reporting. In order to maintain and, if required, improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management's attention may be diverted from other business concerns, which could harm our business and results of operations. Although we have already hired additional employees to comply with these requirements, we may need to hire even more employees in the future, which will increase our costs and expenses.

We are subject to the independent auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act ("Section 404"), enhanced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. While we were able to determine in our management's report for fiscal 2016 that our internal control over financial reporting is effective, as well as provide an unqualified attestation report from our independent registered public accounting firm to that effect, we have and will continue to consume management resources and incur significant expenses for Section 404 compliance on an ongoing basis. In the event that our Chief Executive Officer, Chief Financial Officer, or independent registered public accounting firm determines in the future that our internal control over financial reporting is not effective as defined under Section 404, we could be subject to one or more investigations or enforcement actions by state or federal regulatory agencies, stockholder lawsuits or other adverse actions requiring us to incur defense costs, pay fines, settlements or judgments and causing investor perceptions to be adversely affected and potentially resulting in a decline in the market price of our stock.

In addition, changing laws, regulations and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs, and making some activities more time consuming. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest resources to comply with evolving laws, regulations, and standards, and this investment will increase our general and administrative expense and a diversion of management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations, and standards are unsuccessful, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

We also expect that being a public company and these new rules and regulations will make it more expensive for us to obtain and maintain director and officer liability insurance, and in the future, we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified executive officers and members of our board of directors, particularly to serve on our audit committee and compensation committee.

In addition, as a result of our disclosure obligations as a public company, we have reduced strategic flexibility and are under pressure to focus on short-term results, which may adversely impact our ability to achieve long-term profitability.

We are obligated to maintain proper and effective internal control over financial reporting. We may not complete our analysis of our internal control over financial reporting in a timely manner, or this internal control may not be determined to be effective, which may adversely affect investor confidence in our Company and, as a result, the value of our common stock.

We are required, pursuant to the Exchange Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting, as well as a statement that our auditors have issued an attestation report on our internal controls.

While we were able to determine in our management's report for fiscal 2016 that our internal control over financial reporting is effective, as well as provide an unqualified attestation report from our independent registered public accounting firm to that effect, we may not be able to complete our evaluation, testing, and any required remediation in a timely fashion or our independent registered public accounting firm may not be able to formally attest to the effectiveness of our internal control over financial reporting in the future. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting that we are unable to remediate before the end of the same fiscal year in which the material weakness is identified, we will be unable to assert that our internal controls are effective. If we are unable to assert that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to attest to the effectiveness of our internal controls or determine we have a material weakness in our internal controls, we could lose investor confidence in the accuracy and completeness of our financial reports, which would cause the price of our common stock to decline.

Our charter documents and Delaware law, as well as certain provisions of our convertible notes, could discourage takeover attempts and lead to management entrenchment, which could also reduce the market price of our common stock.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could delay or prevent a change in control of our Company. These provisions could also make it difficult for stockholders to elect directors who are not nominated by the current members of our board of directors or take other corporate actions, including effecting changes in our management. These provisions include:

- a classified board of directors with three-year staggered terms, which could delay the ability of stockholders to change the membership of a majority of our board of directors;
- the ability of our board of directors to issue shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquiror;
- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of our board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- the requirement that a special meeting of stockholders may be called only by our board of directors, the chairperson of our board of directors, our Chief Executive Officer or our President (in the absence of a Chief Executive Officer), which could delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors;

- the requirement for the affirmative vote of holders of at least 66 ²/₃% of the voting power of all of the then outstanding shares of the voting stock, voting together as a single class, to amend the provisions of our amended and restated certificate of incorporation relating to the management of our business (including our classified board structure) or certain provisions of our amended and restated bylaws, which may inhibit the ability of an acquiror to effect such amendments to facilitate an unsolicited takeover attempt;
- the ability of our board of directors to amend the bylaws, which may allow our board of directors to take additional actions to prevent an unsolicited takeover and inhibit the ability of an acquiror to amend the bylaws to facilitate an unsolicited takeover attempt; and
- advance notice procedures with which stockholders must comply to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect the acquiror's own slate of directors or otherwise attempting to obtain control of us.

In addition, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law, which may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a specified period of time. Additionally, certain provisions of our convertible notes could make it more difficult or more expensive for a third party to acquire us. The application of Section 203 or certain provisions of our convertible notes also could have the effect of discouraging, delaying or preventing a transaction involving a change in control of us. Any of these provisions could, under certain circumstances, depress the market price of our common stock.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters is located in Milpitas, California where we currently lease approximately 221,000 square feet of space under lease agreements that expire during the year ended December 31, 2018. In August 2016, we entered into a lease agreement for our new corporate headquarters, expected to commence mid-2017. We maintain additional offices throughout the United States and various international locations, including, but not limited to, Australia, Dubai, Germany, India, Ireland, Japan, Singapore and the United Kingdom. We believe that our current facilities are adequate to meet our ongoing needs, and that, if we require additional space, we will be able to obtain additional facilities on commercially reasonable terms.

Item 3. Legal Proceedings

The information set forth under "Litigation" in Note 9 contained in the "Notes to Consolidated Financial Statements" in Item 8 of Part II of this Annual Report on Form 10-K is incorporated herein by reference.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information

Our common stock, \$0.0001 par value per share, began trading on The NASDAQ Global Select Market on September 20, 2013, where its prices are quoted under the symbol "FEYE."

Holders of Record

As of December 31, 2016, there were 89 holders of record of our common stock. Because many of our shares are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

Price Range of Our Common Stock

The following table sets forth the reported high and low sales prices of our common stock for the periods indicated, as regularly quoted on The NASDAQ Global Select Market:

Year Ended December 31, 2016:	High	Low
First Quarter	\$ 22.48	\$ 11.35
Second Quarter	\$ 18.73	\$ 12.38
Third Quarter	\$ 18.42	\$ 13.38
Fourth Quarter	\$ 15.03	\$ 10.87
Year Ended December 31, 2015:		
	High	Low
First Quarter	\$ 46.44	\$ 29.25
Second Quarter	\$ 55.33	\$ 37.66
Third Quarter	\$ 50.94	\$ 30.15
Fourth Quarter	\$ 33.15	\$ 19.76

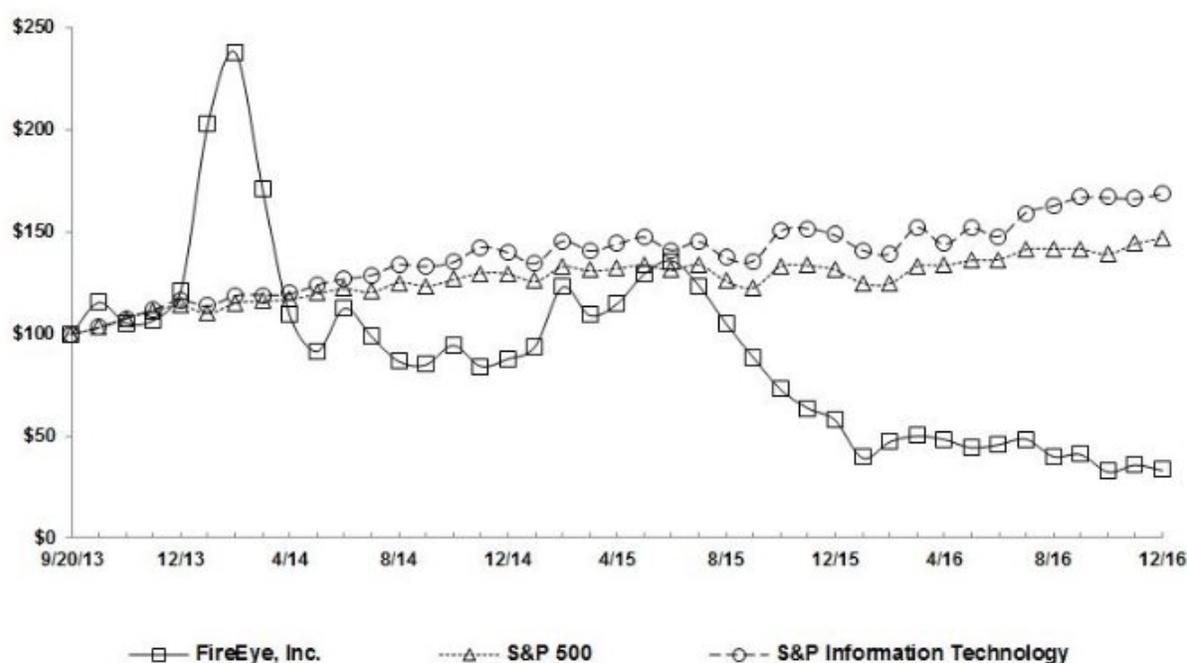
Stock Performance Graph

The following performance graph shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities under that Section, and shall not be deemed to be incorporated by reference into any of our filings under the Securities Act or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

The following graph compares the cumulative total return of our common stock with the total return for the Standard & Poor's 500 Index and the Standard & Poor's Information Technology Index from September 20, 2013 (the date our common stock commenced trading on The NASDAQ Global Select Market) through December 31, 2016. The graph assumes that \$100 was invested on September 20, 2013 in our common stock, the Standard & Poor's 500 Index and the Standard & Poor's Information Technology Index, and assumes reinvestment of any dividends. The stock price performance on the following graph is not necessarily indicative of future stock price performance.

COMPARISON OF 40 MONTH CUMULATIVE TOTAL RETURN*

Among FireEye, Inc., the S&P 500 Index
and the S&P Information Technology Index



*\$100 invested on 9/20/13 in stock or 8/31/13 in index, including reinvestment of dividends.
Fiscal year ending December 31.

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	9/20/13	12/13	4/14	8/14	12/14	4/15	8/15	12/15	4/16	8/16	12/16
FireEye, Inc.	\$ 100.00	\$ 121.14	\$ 109.06	\$ 86.50	\$ 87.72	\$ 114.72	\$ 104.94	\$ 57.61	\$ 48.19	\$ 39.89	\$ 33.06
S&P 500	\$ 100.00	\$ 113.98	\$ 116.90	\$ 125.25	\$ 129.58	\$ 132.07	\$ 125.84	\$ 131.37	\$ 133.66	\$ 141.64	\$ 147.09
S&P Information Technology	\$ 100.00	\$ 116.52	\$ 119.52	\$ 133.90	\$ 139.96	\$ 144.05	\$ 137.19	\$ 148.25	\$ 143.92	\$ 162.82	\$ 168.79

Dividend Policy

We have never declared or paid, and do not anticipate declaring or paying in the foreseeable future, any cash dividends on our capital stock. Any future determination as to the declaration and payment of dividends, if any, will be at the discretion of our board of directors, subject to applicable laws, and will depend on then existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects, and other factors our board of directors may deem relevant.

Recent Sales of Unregistered Securities

There were no sales of unregistered securities during the period covered by this Annual Report, other than those previously reported in a Quarterly Report on Form 10-Q or in a Current Report on Form 8-K.

Issuer Purchases of Equity Securities

No shares of our common stock were repurchased during the three months ended December 31, 2016.

Securities Authorized for Issuance Under Equity Compensation Plans

See Item 12 of Part III of this Annual Report on Form 10-K regarding information about securities authorized for issuance under our equity compensation plans.

Item 6. Selected Consolidated Financial Data

The following selected historical financial data should be read in conjunction with Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and our financial statements and the related notes appearing in Item 8, “Financial Statements and Supplementary Data,” of this Annual Report on Form 10-K to fully understand the factors that may affect the comparability of the information presented below.

The statements of operations data for the years ended December 31, 2016, 2015 and 2014 and the balance sheet data as of December 31, 2016 and 2015 are derived from our audited financial statements appearing in Item 8, “Financial Statements and Supplementary Data,” of this Annual Report on Form 10-K. The statements of operations for the years ended December 31, 2013 and 2012 and the balance sheet data as of December 31, 2014, 2013 and 2012 are derived from audited financial statements not included in this Annual Report on Form 10-K. Our historical results are not necessarily indicative of the results to be expected in the future.

	Year Ended December 31,				
	2016	2015	2014	2013	2012
	(In thousands, except per share data)				
Consolidated Statements of Operations Data:					
Revenue:					
Product	\$ 151,926	\$ 216,632	\$ 178,246	\$ 88,253	\$ 52,265
Subscription and services	562,188	406,335	247,416	73,299	31,051
Total revenue	714,114	622,967	425,662	161,552	83,316
Cost of revenue: ⁽¹⁾					
Product	65,158	74,481	58,980	28,912	14,467
Subscription and services	206,710	158,723	116,113	18,853	3,163
Total cost of revenue	271,868	233,204	175,093	47,765	17,630
Total gross profit	442,246	389,763	250,569	113,787	65,686
Operating expenses: ⁽¹⁾					
Research and development	279,594	279,467	203,187	66,036	16,522
Sales and marketing	439,499	476,166	401,151	167,466	67,562
General and administrative	139,839	141,790	121,099	52,503	15,221
Restructuring charges	27,630	—	4,327	—	—
Total operating expenses	886,562	897,423	729,764	286,005	99,305
Operating loss	(444,316)	(507,660)	(479,195)	(172,218)	(33,619)
Interest income	6,582	2,935	713	68	7
Interest expense	(47,869)	(27,116)	(26)	(525)	(537)
Other income (expense), net	(3,247)	(3,284)	(1,936)	(7,257)	(2,572)
Loss before income taxes	(488,850)	(535,125)	(480,444)	(179,932)	(36,721)
Provision for (benefit from) income taxes	(8,721)	4,090	(36,654)	(59,297)	(965)
Net loss attributable to common stockholders	\$ (480,129)	\$ (539,215)	\$ (443,790)	\$ (120,635)	\$ (35,756)
Net loss per share attributable to common stockholders, basic and diluted	\$ (2.94)	\$ (3.50)	\$ (3.12)	\$ (2.66)	\$ (3.28)
Weighted-average shares used to compute net loss per share attributable to common stockholders	163,211	154,120	142,176	45,271	10,917

(1) Includes share-based compensation expense as follows:

	Year Ended December 31,				
	2016	2015	2014	2013	2012
	(In thousands)				
Stock-Based Compensation Expense:					
Cost of product revenue	\$ 2,092	\$ 1,588	\$ 888	\$ 469	\$ 115
Cost of subscription and services revenue	29,811	29,435	17,037	2,341	55
Research and development	64,755	68,329	28,968	6,958	1,465
Sales and marketing	57,750	73,286	66,773	10,748	1,672
General and administrative	43,343	49,793	38,186	8,342	3,536
Restructuring	1,144	—	—	—	—
Total stock-based compensation expense	\$ 198,895	\$ 222,431	\$ 151,852	\$ 28,858	\$ 6,843

	As of December 31,				
	2016	2015	2014	2013	2012
	(In thousands)				
Consolidated Balance Sheet Data:					
Cash and cash equivalents	\$ 223,667	\$ 402,102	\$ 146,363	\$ 173,918	\$ 60,200
Total assets	2,382,965	2,441,473	1,758,881	1,376,313	125,273
Total deferred revenue	653,516	526,998	352,543	187,514	76,406
Total long-term debt	741,980	706,198	—	—	12,147
Total stockholders' equity	\$ 841,112	\$ 1,044,372	\$ 1,250,828	\$ 1,048,102	\$ 5,390

Item 7. 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 financial statements and related notes appearing elsewhere in this Annual Report on Form 10-K. In addition to historical financial information, the following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those contained in or implied by any forward-looking statements. Factors that could cause or contribute to these differences include those under "Risk Factors" included in Part I, Item 1A or in other parts of this Annual Report on Form 10-K.

Overview

We provide comprehensive intelligence-based cybersecurity solutions that allow organizations to prepare for, prevent, respond to and remediate cyber attacks. Our portfolio of cybersecurity products and services is designed to detect and prevent attacks as well as enable rapid discovery and response when a breach occurs.

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 appliance-based threat detection and prevention solutions, consisting of NX, EX, HX and FX Series of security appliances. While our NX Series of integrated appliances still accounts for the largest portion of our product revenue, we offer our threat detection and prevention products in multiple form factors for cloud and hybrid deployments. Our detection and prevention products are complemented by our forensics and investigation products, our security management appliance, our orchestration software and our consulting services to enable a proactive approach to cybersecurity that extends across the entire security operations lifecycle. Revenue from sales of our security 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 of our appliance-based detection and prevention products. 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 support services have increased our deferred revenue, which totaled \$653.5 million and \$527.0 million as of December 31, 2016 and 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 years ended December 31, 2016, 2015 and 2014, subscription and services revenue as a percentage of total revenue was 79%, 65% and 58%, 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 and support expiring in the 12 months ended December 31, 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 support add to the efficacy of our product portfolio.

Beyond the product and attached threat intelligence subscriptions and support and maintenance services, we offer several security-as-a-service offerings, including Cloud MVX, ETP, TAP, FireEye-as-a-Service and our newly introduced FireEye Helix platform. Revenue from these security-as-a-service subscriptions is recognized ratably over the subscription term; typically one to three years. We also offer professional services, including incident response and other security consulting services for our customers who have experienced a cybersecurity breach or require assistance assessing the resilience of their networks. Revenue from these professional 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.

	Year Ended or as of December 31,		
	2016	2015	2014
	(Dollars in thousands)		
Product revenue	\$ 151,926	\$ 216,632	\$ 178,246
Subscription and services revenue	562,188	406,335	247,416
Total revenue	\$ 714,114	\$ 622,967	\$ 425,662
Year-over-year percentage increase	15%	46%	163%
Gross margin percentage	62%	63%	59%
Deferred revenue, current	\$ 397,118	\$ 305,169	\$ 203,877
Deferred revenue, non-current	\$ 256,398	\$ 221,829	\$ 148,666
Billings (non-GAAP)	\$ 819,545	\$ 797,422	\$ 590,691
Net cash provided by (used in) operating activities	\$ (14,585)	\$ 37,015	\$ (131,270)
Free cash flow (non-GAAP)	\$ (50,899)	\$ (17,534)	\$ (198,985)

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 previously invoiced subscriptions to our threat intelligence, security-as-a-service and support and maintenance contracts. Subscriptions and support contracts are generally non-cancelable, except for cause, and are typically invoiced and paid up-front. 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, excluding deferred revenue assumed through acquisitions. 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 define 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 year ended December 31, 2016, billings exclude \$21.1 million of deferred revenue assumed in connection with our acquisitions. A reconciliation of billings to revenue, the most directly comparable financial measure calculated and presented in accordance with GAAP, is provided below:

	Year Ended December 31,		
	2016	2015	2014
	(in thousands)		
Revenue	\$ 714,114	\$ 622,967	\$ 425,662
Add: Deferred revenue, end of period	653,516	526,998	352,543
Less: Deferred revenue, beginning of period	526,998	352,543	187,514
Less: Deferred revenue assumed through acquisitions	21,087	—	—
Billings (non-GAAP)	\$ 819,545	\$ 797,422	\$ 590,691

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:

	Year Ended December 31,		
	2016	2015	2014
	(in thousands)		
Cash flow provided by (used in) operating activities	\$ (14,585)	\$ 37,015	\$ (131,270)
Less: purchase of property and equipment and demonstration units	36,314	54,549	67,715
Free cash flow (non-GAAP)	\$ (50,899)	\$ (17,534)	\$ (198,985)
Net cash used in investing activities	\$ (189,696)	\$ (576,749)	\$ (382,511)
Net cash provided by financing activities	\$ 25,846	\$ 795,473	\$ 486,226

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 in-house sales teams who work in collaboration with external partners to identify new sales prospects, sell additional products, subscriptions and services, and provide post-sale support. To date, we have primarily targeted

large enterprise and government customers, who typically have sales cycles that can last several months or more. 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 the 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 and support expiring in the 12 months ended December 31, 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 79% , 65% and 58% of our total revenue during the years ended December 31, 2016 , 2015 and 2014 , 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” below, 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, 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 service costs and allocated overhead. General and administrative personnel include our executive, finance, human resources, facilities and legal organizations. Professional service costs 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 addition to our previous restructuring activities, 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. 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.

	Year Ended December 31,		
	2016	2015	2014
(In thousands)			
Revenue:			
Product	\$ 151,926	\$ 216,632	\$ 178,246
Subscription and services	562,188	406,335	247,416
Total revenue	714,114	622,967	425,662
Cost of revenue:			
Product	65,158	74,481	58,980
Subscription and services	206,710	158,723	116,113
Total cost of revenue	271,868	233,204	175,093
Total gross profit	442,246	389,763	250,569
Operating expenses:			
Research and development	279,594	279,467	203,187
Sales and marketing	439,499	476,166	401,151
General and administrative	139,839	141,790	121,099
Restructuring charges	27,630	—	4,327
Total operating expenses	886,562	897,423	729,764
Operating loss	(444,316)	(507,660)	(479,195)
Interest income	6,582	2,935	713
Interest expense	(47,869)	(27,116)	(26)
Other expense, net	(3,247)	(3,284)	(1,936)
Loss before income taxes	(488,850)	(535,125)	(480,444)
Provision for (benefit from) income taxes	(8,721)	4,090	(36,654)
Net loss attributable to common stockholders	\$ (480,129)	\$ (539,215)	\$ (443,790)

	Year Ended December 31,		
	2016	2015	2014
	(Percent of total revenue)		
Revenue:			
Product	21 %	35 %	42 %
Subscription and services	79	65	58
Total revenue	100	100	100
Cost of revenue:			
Product	9	12	14
Subscription and services	29	25	27
Total cost of revenue	38	37	41
Total gross profit	62	63	59
Operating expenses:			
Research and development	39	45	48
Sales and marketing	61	76	94
General and administrative	20	23	28
Restructuring charges	4	—	1
Total operating expenses	124	144	171
Operating loss	(62)	(81)	(112)
Interest income	1	—	—
Interest expense	(7)	(4)	—
Other expense, net	—	(1)	(1)
Loss before income taxes	(68)	(86)	(113)
Provision for (benefit from) income taxes	(1)	1	(9)
Net loss attributable to common stockholders	(67)%	(87)%	(104)%

Comparison of the Years Ended December 31, 2016 and 2015

Revenue

	Year Ended December 31,					
	2016		2015		Change	
	Amount	% of Total Revenue	Amount	% of Total Revenue	Amount	%
(Dollars in thousands)						
Revenue:						
Product	\$ 151,926	21%	\$ 216,632	35%	\$ (64,706)	(30)%
Subscription and services	562,188	79	406,335	65	155,853	38
Total revenue	\$ 714,114	100%	\$ 622,967	100%	\$ 91,147	15 %
Subscription and services by type:						
Product subscription	\$ 316,986	45%	\$ 205,303	33%	\$ 111,683	54 %
Support and maintenance	123,341	17	89,800	14	33,541	37
Professional services	121,861	17	111,232	18	10,629	10
Total subscription and services revenue	\$ 562,188	79%	\$ 406,335	65%	\$ 155,853	38 %
Revenue by geographic region:						
United States	\$ 488,623	69%	\$ 439,205	70%	\$ 49,418	11 %
EMEA	102,288	14	80,960	13	21,328	26
APAC	95,285	13	73,009	12	22,276	31
Other	27,918	4	29,793	5	(1,875)	(6)
Total revenue	\$ 714,114	100%	\$ 622,967	100%	\$ 91,147	15 %

Product revenue decreased by \$64.7 million , or 30% , during the year ended December 31, 2016 compared to the year ended December 31, 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. We expect product revenue growth rates to continue to decline as part of this ongoing transition.

Subscription and services revenue increased by \$155.9 million , or 38% , during the year ended December 31, 2016 compared to the year ended December 31, 2015 . This increase was comprised of subscription revenue of \$111.7 million , support and maintenance revenue of \$33.6 million and professional services revenue of \$10.6 million . The increase in subscription revenue of \$111.7 million and the increase in support and maintenance revenue of \$33.6 million were primarily due to an increase in initial customer purchases of \$74.0 million and an increase in the amortization of deferred subscription and support revenue related to renewals of \$71.3 million during the year ended December 31, 2016 compared to the year ended December 31, 2015 . We expect a continued transition of customers from product sales to our cloud subscriptions. Given our high renewal rate, we expect revenue from the amortization of deferred subscription and support related to renewals to increase as a percentage of our total revenue from subscription and support. Our renewal rate for subscription and support agreements expiring in the 12 months ended December 31, 2016 was in excess of 90% .

Our international revenue increased \$41.7 million , or 23% , during the year ended December 31, 2016 compared to the year ended December 31, 2015 , which reflects our increasing international market presence.

Cost of Revenue and Gross Margin

	Year Ended December 31,					
	2016		2015		Change	
	Amount	Gross Margin	Amount	Gross Margin	Amount	%
(Dollars in thousands)						
Cost of revenue:						
Product	\$ 65,158		\$ 74,481		\$ (9,323)	(13)%
Subscription and services	206,710		158,723		47,987	30
Total cost of revenue	<u>\$ 271,868</u>		<u>\$ 233,204</u>		<u>\$ 38,664</u>	<u>17 %</u>
Gross margin:						
Product		57%		66%		
Subscription and services		63%		61%		
Total gross margin		62%		63%		

The cost of product revenue decreased \$9.3 million , or 13% , during the year ended December 31, 2016 compared to the year ended December 31, 2015 . The decrease in cost of product revenue was primarily driven by fewer product shipments and lower average product cost per unit, partially offset by greater inventory reserves.

The cost of subscription and services revenue increased \$48.0 million , or 30% , during the year ended December 31, 2016 compared to the year ended December 31, 2015 . The increase in cost of subscription and services revenue was due to a \$31.4 million increase in personnel costs, largely driven by increased headcount, including those attributable to our 2016 acquisitions. Additionally, \$11.3 million of the increase is due to the amortization of intangible assets obtained through our 2016 acquisitions, and \$5.6 million of the increase was for higher facility and IT costs.

Gross margin was slightly lower for the year ended December 31, 2016 compared to the year ended December 31, 2015 , due to a decrease in product margins partially 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 higher utilization of our professional services personnel.

Operating Expenses

	Year Ended December 31,					
	2016		2015		Change	
	Amount	% of Total Revenue	Amount	% of Total Revenue	Amount	%
(Dollars in thousands)						
Operating expenses:						
Research and development	\$ 279,594	39%	\$ 279,467	45%	\$ 127	— %
Sales and marketing	439,499	61	476,166	76	(36,667)	(8)
General and administrative	139,839	20	141,790	23	(1,951)	(1)
Restructuring charges	27,630	4	—	—	27,630	
Total operating expenses	<u>\$ 886,562</u>	<u>124%</u>	<u>\$ 897,423</u>	<u>144%</u>	<u>\$ (10,861)</u>	<u>(1)%</u>
Includes stock-based compensation expense of:						
Research and development	\$ 64,755		\$ 68,329			
Sales and marketing	57,750		73,286			
General and administrative	43,343		49,793			
Total	<u>\$ 165,848</u>		<u>\$ 191,408</u>			

Research and Development

Research and development expense for the year ended December 31, 2016 was consistent with the year ended December 31, 2015 . This is a result of increased headcount contributing to higher personnel costs, offset by lower facility, IT and other costs due to savings from the restructuring.

Sales and Marketing

Sales and marketing expense decreased \$36.7 million , or 8% , during the year ended December 31, 2016 compared to the year ended December 31, 2015 . The decrease was primarily due to lower commissions of \$24.5 million as well as a \$9.0 million net decrease in personnel costs, composed of a \$15.5 million decrease in stock-based compensation charges, partially offset by a \$6.5 million increase in salaries.

General and Administrative

General and administrative expense decreased \$2.0 million , or 1% , during the year ended December 31, 2016 compared to the year ended December 31, 2015 . The decrease was driven by lower legal and other professional service vendor costs of \$2.9 million and lower facility and IT costs of \$1.4 million . This was partially offset by a \$2.4 million charge for the change in fair value of the contingent earn-out liability.

Restructuring Charges

During the year ended December 31, 2016 , we incurred restructuring charges of approximately \$27.6 million , which primarily related to a 10% reduction in our workforce, the consolidation of certain real estate facilities and impairment of certain assets under our August 2016 restructuring plan. We incurred no restructuring expenses during the year ended December 31, 2015 .

Interest Income

	Year Ended December 31,					
	2016		2015		Change	
	Amount	%	Amount	%	Amount	%
(Dollars in thousands)						
Interest income	\$ 6,582		\$ 2,935		\$ 3,647	124%

Interest income increased for the year ended December 31, 2016 compared to the year ended December 31, 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

	<u>Year Ended December 31,</u>		<u>Change</u>	
	<u>2016</u>	<u>2015</u>	<u>Amount</u>	<u>%</u>
	(Dollars in thousands)			
Interest expense	\$ (47,869)	\$ (27,116)	\$ (20,753)	77%

Interest expense increased for the year ended December 31, 2016 compared to the year ended December 31, 2015 due to greater interest expense from the Convertible Senior Notes issued in June 2015.

Other Expense, Net

	<u>Year Ended December 31,</u>		<u>Change</u>	
	<u>2016</u>	<u>2015</u>	<u>Amount</u>	<u>%</u>
	(Dollars in thousands)			
Other expense, net	\$ (3,247)	\$ (3,284)	\$ 37	(1)%

Other expense, net remained consistent for the year ended December 31, 2016 compared to the year ended December 31, 2015 .

Provision for (Benefit from) Income Taxes

	<u>Year Ended December 31,</u>	
	<u>2016</u>	<u>2015</u>
	(Dollars in thousands)	
Provision for (benefit from) income taxes	\$ (8,721)	\$ 4,090
Effective tax rate	1.8%	(0.8)%

We recorded a tax benefit for the year ended December 31, 2016 compared to a tax provision for the year ended December 31, 2015 . The change to a tax benefit in 2016 is primarily due to the reversal of a valuation allowance of approximately \$12 million that had been previously recorded to reduce the benefit of U.S. deferred tax assets. We reversed the valuation allowance in 2016 as we recorded a similar amount of acquisition related U.S. deferred tax liabilities during the year, which are considered a source of future taxable income available to realize the benefit of U.S. deferred tax assets. We continue to maintain a full valuation allowance against the remainder of our U.S. deferred tax assets.

Comparison of the Years Ended December 31, 2015 and 2014

Revenue

	Year Ended December 31,					
	2015		2014		Change	
	Amount	% of Total Revenue	Amount	% of Total Revenue	Amount	%
(Dollars in thousands)						
Revenue:						
Product	\$ 216,632	35%	\$ 178,246	42%	\$ 38,386	22%
Subscription and services	406,335	65	247,416	58	158,919	64
Total revenue	<u>\$ 622,967</u>	<u>100%</u>	<u>\$ 425,662</u>	<u>100%</u>	<u>\$ 197,305</u>	<u>46%</u>
Subscription and services by type:						
Product subscription	\$ 205,303	33%	\$ 121,907	29%	\$ 83,396	68%
Support and maintenance	89,800	14	53,406	12	36,394	68
Professional services	111,232	18	72,103	17	39,129	54
Total subscription and services revenue	<u>\$ 406,335</u>	<u>65%</u>	<u>\$ 247,416</u>	<u>58%</u>	<u>\$ 158,919</u>	<u>64%</u>
Revenue by geographic region:						
United States	\$ 439,205	70%	\$ 319,144	75%	\$ 120,061	38%
EMEA	80,960	13	57,721	14	23,239	40
APAC	73,009	12	34,284	8	38,725	113
Other	29,793	5	14,513	3	15,280	105
Total revenue	<u>\$ 622,967</u>	<u>100%</u>	<u>\$ 425,662</u>	<u>100%</u>	<u>\$ 197,305</u>	<u>46%</u>

Product revenue increased by \$38.4 million, or 22%, during the year ended December 31, 2015 compared to the year ended December 31, 2014. The increase in product revenue was primarily driven by growth in our installed base of customers, which grew from approximately 3,100 as of December 31, 2014 to over 4,400 as of December 31, 2015, as well as follow-on purchases from customers expanding their initial deployments of our product portfolio. Our Network Threat Prevention and Email Threat Prevention products have historically accounted for the largest portion of our product revenue as customers initially focused on protecting Web and email entry points when building out their security infrastructure. Our product revenue growth rates have declined as new customers began adopting our cloud subscriptions, including FireEye-as-a-Service and ETP. We expect product revenue growth rates to continue to decline as part of this ongoing transition.

Subscription and service revenue increased by \$158.9 million, or 64%, during the year ended December 31, 2015 compared to the year ended December 31, 2014. This increase is comprised of an increase in subscription revenue of \$83.4 million, an increase in professional services revenue of \$39.1 million and an increase in support and maintenance revenue of \$36.4 million. The increase in subscription revenue of \$83.4 million and the increase in support and maintenance revenue of \$36.4 million is primarily due to an increase in initial customer purchases of \$87.6 million and an increase in the amortization of deferred subscription and support and maintenance revenue related to renewals of \$32.2 million for the year ended December 31, 2015 compared to the year ended December 31, 2014. We expect a continued transition of customers from product sales to our cloud subscriptions. Given our high renewal rate and increasing base of customers, 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 support agreements expiring in the 12 months ended December 31, 2015 was in excess of 90%.

International revenue increased \$77.2 million, or 73%, during the year ended December 31, 2015 compared to the year ended December 31, 2014, which reflects our increasing international market presence.

Cost of Revenue and Gross Margin

	Year Ended December 31,					
	2015		2014		Change	
	Amount	Gross Margin	Amount	Gross Margin	Amount	%
(Dollars in thousands)						
Cost of revenue:						
Product	\$ 74,481		\$ 58,980		\$ 15,501	26%
Subscription and services	158,723		116,113		42,610	37
Total cost of revenue	<u>\$ 233,204</u>		<u>\$ 175,093</u>		<u>\$ 58,111</u>	<u>33%</u>
Gross margin:						
Product		66%		67%		
Subscription and services		61%		53%		
Total gross margin		63%		59%		

The cost of product revenue increased \$15.5 million, or 26%, during the year ended December 31, 2015 compared to the year ended December 31, 2014. The increase in cost of product revenue was driven primarily by an increase in product revenue.

The cost of subscription and services revenue increased \$42.6 million, or 37%, during the year ended December 31, 2015 compared to the year ended December 31, 2014. The increase in cost of subscription and services revenue was driven by a \$16.4 million increase in facility and IT costs to support departmental expansion, a \$12.4 million increase in stock-based compensation charges, a \$6.8 million increase due to higher data hosting services and a \$5.4 million increase in depreciation, of which \$1.1 million related to accelerated depreciation as a result of changes in the estimated useful life of certain assets which were replaced in the first quarter of 2016.

Gross margin increased for the year ended December 31, 2015 compared to the year ended December 31, 2014, due to the increase in subscription and services margins. The increase in subscription and services margins is primarily due to the proportion of revenues attributable to subscriptions, which have higher gross margins compared to incident response, compromise assessments and other professional services.

Operating Expenses

	Year Ended December 31,					
	2015		2014		Change	
	Amount	% of Total Revenue	Amount	% of Total Revenue	Amount	%
(Dollars in thousands)						
Operating expenses:						
Research and development	\$ 279,467	45%	\$ 203,187	48%	\$ 76,280	38 %
Sales and marketing	476,166	76	401,151	94	75,015	19
General and administrative	141,790	23	121,099	28	20,691	17
Restructuring charges	—	—	4,327	1	(4,327)	(100)
Total operating expenses	<u>\$ 897,423</u>	<u>144%</u>	<u>\$ 729,764</u>	<u>171%</u>	<u>\$ 167,659</u>	<u>23 %</u>
Includes stock-based compensation expense of:						
Research and development	\$ 68,329		\$ 28,968			
Sales and marketing	73,286		66,773			
General and administrative	49,793		38,186			
Total	<u>\$ 191,408</u>		<u>\$ 133,927</u>			

Research and Development

Research and development expense increased \$76.3 million, or 38%, during the year ended December 31, 2015 compared to the year ended December 31, 2014. The increase was primarily driven by a \$62.2 million increase in personnel costs, primarily due to a \$39.4 million increase in stock-based compensation charges, as well as a 24% increase in headcount. Additionally, \$8.8 million of the increase was driven by higher facility and IT costs to support departmental expansion and continued investment in our future product and service offerings.

Sales and Marketing

Sales and marketing expense increased \$75.0 million, or 19%, during the year ended December 31, 2015 compared to the year ended December 31, 2014. The increase was primarily driven by a \$38.7 million increase in personnel costs, of which \$6.5 million was related to stock-based compensation charges, largely as a result of a 28% increase in headcount, as well as a \$23.4 million increase in commissions associated with higher sales. Additionally, \$7.5 million of the increase was driven by higher facility and IT costs to support departmental expansion.

General and Administrative

General and administrative expense increased \$20.7 million, or 17%, during the year ended December 31, 2015 compared to the year ended December 31, 2014. The increase was primarily driven by a \$21.2 million increase in personnel costs, of which \$11.6 million was related to stock-based compensation charges, largely as a result of a 32% increase in headcount.

Restructuring Charges

During the year ended December 31, 2014, we incurred restructuring charges of \$4.3 million, of which \$1.6 million related to workforce reductions and \$2.7 million related to facility consolidations, as part of our plans initiated in August 2014 to reduce our cost structure and improve efficiency. We incurred no restructuring charges during the year ended December 31, 2015.

Interest Income

	Year Ended December 31,		Change	
	2015	2014	Amount	%
	(Dollars in thousands)			
Interest income	\$ 2,935	\$ 713	\$ 2,222	312%

Interest income increased during the year ended December 31, 2015 compared to the year ended December 31, 2014 due to higher average balances in our cash and cash equivalents and investments.

Interest Expense

	Year Ended December 31,		Change	
	2015	2014	Amount	%
	(Dollars in thousands)			
Interest expense	\$ (27,116)	\$ (26)	\$ (27,090)	104,192%

Interest expense increased during the year ended December 31, 2015 compared to the year ended December 31, 2014 due to cash interest expense of \$7.0 million and amortization of discount and issuance costs of \$20.1 million from the Convertible Senior Notes issued in June 2015.

Other Expense, Net

	Year Ended December 31,		Change	
	2015	2014	Amount	%
	(Dollars in thousands)			
Other expense, net	\$ (3,284)	\$ (1,936)	\$ (1,348)	70%

The increase in other expense, net during the year ended December 31, 2015 compared to the year ended December 31, 2014 was primarily due to foreign currency transaction losses caused by unfavorable changes in foreign currency exchange rates .

Provision for (Benefit from) Income Taxes

	Year Ended December 31,		Amount	%
	2015	2014		
	(Dollars in thousands)			
Provision for (benefit from) income taxes			\$ 4,090	\$ (36,654)
Effective tax rate			(0.8)%	7.6%

The change from a benefit from income taxes to a provision for income taxes during the year ended December 31, 2015 compared to the year ended December 31, 2014 was primarily due to the fact that we no longer have deferred tax liabilities in excess of our deferred tax assets which would be available as a source of income for purposes of determining our valuation allowance. 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 December 31, 2015. The tax expense for the year ended December 31, 2015 is primarily due to foreign taxes.

Quarterly Results of Operations

The following unaudited quarterly statements of operations data for each of the eight quarters in the period ended December 31, 2016 have been prepared on a basis consistent with our audited annual financial statements included in this Annual Report on Form 10-K and include, in our opinion, all normal recurring adjustments necessary for the fair presentation of the financial information contained in those statements. Our historical results are not necessarily indicative of the results that may be expected in the future. The following quarterly financial data should be read in conjunction with our audited financial statements and the related notes included in this Annual Report on Form 10-K.

	Three Months Ended							
	December 31, 2016	September 30, 2016	June 30, 2016	March 31, 2016	December 31, 2015	September 30, 2015	June 30, 2015	March 31, 2015
(In thousands)								
Revenue:								
Product	\$ 33,586	\$ 43,857	\$ 40,776	\$ 33,707	\$ 66,598	\$ 60,101	\$ 49,696	\$ 40,237
Subscription and services	151,110	142,554	134,265	134,259	118,176	105,515	97,511	85,133
Total revenue	184,696	186,411	175,041	167,966	184,774	165,616	147,207	125,370
Cost of revenue:								
Product	15,391	16,675	15,959	17,133	20,915	21,265	17,101	15,200
Subscription and services	48,567	52,378	51,468	54,297	42,260	40,606	39,006	36,851
Total cost of revenue	63,958	69,053	67,427	71,430	63,175	61,871	56,107	52,051
Total gross profit	120,738	117,358	107,614	96,536	121,599	103,745	91,100	73,319
Operating expenses:								
Research and development	54,574	62,665	76,372	85,983	71,690	73,374	68,798	65,605
Sales and marketing	84,310	110,756	121,405	123,028	135,432	117,131	116,008	107,595
General and administrative	30,914	32,860	33,809	42,256	37,978	36,518	34,687	32,607
Restructuring charges	—	22,423	3,537	1,670	—	—	—	—
Total operating expenses	169,798	228,704	235,123	252,937	245,100	227,023	219,493	205,807
Operating loss	(49,060)	(111,346)	(127,509)	(156,401)	(123,501)	(123,278)	(128,393)	(132,488)
Interest income	1,803	1,687	1,627	1,465	1,319	956	391	269
Interest expense	(12,132)	(12,019)	(11,909)	(11,809)	(11,691)	(11,587)	(3,838)	—
Other expense, net	(2,404)	(467)	(1,191)	815	(725)	(985)	(806)	(768)
Loss before income taxes	(61,793)	(122,145)	(138,982)	(165,930)	(134,598)	(134,894)	(132,646)	(132,987)
Provision for (benefit from) income taxes	(257)	1,228	338	(10,030)	1,550	636	927	977
Net loss attributable to common stockholders	\$ (61,536)	\$ (123,373)	\$ (139,320)	\$ (155,900)	\$ (136,148)	\$ (135,530)	\$ (133,573)	\$ (133,964)
Net loss per share attributable to common stockholders, basic and diluted	\$ (0.37)	\$ (0.75)	\$ (0.86)	\$ (0.98)	\$ (0.87)	\$ (0.88)	\$ (0.87)	\$ (0.88)
Weighted average shares used to compute net loss per share attributable to common stockholders, basic and diluted	167,228	164,728	162,045	158,781	156,137	154,523	154,121	151,651

	Three Months Ended							
	December 31, 2016	September 30, 2016	June 30, 2016	March 31, 2016	December 31, 2015	September 30, 2015	June 30, 2015	March 31, 2015
(Percent of total revenue)								
Revenue:								
Product	18 %	24 %	23 %	20 %	36 %	36 %	34 %	32 %
Subscription and services	82	76	77	80	64	64	66	68
Total revenue	100	100	100	100	100	100	100	100
Cost of revenue:								
Product	8	9	9	10	11	13	12	12
Subscription and services	26	28	30	33	23	24	26	30
Total cost of revenue	34	37	39	43	34	37	38	42
Total gross profit	66	63	61	57	66	63	62	58
Operating expenses:								
Research and development	30	34	44	51	39	44	47	52
Sales and marketing	46	59	69	73	73	71	79	86
General and administrative	17	18	19	25	21	22	23	26
Restructuring charges	—	12	2	1	—	—	—	—
Total operating expenses	93	123	134	150	133	137	149	164
Operating loss	(27)	(60)	(73)	(93)	(67)	(74)	(87)	(106)
Interest income	1	1	1	1	1	1	—	—
Interest expense	(7)	(7)	(7)	(7)	(6)	(7)	(3)	—
Other expense, net	(1)	—	(1)	—	(1)	(1)	—	—
Loss before income taxes	(34)	(66)	(80)	(99)	(73)	(81)	(90)	(106)
Provision for (benefit from) income taxes	—	—	—	(6)	1	1	1	1
Net loss attributable to common stockholders	(34)%	(66)%	(80)%	(93)%	(74)%	(82)%	(91)%	(107)%

Quarterly Revenue Trends

Our quarterly revenue increased year-over-year for all periods presented, except the fourth quarter of 2016 which was consistent with the fourth quarter of 2015 due to unseasonably low product sales in the fourth quarter of 2016. This is primarily due to increased subscription sales which were bolstered by our acquisition of iSIGHT in the first quarter of 2016. Sequentially, our subscription and services revenues continued to increase each quarter due to a shift in customer buying preferences away from on premise appliance-based solutions to cloud-based and cloud-enabled subscriptions. As our mix of sales continues to shift from products to subscriptions and services, we believe there will be less volatility in our quarterly trends due to the ratable nature of revenue recognition associated with our subscription and service offerings. However, we have not yet assessed all the potential impacts the new standard on revenue recognition will have, which upon implementation could, at least temporarily, increase the volatility in these results (See Note 1 contained in the "Notes to Consolidated Financial Statements" in Item 8 of Part II of this Annual Report on Form 10-K for discussion of anticipated impact and status of adoption of the new standard on revenue recognition).

Quarterly Gross Margin Trends

Consistent with our quarterly revenues, quarterly gross profit increased year-over-year for all periods presented, except the fourth quarter of 2016 which was consistent with the fourth quarter of 2015. Total gross margin, or gross profit as a percentage of revenue, steadily increased each sequential quarter within both 2015 and 2016, largely due to the shift in sales mix in product and subscriptions and services, other than from the fourth quarter of 2015 to the first quarter of 2016. As our mix of sales continues to shift from products to subscriptions and services, we believe there will be less volatility in our quarterly trends due to the ratable nature of revenue recognition associated with our subscription and service offerings, but still expect fluctuations in our quarterly gross margins in the future.

Quarterly Expense Trends

Total operating expenses increased sequentially through the first quarter of 2016, after which it began to decline each subsequent quarter as a result of our restructuring activities in 2016. This trend was consistent among each category of operating expenses. Beginning with the second quarter of 2016, we began realizing savings from our restructuring plans designed to align our expense structure with current growth expectations.

Liquidity and Capital Resources

	As of December 31,	
	2016	2015
	(In thousands)	
Cash and cash equivalents	\$ 223,667	\$ 402,102
Short-term investments	\$ 712,058	\$ 767,775

	Year Ended December 31,		
	2016	2015	2014
	(In thousands)		
Cash provided by (used in) operating activities	\$ (14,585)	\$ 37,015	\$ (131,270)
Cash used in investing activities	(189,696)	(576,749)	(382,511)
Cash provided by financing activities	25,846	795,473	486,226
Net increase (decrease) in cash and cash equivalents	\$ (178,435)	\$ 255,739	\$ (27,555)

As of December 31, 2016, our cash and cash equivalents of \$223.7 million were held for working capital, capital expenditures, investment in technology, debt servicing and business acquisition purposes, of which approximately \$59.6 million was held outside of the United States. We consider the undistributed earnings of our foreign subsidiaries as of December 31, 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.

In May 2014, we acquired privately held nPulse Technologies, a performance leader in network forensics based in Charlottesville, Virginia. This purchase consisted of \$55.2 million in cash, \$0.1 million of equity awards assumed, and 54,319 shares of our common stock with a fair value of \$1.3 million which will vest upon the achievement of certain milestones.

In March 2014, we completed our follow-on public offering in which we issued and sold 5,582,215 shares of common stock at a price of \$82.00 per share. We received aggregate proceeds of \$446.5 million from the sale of shares of common stock, net of underwriters' discounts and commissions of \$11.2 million, but before deducting offering expenses of \$2.2 million. Another 8,417,785 shares were sold by certain selling stockholders, which included 796,846 shares sold pursuant to the exercise of vested outstanding options by our employees. We did not receive any of the proceeds from the sales of shares by the selling stockholders.

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 year ended December 31, 2016, our operating activities used cash of \$14.6 million. We incurred a net loss of \$480.1 million, which included net non-cash expenses of \$354.4 million, primarily consisting of stock-based compensation charges and

depreciation and amortization expense. Our net change in operating assets and liabilities provided cash of \$111.2 million , primarily sourced from deferred revenue for \$105.4 million , as a result of increases in sales of subscriptions and support and maintenance services, and accounts receivable for \$61.8 million , resulting from increased collections which benefited from the restructuring of programs to incentivize early payment. These sources of cash were partially offset by the use of cash related to current liabilities of \$62.6 million , which included the payment of \$7.7 million for transaction costs incurred by iSIGHT and Invotas prior to acquisition.

During the year ended December 31, 2015 , our operating activities provided cash of \$37.0 million . We incurred a net loss of \$539.2 million , which included net non-cash expenses of \$357.5 million , primarily consisting of stock-based compensation charges, depreciation and amortization expense and non-cash interest expense related to our convertible senior notes. Our net change in operating assets and liabilities provided cash of \$218.8 million , primarily sourced from deferred revenue for \$174.5 million , as a result of increases in sales of subscriptions and support and maintenance services, accounts receivable for \$19.1 million , resulting from increased collection efforts and early payment incentives, and accrued liabilities and compensation for \$22.2 million as a result of growth in our headcount and business expansion.

During the year ended December 31, 2014, our operating activities used cash of \$131.3 million. We incurred a net loss of \$443.8 million, which included net non-cash expenses of \$208.4 million, primarily consisting of stock-based compensation charges, depreciation and amortization expense, and deferred tax benefit. Our net change in operating assets and liabilities provided cash of \$104.1 million, primarily sourced from deferred revenue for \$164.7 million as a result of increases in sales of subscriptions and support and maintenance services, and accrued liabilities and compensation for \$35.1 million as a result of the growth in our headcount and business expansion, partially offset by the use of cash related to accounts receivable for \$97.2 million resulting from growth in our billings.

Investing Activities

Cash used in investing activities during the year ended December 31, 2016 was \$189.7 million , primarily for the acquisitions of iSIGHT and Invotas and, to a lesser extent, capital expenditures to purchase property and equipment and demonstration units, partially offset by net redemptions and sales of short-term investments.

Cash used in investing activities during the year ended December 31, 2015 was \$576.7 million, primarily for the purchase of marketable securities to invest a significant portion of the cash received from our convertible senior notes offering, net of maturities, and, to a lesser extent, for capital expenditures to purchase property and equipment and demonstration units.

Cash used in investing activities during the year ended December 31, 2014 was \$382.5 million, primarily for the purchase of marketable securities to invest a significant portion of the cash received from our follow-on public offering, net of maturities, and, to a lesser extent, for capital expenditures to purchase property and equipment and demonstration units and for the acquisition of nPulse. This use of cash was partially offset by \$31.6 million received from the sale of certain marketable securities.

Financing Activities

During the year ended December 31, 2016 , financing activities provided \$25.8 million in cash, primarily due to proceeds from employee purchases of shares under our 2013 Employee Stock Purchase Plan ("ESPP") and exercises of stock options, partially offset by the repayment of debt assumed through acquisitions.

During the year ended December 31, 2015, financing activities provided \$795.5 million in cash, primarily from net proceeds of \$896.5 million from our convertible senior notes offering, as well as proceeds of \$29.1 million from the exercise of employee stock options, net of repurchases. These sources of cash were partially offset by the use of \$150.0 million associated with the Prepaid Forward.

During the year ended December 31, 2014, financing activities provided \$486.2 million in cash, primarily from net proceeds of \$444.3 million from our follow-on public offering, as well as proceeds of \$22.7 million from the exercise of employee stock options, net of repurchases.

Contractual Obligations and Commitments

The following summarizes our contractual obligations and commitments as of December 31, 2016 :

	Payments Due by Period				
	Total	Less Than 1 Year	1 - 3 Years	3 - 5 Years	More Than 5 Years
	(In thousands)				
Convertible Senior Notes	\$ 977,213	\$ 12,075	\$ 24,150	\$ 477,250	\$ 463,738
Operating leases	105,410	15,715	27,688	22,743	39,264
Purchase obligations	20,673	14,812	5,861	—	—
Contract manufacturer commitments	10,239	10,239	—	—	—
Total	\$ 1,113,535	\$ 52,841	\$ 57,699	\$ 499,993	\$ 503,002

Total future non-cancelable minimum rental payments under operating leases of \$105.4 million shown in the table above have not been reduced by future minimum sublease rentals totaling \$6.9 million .

Total future payments related to our Convertible Senior Notes of \$977.2 million shown in the table above is composed of \$460.0 million principal amount of Series A Notes, \$460.0 million principal amount of Series B Notes and future interest of \$57.2 million . Although the Convertible Senior Notes have a stated maturity of June 1, 2035, they have been reflected in the table above assuming repurchase on June 1, 2020 in the case of the Series A Notes and June 1, 2022 in the case of the Series B Notes (the first date holders have the right to require us to repurchase all or any portion of their Convertible Senior Notes) at 100% of the principal amount plus accrued and unpaid interest as of these dates.

Due to the uncertainty with respect to the timing of future cash flows associated with our unrecognized tax benefits as of December 31, 2016 , we are unable to make reasonably reliable estimates of the period of cash settlement with the respective taxing authorities. Therefore, approximately \$2.0 million of unrecognized tax benefits classified as “Other long-term liabilities” in the accompanying consolidated balance sheets as of December 31, 2016 , have been excluded from the contractual obligations table above.

Off-Balance Sheet Arrangements

As of December 31, 2016 , we did not have any relationships with unconsolidated entities or financial partnerships, such as structured finance or special purpose entities, which were established for the purpose of facilitating off-balance sheet arrangements or other purposes.

Segment Information

We have one primary business activity and operate in one reportable segment.

Concentration

For the years ended December 31, 2016 and 2015 , one distributor represented 19% and 17% , respectively, and one reseller represented 12% and 13% , respectively, of our total revenue. For the year ended December 31, 2014 , no distributor represented 10% or greater of our total revenue, and one reseller represented 11% of our total revenue. Our agreements with these distributors and resellers were made in the ordinary course of our business and may be terminated with or without cause by either party with advance notice. Although we believe we would experience some short-term disruption in the distribution of our products and subscriptions and services if these agreements were terminated, we believe such termination would not have a long-term material adverse effect on our financial results and that alternative resellers and other channel partners exist to deliver our products to our end-customers.

Critical Accounting Policies and Estimates

Our consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses, and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Actual results may differ from these estimates. To the extent that there are material differences between these estimates and our actual results, our future financial statements will be affected.

The critical accounting policies requiring estimates, assumptions, and judgments that we believe have the most significant impact on our consolidated financial statements are described below.

Revenue Recognition

We generate revenue from the sales of products, subscriptions, support and maintenance, and other services primarily through our indirect relationships with our partners as well as end customers through a direct sales force. Our products include operating system

software that is integrated into the appliance hardware and is deemed essential to its functionality. As a result, we account for product revenue in accordance with Accounting Standards Codification 605, Revenue Recognition, and all related interpretations, as all our security appliance deliverables include proprietary operating system software, which together deliver the essential functionality of our products.

Revenue is recognized when all of the following criteria are met:

- ***Persuasive Evidence of an Arrangement Exists.*** We rely upon non-cancelable sales agreements and purchase orders to determine the existence of an arrangement.
- ***Delivery has Occurred.*** We use shipping documents or transmissions of service contract registration codes to verify delivery.
- ***The Fee is Fixed or Determinable.*** We assess whether the fee is fixed or determinable based on the payment terms associated with the transaction.
- ***Collectability is Reasonably Assured.*** We assess collectability based on credit analysis and payment history.

Our products include principal security product families that address critical vectors of attack, including Web, email, endpoint, file and mobile. Our Network Threat Prevention, Endpoint Threat Prevention, File Content Security, Malware Analysis System, Network Forensics Platform, Investigation Analysis System, Central Management System and Email Threat Prevention, appliances and subscription services qualify as separate units of accounting. Therefore, revenue from the sale of these products is recognized at the time of shipment. At the time of shipment, product revenue generally meets the criteria for fixed or determinable fees as our partners receive an order from an end-customer prior to placing an order with us. In addition, payment from our partners is not contingent on the partners' collection from their end-customers. Our partners do not stock products and do not have any stock rotation rights. We recognize subscription and support and maintenance services revenue ratably over the contractual service period, which is typically one or three years. Professional services revenue, including incident response and related consulting services for our customers who have experienced a cybersecurity breach or who require assistance assessing the vulnerability of their networks, and training services revenue is recognized as the services are rendered.

At the time of shipment, product revenue generally meets the criteria for fixed or determinable fees as our partners receive an order from an end-customer prior to placing an order with us. In addition, payment from our partners is not contingent on the partners' collection from their end-customers. Our partners do not stock products and do not have any stock rotation rights. We recognize subscription and support and maintenance services revenue ratably over the contractual service period, which is typically one or three years. Professional services revenue, including incident response and related consulting services for our customers who have experienced a cybersecurity breach or who require assistance assessing the vulnerability of their networks, and training services revenue is recognized as the services are rendered.

Most of our arrangements, other than renewals of subscriptions and support and maintenance services, are multiple-element arrangements with a combination of product, subscriptions, support and maintenance, and other services. For multiple-element arrangements, we allocate revenue to each unit of accounting based on an estimated selling price at the arrangement inception. The estimated selling price for each element is based upon the following hierarchy: vendor-specific objective evidence, or VSOE, of selling price, if available, third-party evidence, or TPE, of selling price, if VSOE of selling price is not available, or best estimate of selling price, or BEBP, if neither VSOE of selling price nor TPE of selling price are available. The total arrangement consideration is allocated to each separate unit of accounting using the relative estimated selling prices of each unit based on the aforementioned selling price hierarchy. We limit the amount of revenue recognized for delivered elements to an amount that is not contingent upon future delivery of additional products or services or meeting of any specified performance conditions.

To determine the estimated selling price in multiple-element arrangements, we seek to establish VSOE of selling price using the prices charged for a deliverable when sold separately and, for subscriptions and support and maintenance, based on the renewal rates and discounts offered to partners. If VSOE of selling price cannot be established for a deliverable, we seek to establish TPE of selling price by evaluating similar and interchangeable competitor products or services in standalone arrangements with similarly situated partners. However, as our products contain a significant element of proprietary technology and offer substantially different features and functionality from our competitors, we are unable to obtain comparable pricing of our competitors' products with similar functionality on a stand-alone basis. Therefore, we have not been able to obtain reliable evidence of TPE of selling price. If neither VSOE nor TPE of selling price can be established for a deliverable, we establish BEBP primarily based on historical transaction pricing. Historical transactions are segregated based on our pricing model and our go-to-market strategy, which include factors such as type of sales channel (reseller, distributor, or end-customer), the geographies in which our products and services were sold (domestic or international), offering type (products or services), and whether or not the opportunity was identified by our sales force or by our partners. In analyzing historical transaction pricing, we evaluate whether a majority of the prices charged for a product, as represented by a percentage of list price, fall within a reasonable range. To further support the BEBP of selling price as determined by the historical transaction pricing or when such information is unavailable, such as when there are limited sales of a new product, we consider the same factors we have established through our pricing model and go-to-market strategy. The determination of BEBP is made through consultation with and approval by our management. We have established the estimated selling price of all of our deliverables using BEBP.

Shipping charges billed to partners are included in revenue while related costs are included in cost of revenue. Sales commissions and other incremental costs to acquire contracts are also expensed as incurred. After receipt of a partner order, any amounts billed in excess of revenue recognized are recorded as deferred revenue.

Stock-Based Compensation

Compensation expense related to stock-based transactions, including employee and non-employee director stock options, is measured and recognized in the financial statements based on the fair value of the awards granted. The fair value of each option award is estimated on the grant date using the Black-Scholes option-pricing model and a single option award approach. The fair value of stock options granted to non-employees is remeasured as the stock options vest, and the resulting change in value, if any, is recognized in the statement of operations during the period the related services are rendered. Stock-based compensation expense is recognized over the requisite service periods of the awards, which is generally four years.

Our use of the Black-Scholes option-pricing model requires the input of highly subjective assumptions, including the fair value of the underlying common stock prior to our IPO in September 2013, the expected term of the option, the expected volatility of the price of our common stock, risk-free interest rates, and the expected dividend yield of our common stock. The assumptions used in our option-pricing model represent management's best estimates. These estimates involve inherent uncertainties and the application of management's judgment. If factors change and different assumptions are used, our stock-based compensation expense could be materially different in the future. These assumptions and estimates are as follows:

- **Fair Value of Common Stock.** Because our common stock was not publicly traded until September 20, 2013, we were required to estimate the fair value of common stock for grants made prior to that date, as discussed in "Common Stock Valuations" below.
- **Risk-Free Interest Rate.** We base the risk-free interest rate used in the Black-Scholes option-pricing model on the implied yield available on U.S. Treasury zero-coupon issues with a remaining term equivalent to that of the options for each option group.
- **Expected Term.** The expected term represents the period that our stock-based awards are expected to be outstanding. We base the expected term assumption on our historical exercise behavior combined with estimates of the post-vesting holding period.
- **Volatility.** We determine the price volatility factor based on the historical volatilities of our publicly traded peer group as we do not have a significant trading history for our common stock. Industry peers consist of several public companies in the technology industry that are similar to us in size, stage of life cycle, and financial leverage. We used the same set of peer group companies in all the relevant valuation estimates. We did not rely on implied volatilities of traded options in our industry peers' common stock because the volume of activity was relatively low. We intend to continue to consistently apply this process using the same or similar public companies until a sufficient amount of historical information regarding the volatility of our own common stock share price becomes available, or unless circumstances change such that the identified companies are no longer similar to us, in which case, more suitable companies whose share prices are publicly available would be utilized in the calculation.
- **Dividend Yield.** The expected dividend assumption is based on our current expectations about our anticipated dividend policy. Consequently, we used an expected dividend yield of zero.

See Note 11 for the assumptions used in the Black-Scholes option-pricing model to determine the fair value of our stock options granted for the year ended December 31, 2014.

In addition to the assumptions used in the Black-Scholes option-pricing model, we also estimated a forfeiture rate to calculate the stock-based compensation expense for our awards prior to January 1, 2016. Beginning January 1, 2016, we began recognizing forfeitures as they occur with the adoption of ASU 2016-09.

We estimate the fair value of the rights to acquire stock under our ESPP using the Black-Scholes option pricing formula. Our ESPP typically provides for consecutive twelve-month offering periods and we use our peer group volatility data in the valuation of ESPP shares. We recognize such compensation expense on a straight-line basis over the requisite service period.

We account for the fair value of restricted stock units ("RSUs") using the closing market price of our common stock on the date of grant. For new-hire grants, RSUs generally vest ratably on an annual basis over four years. For annual refresh grants, RSUs generally vest ratably on an annual, or combination of annual and quarterly, basis over two to four years.

We account for the fair value of performance stock units ("PSUs") using the closing market price of our common stock on the date of grant. We begin recognizing compensation expense when we conclude that it is probable that the performance conditions will be achieved. We reassess the probability of vesting at each reporting period and adjust our compensation cost based on this probability assessment.

We will continue to use judgment in evaluating the assumptions related to our stock-based compensation on a prospective basis. As we continue to accumulate additional data related to our common stock, we may have refinements to our estimates which could materially impact our future stock-based compensation expense.

Income Taxes

We account for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in our financial statements or tax returns. In addition, deferred tax assets are recorded for the future benefit of utilizing net operating losses and research and development credit carryforwards. Valuation allowances are provided when necessary to reduce deferred tax assets to the amount expected to be realized.

We apply the authoritative accounting guidance prescribing a threshold and measurement attribute for the financial recognition and measurement of a tax position taken or expected to be taken in a tax return. We recognize liabilities for uncertain tax positions based on a two-step process. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step requires us to estimate and measure the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement.

Significant judgment is required in evaluating our uncertain tax positions and determining our provision for income taxes. Although we believe our reserves are reasonable, no assurance can be given that the final tax outcome of these matters will not be different from that which is reflected in our historical income tax provisions and accruals. We adjust these reserves in light of changing facts and circumstances, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences may impact the provision for income taxes in the period in which such determination is made.

Significant judgment is also required in determining any valuation allowance recorded against deferred tax assets. In assessing the need for a valuation allowance, we consider all available evidence, including scheduled reversal of deferred tax liabilities, past operating results, the feasibility of tax planning strategies and estimates of future taxable income. Estimates of future taxable income are based on assumptions that are consistent with our plans. Assumptions represent management's best estimates and involve inherent uncertainties and the application of management's judgment. Should actual amounts differ from our estimates, the amount of our tax expense and liabilities could be materially impacted.

We do not provide for a U.S. income tax liability on undistributed foreign earnings of our foreign subsidiaries. The earnings of non-U.S. subsidiaries are indefinitely reinvested in non-U.S. operations.

Contract Manufacturer Liabilities

We outsource most of our manufacturing, repair, and supply chain management operations to our independent contract manufacturers and payments to them are a significant portion of our product cost of revenue. Although we could be contractually obligated to purchase manufactured products, we generally do not own the manufactured products. Product title transfers from our independent contract manufacturers to us and immediately to our partners upon shipment. Our independent contract manufacturers assemble our products using design specifications, quality assurance programs, and standards that we establish, and they procure components and assemble our products based on our demand forecasts. These forecasts represent our estimates of future demand for our products based upon historical trends and analysis from our sales and product management functions as adjusted for overall market conditions. If the actual component usage and product demand are significantly lower than forecast, we accrue for costs for contractual manufacturing commitments in excess of our forecasted demand, including costs for excess components or for carrying costs incurred by our contract manufacturers. To date, we have not accrued any significant costs associated with this exposure.

Loss Contingencies

We are subject to the possibility of various loss contingencies arising in the ordinary course of business. We consider the likelihood of loss or impairment of an asset, or the incurrence of a liability, as well as our ability to reasonably estimate the amount of loss, in determining loss contingencies. An estimated loss contingency is accrued when it is probable that an asset has been impaired or a liability has been incurred and the amount of loss can be reasonably estimated. If we determine that a loss is possible and the range of the loss can be reasonably determined, then we disclose the range of the possible loss. We regularly evaluate current information available to us to determine whether an accrual is required, an accrual should be adjusted or a range of possible loss should be disclosed.

Warranties

We generally provide a one-year warranty on hardware. We do not accrue for potential warranty claims as a component of cost of product revenue as all product warranty claims are satisfied under our support and maintenance contracts.

Goodwill

Goodwill is the excess of the aggregate purchase price paid over the fair value of the net tangible assets acquired. Goodwill is not amortized and is tested for impairment at least annually or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. We have determined that we operate as one reporting unit and have selected December 1 as the date to perform our annual impairment test. In the valuation of our goodwill, we must make assumptions regarding estimated future cash flows to be derived from our business. If these estimates or their related assumptions change in the future, we may be required to record impairment for these assets. The first step of the impairment test involves comparing the fair value of the reporting unit to its net book value, including

goodwill. If the net book value exceeds its fair value, then we would perform the second step of the goodwill impairment test to determine the amount of the impairment loss. The impairment loss would be calculated by comparing our implied fair value to our net book value. In calculating our implied fair value of goodwill, our fair value would be allocated to all of the other assets and liabilities based on their fair values. The excess of our fair value over the amount assigned to our other assets and liabilities is the implied fair value of goodwill. An impairment loss would be recognized when the carrying amount of goodwill exceeds its implied fair value. There was no impairment of goodwill recorded for the years ended December 31, 2016, 2015 or 2014, and our reporting unit was not at risk of failing the first step of the impairment test for any of these periods.

Business Combinations

We account for all of our acquisitions using the acquisition method of accounting for business combinations. The fair value of purchase consideration is allocated to the tangible assets acquired, liabilities assumed and intangible assets acquired, based on their estimated fair values. The excess of the fair value of purchase consideration over the values of these identifiable assets and liabilities is recorded as goodwill.

When determining the fair value of assets acquired and liabilities assumed, management makes significant estimates and assumptions, especially with respect to intangible assets. Critical estimates in valuing certain identifiable assets include, but are not limited to, expected long-term market growth, customer retention, future expected operating expenses, costs of capital, and appropriate discount rates. Management's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates.

Recent Accounting Pronouncements

See Note 1 Description of Business and Summary of Significant Accounting Policies contained in the "Notes to Consolidated Financial Statements" in Item 8 of Part II of this Annual Report on Form 10-K for a full description of the recent accounting pronouncements and our expectation of their impact, if any, on our results of operations and financial conditions.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Foreign Currency Exchange Risk

Our sales contracts are primarily denominated in U.S. dollars. A portion of our operating expenses are incurred outside the United States and are denominated in foreign currencies and are subject to fluctuations due to changes in foreign currency exchange rates, particularly changes in the Indian Rupee, British Pound Sterling, Japanese Yen and Euro. Additionally, fluctuations in foreign currency exchange rates may cause us to recognize transaction gains and losses in our statement of operations. On June 23, 2016, the United Kingdom ("U.K.") held a referendum in which British voters approved an exit from the European Union ("EU"), commonly referred to as "Brexit." This resulted in an adverse impact to currency exchange rates, notably the British Pound Sterling which experienced a sharp decline in value compared to the U.S. dollar and other currencies. Continued volatility in currency exchange rates is expected as the U.K. negotiates its exit from the EU, which could result in greater transaction gains or losses in our statement of operations.

The effect of a hypothetical 10% adverse change in foreign exchange rates on monetary assets and liabilities at December 31, 2016 would not be material to our financial condition or results of operations. To date, foreign currency transaction gains and losses and exchange rate fluctuations have not been material to our financial statements, and we have not engaged in any foreign currency hedging transactions.

As our international operations continue to grow, our risks associated with fluctuations in currency rates will become greater, and we will continue to reassess our approach to managing this risk. In addition, currency fluctuations or a weakening U.S. dollar can increase the costs of our international expansion, and a strengthening U.S. dollar could slow international demand as products and services priced in U.S. dollars become more expensive.

Interest Rate Risk

We had cash and cash equivalents and investments of \$935.7 million and \$1,169.9 million as of December 31, 2016 and 2015, respectively, consisting of bank deposits, money market funds, certificates of deposit, commercial paper and bonds issued by corporate institutions and U.S. government agencies. Such interest-earning instruments carry a degree of interest rate risk. To date, fluctuations in interest income have not been significant.

We do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate risk exposure. We have not been exposed to, nor do we anticipate being exposed to, material risks due to changes in interest rates.

Our cash flow exposure due to changes in interest rates related to our debt is limited as our Convertible Senior Notes have fixed interest rates at 1.000% and 1.625%. The fair value of the Convertible Senior Notes may increase or decrease for various reasons, including fluctuations in the market price of our common stock, fluctuations in market interest rates and fluctuations in general economic conditions. Based upon the quoted market price as of December 31, 2016, the fair value of our Convertible Senior Notes was approximately \$844.7 million.

A hypothetical 10% change in interest rates during any of the periods presented would not have had a material impact on our financial statements.

Item 8. Financial Statements and Supplementary Data

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	<u>Page</u>
<u>Report of Independent Registered Public Accounting Firm</u>	<u>66</u>
<u>Consolidated Balance Sheets as of December 31, 2016 and 2015</u>	<u>67</u>
<u>Consolidated Statements of Operations for the years ended December 31, 2016, 2015 and 2014</u>	<u>68</u>
<u>Consolidated Statements of Comprehensive Loss for the years ended December 31, 2016, 2015 and 2014</u>	<u>69</u>
<u>Consolidated Statements of Stockholders' Equity for the years ended December 31, 2016, 2015 and 2014</u>	<u>70</u>
<u>Consolidated Statements of Cash Flows for the years ended December 31, 2016, 2015 and 2014</u>	<u>71</u>
<u>Notes to Consolidated Financial Statements</u>	<u>72</u>

Certain supplementary financial information required by this Item 8 is included in Item 7 under the caption "Quarterly Results of Operations."

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
FireEye, Inc.
Milpitas, California

We have audited the accompanying consolidated balance sheets of FireEye, Inc. and subsidiaries (the "Company") as of December 31, 2016 and 2015 , and the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2016 . Our audits also included the financial statement schedule listed in the Index at Item 15. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of FireEye, Inc. and subsidiaries as of December 31, 2016 and 2015 , and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 , in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016 , based on the criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 24, 2017 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ DELOITTE & TOUCHE LLP

San Jose, California
February 24, 2017

FIREEYE, INC.
Consolidated Balance Sheets
(In thousands, except per share data)

	As of December 31,	
	2016	2015
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 223,667	\$ 402,102
Short-term investments	712,058	767,775
Accounts receivable, net of allowance for doubtful accounts of \$1,590 and \$2,021 at December 31, 2016 and 2015, respectively	121,150	172,752
Inventories	5,955	13,747
Prepaid expenses and other current assets	25,081	30,883
Total current assets	1,087,911	1,387,259
Property and equipment, net	61,852	78,368
Goodwill	978,260	750,288
Intangible assets, net	244,032	214,560
Deposits and other long-term assets	10,910	10,998
TOTAL ASSETS	\$ 2,382,965	\$ 2,441,473
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$ 20,269	\$ 43,650
Accrued and other current liabilities	22,997	29,820
Accrued compensation	96,004	79,294
Deferred revenue, current portion	397,118	305,169
Total current liabilities	536,388	457,933
Convertible senior notes, net	741,980	706,198
Deferred revenue, non-current portion	256,398	221,829
Other long-term liabilities	7,087	11,141
Total liabilities	1,541,853	1,397,101
Commitments and contingencies (NOTE 9)		
Stockholders' equity:		
Common stock, par value of \$0.0001 per share; 1,000,000 shares authorized, 174,596 shares and 161,643 shares issued and outstanding as of December 31, 2016 and 2015, respectively	17	16
Additional paid-in capital	2,682,909	2,403,088
Treasury stock, at cost; 3,333 shares as of December 31, 2016 and 2015	(150,000)	(150,000)
Accumulated other comprehensive loss	(1,742)	(2,225)
Accumulated deficit	(1,690,072)	(1,206,507)
Total stockholders' equity	841,112	1,044,372
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 2,382,965	\$ 2,441,473

See accompanying notes to consolidated financial statements.

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

	Year Ended December 31,		
	2016	2015	2014
Revenue:			
Product	\$ 151,926	\$ 216,632	\$ 178,246
Subscription and services	562,188	406,335	247,416
Total revenue	714,114	622,967	425,662
Cost of revenue:			
Product	65,158	74,481	58,980
Subscription and services	206,710	158,723	116,113
Total cost of revenue	271,868	233,204	175,093
Total gross profit	442,246	389,763	250,569
Operating expenses:			
Research and development	279,594	279,467	203,187
Sales and marketing	439,499	476,166	401,151
General and administrative	139,839	141,790	121,099
Restructuring charges	27,630	—	4,327
Total operating expenses	886,562	897,423	729,764
Operating loss	(444,316)	(507,660)	(479,195)
Interest income	6,582	2,935	713
Interest expense	(47,869)	(27,116)	(26)
Other expense, net	(3,247)	(3,284)	(1,936)
Loss before income taxes	(488,850)	(535,125)	(480,444)
Provision for (benefit from) income taxes	(8,721)	4,090	(36,654)
Net loss attributable to common stockholders	\$ (480,129)	\$ (539,215)	\$ (443,790)
Net loss per share attributable to common stockholders, basic and diluted	\$ (2.94)	\$ (3.50)	\$ (3.12)
Weighted average shares used in computing net loss per share attributable to common stockholders, basic and diluted	163,211	154,120	142,176

See accompanying notes to consolidated financial statements.

FIREEYE, INC.
Consolidated Statements of Comprehensive Loss
(In thousands)

	Year Ended December 31,		
	2016	2015	2014
Net loss	\$ (480,129)	\$ (539,215)	\$ (443,790)
Change in net unrealized gains (losses) on available-for-sale investments, net of tax	483	(1,784)	(441)
Comprehensive loss	<u>\$ (479,646)</u>	<u>\$ (540,999)</u>	<u>\$ (444,231)</u>

See accompanying notes to consolidated financial statements.

FIREEYE, INC.
Consolidated Statement of Stockholders' Equity
(In thousands)

	Common Stock		Additional Paid-In Capital	Treasury Stock	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount					
Balance at December 31, 2013	137,758	\$ 14	\$ 1,271,590	\$ —	\$ —	\$ (223,502)	\$ 1,048,102
Issuance of common stock in connection with follow-on public offering, net of offering costs	5,582	—	444,295	—	—	—	444,295
Issuance of common stock for equity awards, net of repurchases and tax withholdings	8,030	1	20,658	—	—	—	20,659
Issuance of common stock related to nPulse Technologies, Inc. acquisition	296	—	1,398	—	—	—	1,398
Issuance of common stock related to employee stock purchase plan	1,194	—	21,228	—	—	—	21,228
Assumption of vested options related to the acquisition of Mandiant, Inc.	—	—	3,135	—	—	—	3,135
Vesting of early exercise of equity awards	—	—	4,390	—	—	—	4,390
Stock-based compensation	—	—	151,852	—	—	—	151,852
Unrealized loss on investments	—	—	—	—	(441)	—	(441)
Net loss	—	—	—	—	—	(443,790)	(443,790)
Balance at December 31, 2014	152,860	15	1,918,546	—	(441)	(667,292)	1,250,828
Issuance of common stock for equity awards, net of repurchases and tax withholdings	7,786	1	27,062	—	—	—	27,063
Issuance of common stock related to employee stock purchase plan	997	—	21,880	—	—	—	21,880
Excess tax benefit on vesting of awards and options exercised	—	—	809	—	—	—	809
Equity component of convertible senior notes, net	—	—	210,401	—	—	—	210,401
Prepaid forward stock purchase	—	—	—	(150,000)	—	—	(150,000)
Vesting of early exercise of equity awards	—	—	2,271	—	—	—	2,271
Stock-based compensation	—	—	222,119	—	—	—	222,119
Unrealized loss on investments	—	—	—	—	(1,784)	—	(1,784)
Net loss	—	—	—	—	—	(539,215)	(539,215)
Balance at December 31, 2015	161,643	16	2,403,088	(150,000)	(2,225)	(1,206,507)	1,044,372
Issuance of common stock for equity awards, net of repurchases and tax withholdings	8,438	1	12,720	—	—	—	12,721
Issuance of common stock related to employee stock purchase plan	1,980	—	22,080	—	—	—	22,080
Issuance of common stock related to iSIGHT Security, Inc. acquisition	1,793	—	29,900	—	—	—	29,900
Issuance of common stock related to Invotas International Corporation acquisition	742	—	11,100	—	—	—	11,100
Vesting of early exercise of equity awards	—	—	1,519	—	—	—	1,519
Stock-based compensation	—	—	199,066	—	—	—	199,066
Unrealized gain on investments	—	—	—	—	483	—	483
Cumulative-effect adjustment for adoption of ASU 2016-09	—	—	3,436	—	—	(3,436)	—
Net loss	—	—	—	—	—	(480,129)	(480,129)
Balance at December 31, 2016	174,596	\$ 17	\$ 2,682,909	\$ (150,000)	\$ (1,742)	\$ (1,690,072)	\$ 841,112

See accompanying notes to the consolidated financial statements.

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

	Year Ended December 31,		
	2016	2015	2014
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	\$ (480,129)	\$ (539,215)	\$ (443,790)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	119,267	111,956	94,136
Stock-based compensation	199,066	222,119	151,852
Non-cash interest expense related to convertible senior notes	35,782	20,069	—
Change in fair value of contingent earn-out liability	2,356	—	—
Deferred income taxes	(11,926)	(1,353)	(39,869)
Other	9,836	4,672	2,261
Changes in operating assets and liabilities, net of business acquisitions:			
Accounts receivable	61,785	19,126	(97,165)
Inventories	1,415	(7,820)	(2,024)
Prepaid expenses and other assets	9,344	(675)	1,450
Accounts payable	(19,093)	7,705	(3,193)
Accrued liabilities	(11,154)	7,495	11,403
Accrued transaction costs of acquiree	(7,727)	—	—
Accrued compensation	(24,621)	14,742	23,658
Deferred revenue	105,431	174,455	164,728
Other long-term liabilities	(4,217)	3,739	5,283
Net cash provided by (used in) operating activities	(14,585)	37,015	(131,270)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchases of property and equipment and demonstration units	(36,314)	(54,549)	(67,715)
Purchases of short-term investments	(507,073)	(769,097)	(390,360)
Proceeds from maturities of short-term investments	554,358	245,116	99,541
Proceeds from sales of short-term investments	4,507	4,807	31,577
Business acquisitions, net of cash acquired	(204,926)	—	(55,058)
Purchase of investment in private company	—	(1,800)	—
Lease deposits	(248)	(1,226)	(496)
Net cash used in investing activities	(189,696)	(576,749)	(382,511)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Net proceeds from follow-on public offering	—	—	444,338
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	(112)	—	—
Payment related to shares withheld for taxes	(1,124)	(2,027)	(2,058)
Proceeds from employee stock purchase plan	22,080	21,880	21,228
Proceeds from exercise of equity awards	13,844	29,090	22,718
Net cash provided by financing activities	25,846	795,473	486,226
Net change in cash and cash equivalents	(178,435)	255,739	(27,555)
Cash and cash equivalents, beginning of period	402,102	146,363	173,918
Cash and cash equivalents, end of period	\$ 223,667	\$ 402,102	\$ 146,363
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:			
Cash paid for income taxes	\$ 5,209	\$ 2,686	\$ 2,489
Cash paid for interest	\$ 12,098	\$ 6,004	\$ 27
SUPPLEMENTAL DISCLOSURES OF NON-CASH INVESTING AND FINANCING ACTIVITIES:			

Common stock issued in connection with acquisitions	\$	41,000	\$	—	\$	1,398
Contingent earn-out in connection with acquisitions	\$	39,088	\$	—	\$	—
Purchases of property and equipment and demonstration units in accounts payable and accrued liabilities	\$	4,035	\$	8,604	\$	6,716

See accompanying notes to consolidated financial statements.

FIREEYE, INC.

Notes to 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.

In March 2014, we completed our follow-on public offering in which we issued and sold 5,582,215 shares of common stock at a price of \$82.00 per share. We received aggregate proceeds of \$446.5 million from the sale of shares of common stock, net of underwriters’ discounts and commissions of \$11.2 million, but before deducting offering expenses of approximately \$2.2 million. Another 8,417,785 shares were sold by certain selling stockholders, which included 796,846 shares sold pursuant to the exercise of vested outstanding options by our employees. We did not receive any of the proceeds from the sales of shares by the selling stockholders.

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 consolidated financial statements include the accounts of FireEye, Inc. and its wholly owned subsidiaries and have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”). All intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of 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, subscriptions and services, commissions expense, bonus expense, future taxable income, contract manufacturer liabilities, litigation and settlement costs and other loss contingencies, fair value of our equity awards, achievement of targets for performance stock units, fair value of the liability and equity components of Convertible Senior Notes 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.

Concentrations

Financial instruments that subject us to concentrations of credit risk consist primarily of cash and cash equivalents, short-term investments, and accounts receivable. We maintain a substantial portion of our cash and cash equivalents in money market funds invested in U.S. Treasury related obligations. Management believes that these financial institutions are financially sound and, accordingly, are subject to minimal credit risk. Deposits held with banks may exceed the amount of insurance provided on such deposits.

Our short-term investments primarily consist of notes and bonds issued by corporate institutions and U.S. Government agencies. All of our investments are highly-rated by credit rating agencies and are issued by organizations with reputable credit, and therefore bear minimal credit risk.

Our accounts receivables are primarily derived from a diverse set of customers across various geographical locations. We perform ongoing credit evaluations of our customers and generally do not require collateral on accounts receivable. We maintain an allowance for doubtful accounts for estimated potential credit losses. See Note 15 for information on major customers.

We rely primarily on a single contract manufacturer to assemble our products. In some cases we rely on sole suppliers for a certain number of our components.

Foreign Currency Translation and Transactions

The functional currency of our foreign subsidiaries is the U.S. dollar. We translate all monetary assets and liabilities denominated in foreign currencies into U.S. dollars using the exchange rates in effect at the balance sheet dates and other assets and liabilities using historical exchange rates.

Foreign currency denominated revenue and expenses have been re-measured using the average exchange rates in effect during each period. Foreign currency re-measurement gains and losses have been included in other income (expense) and have not been significant for the years ended December 31, 2016, 2015 and 2014.

Cash and Cash Equivalents

We consider all highly liquid investments with original maturities of three months or less at date of purchase to be cash equivalents. We determine the appropriate classification of our investments at the time of purchase, and evaluate such designation at each balance sheet date.

Short-term Investments

We classify our investments in debt and equity securities as available-for-sale and record these investments at fair value. Investments with an original maturity of three months or less at the date of purchase are considered cash equivalents, while all other investments are classified as short-term or long-term based on the nature of the investments, their maturities, and their availability for use in current operations. Unrealized gains and losses are reported as a component of other comprehensive loss. Realized gains and losses are determined based on the specific identification method, and are reflected in our Consolidated Statements of Operations. We regularly review our investment portfolio to identify and evaluate investments that have indicators of possible impairment. Factors considered in determining whether a loss is other-than-temporary include, but are not limited to: the length of time and extent a security's fair value has been below its cost, the financial condition and near-term prospects of the investee, the credit quality of the security's issuer, likelihood of recovery and our intent and ability to hold the security for a period of time sufficient to allow for any anticipated recovery in value. For our debt instruments, we also evaluate whether we have the intent to sell the security or it is more likely than not that we will be required to sell the security before recovery of its cost basis.

Investments are considered to be impaired when a decline in fair value is judged to be other-than-temporary. Fair value is calculated based on publicly available market information or other estimates determined by management. If the cost of an investment exceeds its fair value, we evaluate, among other factors, general market conditions, credit quality of debt instrument issuers, the duration and extent to which the fair value is less than cost and whether we have plans to sell the security, or it is more likely than not that we will be required to sell the security, before recovery. Once a decline in fair value is determined to be other-than-temporary, an impairment charge is recorded to other income (expense) and a new cost basis in the investment is established.

Fair Value of Financial Instruments

We define fair value as the price that would be received from selling an asset, or paid to transfer a liability, in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities which are required to be recorded at fair value, we consider the principal or most advantageous market in which to transact and the market-based risk. We apply fair value accounting for all financial assets and liabilities that are recognized or disclosed at fair value in the financial statements on a recurring basis. The carrying amounts reported in the consolidated financial statements approximate the fair value for cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities due to their short-term nature.

Accounts Receivable

Trade accounts receivable are recorded at the invoiced amount, net of allowances for doubtful accounts. The allowance for doubtful accounts is based on our assessment of the collectability of accounts. Management regularly reviews the adequacy of the allowance for

doubtful accounts by considering the age of each outstanding invoice, each partner's expected ability to pay and the collection history with each partner, when applicable, to determine whether a specific allowance is appropriate. Accounts receivable deemed uncollectible are charged against the allowance for doubtful accounts when identified.

Inventories

Inventories are stated at the lower of cost or market. Provisions have been made to reduce all slow-moving, obsolete or unusable inventories to their net realizable values. We purchase completed units from contract manufacturers. Accordingly, substantially all inventories are finished goods with an immaterial balance of replacement parts. As of December 31, 2016 and 2015, the reserves for excess and obsolete inventories were \$3.8 million and \$1.4 million, respectively.

Deferred Costs of Revenue

Deferred cost of revenue consists of direct and incremental costs related to product revenue deferred in accordance with the Company's revenue recognition policy. Deferred cost of revenue that will be realized within the succeeding 12 month period is classified as current, and included in prepaid expenses and other current assets on the consolidated balance sheets. The remaining balance is classified as non-current, and included in deposits and other long-term assets.

Property and Equipment

Property and equipment are recorded at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the assets, generally two to five years.

The estimated useful lives of property and equipment are described below:

Property and Equipment	Useful Life
Computer equipment and software	2 to 5 years
Leasehold improvements	Shorter of estimated useful life or remaining lease term
Furniture and fixtures	5 years
Machinery and equipment	2 to 5 years

Demonstration Units

Product demonstration units are included in prepaid expenses and other current assets on the consolidated balance sheets. Demonstration units are recorded at cost and are amortized over the estimated useful life from the date of transfer from inventory, generally 12 months. We generally do not resell units that have been used for demonstration purposes.

Impairment of Long-Lived Assets

We evaluate events and changes in circumstances that could indicate carrying amounts of long-lived assets may not be recoverable. When such events or changes in circumstances occur, we assess the recoverability of long-lived assets by determining whether or not the carrying value of such assets will be recovered through undiscounted expected future cash flows. If the total of the future undiscounted cash flows is less than the carrying amount of an asset, we record an impairment charge for the amount by which the carrying amount of the assets exceeds the fair value of the asset. Through December 31, 2016 we have not written down any of our long-lived assets as a result of impairment.

Business Combinations

We have accounted for all of our acquisitions using the acquisition method. The Company allocates the fair value of purchase consideration to the tangible assets acquired, liabilities assumed and intangible assets acquired, based on their estimated fair values. The excess of the fair value of purchase consideration over the values of these identifiable assets and liabilities is recorded as goodwill.

When determining the fair value of assets acquired and liabilities assumed, management makes significant estimates and assumptions, especially with respect to intangible assets. Critical estimates in valuing certain identifiable assets include, but are not limited to, expected long-term market growth, future expected operating expenses, costs of capital, and appropriate discount rates. Management's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and, as a result, actual results may differ from estimates.

Goodwill and Purchased Intangibles

Goodwill represents the excess of the aggregate purchase price paid over the fair value of the net tangible assets acquired. Goodwill is not amortized and is tested for impairment at least annually or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. The Company has determined that it operates as one reporting unit and has selected December 1 as the date to perform its annual impairment test.

In the valuation of its goodwill, the Company must make assumptions regarding estimated future cash flows to be derived from the Company. If these estimates or their related assumptions change in the future, the Company may be required to record impairment for

these assets. The first step of the impairment test involves comparing the fair value of the reporting unit to its net book value, including goodwill. If the net book value exceeds its fair value, then the Company would perform the second step of the goodwill impairment test to determine the amount of the impairment loss. The impairment loss would be calculated by comparing the implied fair value of the Company to its net book value. In calculating the implied fair value of the Company's goodwill, the fair value of the Company would be allocated to all of the other assets and liabilities based on their fair values. The excess of the fair value of the Company over the amount assigned to its other assets and liabilities is the implied fair value of goodwill. An impairment loss would be recognized when the carrying amount of goodwill exceeds its implied fair value. There was no impairment of goodwill recorded for the years ended December 31, 2016, 2015 or 2014.

Purchased intangible assets with finite lives are carried at cost, less accumulated amortization. Amortization is computed over the estimated useful lives of the respective assets. Purchased intangible assets with indefinite lives are assessed for potential impairment annually, or when events or circumstances indicate that their carrying amounts might be impaired.

Warranties

We generally provide a one -year warranty on hardware. We do not accrue for potential warranty claims as a component of cost of product revenue as all product warranty claims are satisfied under our support and maintenance contracts.

Deferred Revenue

Deferred revenue consists of amounts that have been invoiced and for which the Company has the right to bill, but that have not been recognized as revenue. Deferred revenue that will be realized during the succeeding 12 month period is recorded as current, and the remaining deferred revenue is recorded as non-current.

Contract Manufacturer Liabilities

We outsource most of our manufacturing, repair, and supply chain management operations to our independent contract manufacturers and payments to such manufacturers are a significant portion of our product cost of revenue. Although we could be contractually obligated to purchase manufactured products, we generally do not own the manufactured products. Product title transfers from our independent contract manufacturers to us and to our partners upon shipment. Our independent contract manufacturers assemble our products using design specifications, quality assurance programs, and standards that we establish, and they procure components and assemble our products based on our demand forecasts. These forecasts represent our estimates of future demand for our products based upon historical trends and analysis from our sales and product management functions as adjusted for overall market conditions. If the actual component usage and product demand are significantly lower than forecast, we may accrue for costs for contractual manufacturing commitments in excess of our forecasted demand, including costs for excess components or for carrying costs incurred by our contract manufacturers. To date, we have not accrued any significant costs associated with this exposure.

Revenue Recognition

We generate revenue from the sales of products, subscriptions, support and maintenance and professional services, primarily through our indirect relationships with our partners as well as end customers through our direct sales force. Our products include operating system software that is integrated into the appliance hardware and is deemed essential to its functionality. As a result, we account for product revenue in accordance with Accounting Standards Codification 605, Revenue Recognition, and all related interpretations, as all of our security appliance deliverables include proprietary operating system software, which together delivers the essential functionality of our products. Our professional services consist primarily of time and materials based contracts, and the revenue is recognized as costs are incurred at amounts represented by the agreed-upon billing amounts. Revenue from fixed-price professional services engagements are recognized under the proportional performance method of accounting.

Revenue is recognized when all of the following criteria are met:

- ***Persuasive Evidence of an Arrangement Exists*** . We rely upon non-cancelable sales agreements and purchase orders to determine the existence of an arrangement.
- ***Delivery has Occurred*** . We use shipping documents or transmissions of service contract registration codes to verify delivery.
- ***The Fee is Fixed or Determinable*** . We assess whether the fee is fixed or determinable based on the payment terms associated with the transaction.
- ***Collectability is Reasonably Assured*** . We assess collectability based on credit analysis and payment history.

Our products include principal security product families that address critical vectors of attack, including Web, email, endpoint, file and mobile. Our Network Threat Prevention, Endpoint Threat Prevention, Email Threat Prevention, File Content Security, Forensic Analysis System and Central Management System appliance and subscription services qualify as separate units of accounting. Therefore product revenue from these appliances is recognized at the time of shipment.

At the time of shipment, product revenue meets the criteria for fixed or determinable fees. In addition, payment from our partners is not contingent on the partners' collection from their end-customers. Our partners do not stock products and do not have any stock rotation rights. We recognize subscription and support and maintenance service revenue ratably over the contractual service period, which

is typically one or three years. Professional services revenue, including incident response and related consulting services for our customers who have experienced a cybersecurity breach or who require assistance assessing the vulnerability of their networks, and training services revenue is recognized as the services are rendered.

Most of our arrangements, other than renewals of subscriptions and support and maintenance services, are multiple-element arrangements with a combination of product, subscriptions, support and maintenance, and other services. For multiple-element arrangements, we allocate revenue to each unit of accounting based on an estimated selling price at the arrangement inception. The estimated selling price for each element is based upon the following hierarchy: vendor-specific objective evidence ("VSOE") of selling price, if available, third-party evidence ("TPE") of selling price, if VSOE of selling price is not available, or best estimate of selling price ("BESP"), if neither VSOE of selling price nor TPE of selling price are available. The total arrangement consideration is allocated to each separate unit of accounting using the relative estimated selling prices of each unit based on the aforementioned selling price hierarchy. We limit the amount of revenue recognized for delivered elements to an amount that is not contingent upon future delivery of additional products or services or meeting of any specified performance conditions.

To determine the estimated selling price in multiple-element arrangements, we seek to establish VSOE of selling price using the prices charged for a deliverable when sold separately and, for subscriptions and support and maintenance, based on the renewal rates and discounts offered to partners. If VSOE of selling price cannot be established for a deliverable, we seek to establish TPE of selling price by evaluating similar and interchangeable competitor products or services in standalone arrangements with similarly situated partners. However, as our products contain a significant element of proprietary technology and offer substantially different features and functionality from our competitors, we are unable to obtain comparable pricing of our competitors' products with similar functionality on a standalone basis. Therefore, we have not been able to obtain reliable evidence of TPE of selling price. If neither VSOE nor TPE of selling price can be established for a deliverable, we establish BESP primarily based on historical transaction pricing. Historical transactions are segregated based on our pricing model and our go-to-market strategy, which include factors such as type of sales channel (reseller, distributor, or end-customer), the geographies in which our products and services were sold (domestic or international), offering type (products, subscriptions or services), and whether or not the opportunity was identified by our sales force or by our partners. In analyzing historical transaction pricing, we evaluate whether a majority of the prices charged for a product, as represented by a percentage of list price, fall within a reasonable range. To further support the best estimate of selling price as determined by the historical transaction pricing or when such information is unavailable, such as when there are limited sales of a new product, we consider the same factors we have established through our pricing model and go-to-market strategy. The determination of BESP is made through consultation with and approval by our management. We have established the estimated selling price of all of our deliverables using BESP.

Shipping charges billed to partners are included in revenue and related costs are included in cost of revenue. Sales commissions and other incremental costs to acquire contracts are also expensed as incurred and are recorded in sales and marketing expense. After receipt of a partner order, any amounts billed in excess of revenue recognized are recorded as deferred revenue.

Advertising Costs

Advertising costs, which are expensed and included in sales and marketing expense when incurred, were \$3.6 million, \$5.1 million and \$2.3 million during the years ended December 31, 2016, 2015 and 2014, respectively.

Software Development Costs

The costs to develop internal-use software are subject to capitalization and begin amortizing once the software is substantially ready for use. These costs are included in property and equipment and are generally amortized over 3 years. All other software development costs are expensed as incurred and included in research and development expense on the consolidated statements of operations.

Stock-Based Compensation

Compensation expense related to stock-based transactions, including employee and non-employee director awards and our 2013 Employee Stock Purchase Plan (the "ESPP"), is measured and recognized in the financial statements based on fair value. The fair value of each option award is estimated on the grant date using the Black-Scholes option-pricing model and a single option award approach. This model requires that at the date of grant we determine the fair value of the underlying common stock, the expected term of the award, the expected volatility of the price of our common stock, risk-free interest rates, and expected dividend yield of our common stock. The fair value of restricted stock awards and restricted stock units is based on the closing market price of our common stock on the date of grant. The stock-based compensation expense is recognized using a straight-line basis over the requisite service period of the entire awards, which is generally four years, unless the awards are subject to performance conditions, in which case the Company recognizes compensation expense over the requisite service period of each vesting tranche. For performance-based awards, the Company recognizes compensation expense when it becomes probable that the performance criteria set by the Board of Directors will be achieved.

Beginning January 1, 2016 with the adoption of ASU 2016-09, we elected to recognize forfeitures as they occur, and no longer estimate a forfeiture rate when calculating the stock-based compensation for our equity awards. Stock-based compensation for the years ended December 31, 2015 and 2014 was calculated using an estimated forfeiture rate based on an analysis of our actual historical forfeitures.

We account for stock options issued to non-employees based on the fair value of the awards determined using the Black-Scholes

option-pricing model. The fair value of stock options granted to non-employees is remeasured as the stock options vest, and the resulting change in value, if any, is recognized in the statement of operations during the period the related services are rendered.

Income Taxes

We account for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in our financial statements or tax returns. In addition, deferred tax assets are recorded for the future benefit of utilizing net operating losses and research and development credit carry forwards. Valuation allowances are provided when necessary to reduce deferred tax assets to the amount expected to be realized.

We apply the authoritative accounting guidance prescribing a threshold and measurement attribute for the financial recognition and measurement of a tax position taken or expected to be taken in a tax return. We recognize liabilities for uncertain tax positions based on a two-step process. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step requires us to estimate and measure the tax liability as the largest amount that is more likely than not to be realized upon ultimate settlement. We recognize interest and penalties related to unrecognized tax benefits within the income tax expense line in the accompanying consolidated statements of operations. Accrued interest and penalties are included within other long-term liabilities in the consolidated balance sheets.

Net Loss Per Share Attributable to Common Stockholders

We calculate our basic and diluted net loss per share attributable to common stockholders in conformity with the two-class method required for companies with participating securities. Under the two-class method, in periods when the Company has net income, net income attributable to common stockholders is determined by allocating undistributed earnings, calculated as net income less current period convertible preferred stock non-cumulative dividends, between common stock and the convertible preferred stock. In computing diluted net income attributable to common stockholders, undistributed earnings are re-allocated to reflect the potential impact of dilutive securities. The Company's basic net loss per share attributable to common stockholders is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding for the period. The diluted net loss per share attributable to common stockholders is computed by giving effect to all potential dilutive common stock equivalents outstanding for the period. For purposes of this calculation, options to purchase common stock are considered common stock equivalents, but have been excluded from the calculation of diluted net loss per share attributable to common stockholders as their effect is anti-dilutive.

Convertible Senior Notes

We allocated the principal amount of the Convertible Senior Notes between its liability and equity components. The carrying amount of the liability component was determined by measuring the fair value of a similar debt instrument of similar credit quality and maturity that did not have the convert feature. The carrying amount of the equity component, representing the embedded conversion option, was determined by deducting the fair value of the liability component from the principal amount of the Convertible Senior Notes as a whole. The equity component was recorded to additional paid-in capital and is not remeasured as long as it continues to meet the conditions for equity classification. The excess of the principal amount of the Convertible Senior Notes over the carrying amount of the liability component was recorded as a debt discount, and is being amortized to interest expense using the effective interest method through the first date holders have the right to require us to repurchase all or any portion of their Convertible Senior Notes; the first put date (see Note 8). We allocate the total amount of transaction costs incurred to the liability and equity components using the same proportions as the proceeds from the Convertible Senior Notes. Transaction costs attributable to the liability component were recorded as a direct deduction from the liability component of the Convertible Senior Notes, and are being amortized to interest expense using the effective interest method through the first put date. Transaction costs attributable to the equity component were netted with the equity component of the Convertible Senior Notes in additional paid-in capital.

Recent Accounting Pronouncements

In January 2017, the FASB issued ASU 2017-04, Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment. This standard eliminates the requirement to calculate the implied fair value of goodwill to measure a goodwill impairment charge (i.e. Step 2 of the current guidance), instead measuring the impairment charge as the excess of the reporting unit's carrying amount over its fair value (i.e. Step 1 of the current guidance). The guidance is effective for us beginning in the first quarter of 2020, and should be applied prospectively. Early adoption is permitted for impairment testing dates after January 1, 2017. The adoption of this standard is not expected to have a significant impact on our consolidated financial statements.

In January 2017, the FASB issued ASU 2017-01, Business Combinations (Topic 805): Clarifying the Definition of a Business. This standard changes the definition of a business by requiring at least one substantive process. It also states that if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets, then the set of transferred assets and activities is not a business. The guidance is effective for us beginning in the first quarter of 2018, and should be applied prospectively. Early adoption is permitted. The adoption of this standard is not expected to have a significant impact on our consolidated financial statements.

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. As a result, the table of deferred tax assets shown in Note 12 includes certain deferred tax assets as of December 31, 2016 that arose directly from tax deductions related to equity compensation greater than compensation recognized for financial reporting in the amount of \$117.3 million. The adoption of an amendment related to the accounting for minimum statutory withholding tax requirements included in this guidance has no impact on our current 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, as we expect to recognize material lease assets and lease liabilities from our building leases and other items.

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. The FASB has subsequently issued several clarifying standards to address stakeholder questions and implementation issues.

We currently anticipate adopting the standard retrospectively to all prior periods presented. Our ability to apply the requirements retrospectively to all prior periods presented is dependent on system readiness, including software procured from third-party providers, and the completion of our analysis of information necessary to restate prior period financial statements.

We anticipate this standard will have a material impact on our consolidated financial statements and related disclosures. While we are continuing to assess all the potential impacts this standard will have, and as such we do not know or cannot reasonably estimate quantitative information related to the impact of this standard on our consolidated financial statements at this time, we currently believe the most significant impact relates to our accounting for intelligence dependent appliance and software license revenue. We expect revenue related to certain appliances and software licenses not dependent on intelligence, subscription and support offerings, cloud offerings and professional services to remain substantially unchanged. Specifically, under the new standard we expect to combine intelligence dependent appliances and software licenses with the related intelligence subscription and support as a single performance obligation. As a result, we expect to recognize intelligence dependent appliance and software license revenue ratably over the life of the related device or license, rather than at the time of shipping, when our contracts contain material right of renewal options. Where our contracts do not contain material right of renewal options, we expect to recognize intelligence dependent appliance and software license revenue ratably over the contractual term. Due to complexity of certain of our customer contracts, the actual revenue recognition treatment required under the standard will be dependent on contract-specific terms, and may vary in some instance from the recognition models noted above. We currently believe appliance and software license revenue will be recognized predominantly over the useful life of the device or license as most of our appliance and license offerings are intelligence dependent. Additionally, we currently expect commissions to be deferred at the time of sale, and recognized ratably over the life of the related device or license or over the contractual term.

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):

Description	As of December 31, 2016				As of December 31, 2015			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets								
Cash equivalents:								
Money market funds	\$ 449	\$ —	\$ —	\$ 449	\$ 210,533	\$ —	\$ —	\$ 210,533
Total cash equivalents	449	—	—	449	210,533	—	—	210,533
Short-term investments:								
Certificates of deposit	—	9,569	—	9,569	—	19,124	—	19,124
Commercial paper	—	29,920	—	29,920	—	—	—	—
Corporate notes and bonds	—	420,684	—	420,684	—	447,267	—	447,267
U.S. Government agencies	—	251,885	—	251,885	—	301,384	—	301,384
Total short-term investments	—	712,058	—	712,058	—	767,775	—	767,775
Total assets measured at fair value	\$ 449	\$ 712,058	\$ —	\$ 712,507	\$ 210,533	\$ 767,775	\$ —	\$ 978,308
Liabilities								
Contingent earn-out	\$ —	\$ —	\$ 41,332	\$ 41,332	\$ —	\$ —	\$ —	\$ —
Total liabilities measured at fair value	\$ —	\$ —	\$ 41,332	\$ 41,332	\$ —	\$ —	\$ —	\$ —

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 year ended December 31, 2016 (in thousands):

	Amount
Balance at acquisition (January 14, 2016)	\$ 35,588
Measurement period adjustments (1)	3,500
Changes in fair value (2)	2,356
Cash payments	(112)
Balance as of December 31, 2016	\$ 41,332

(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 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 year ended December 31, 2016 .

The estimated fair value of the Convertible Senior Notes as of December 31, 2016 was determined to be \$844.7 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 December 31, 2016				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value	Short-Term Investments
Certificates of deposit	\$ 9,560	\$ 10	\$ (1)	\$ 9,569	\$ 9,569
Commercial paper	29,929	—	(9)	29,920	29,920
Corporate notes and bonds	421,635	17	(968)	420,684	420,684
U.S. Government agencies	252,676	2	(793)	251,885	251,885
Total	\$ 713,800	\$ 29	\$ (1,771)	\$ 712,058	\$ 712,058

	As of December 31, 2015				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value	Short-Term Investments
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 December 31, 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	24,925	(9)	—	—	24,925	(9)
Corporate notes and bonds	294,818	(889)	99,433	(79)	394,251	(968)
U.S. Government agencies	222,171	(763)	17,657	(30)	239,828	(793)
Total	\$ 541,914	\$ (1,661)	\$ 117,289	\$ (110)	\$ 659,203	\$ (1,771)

	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 December 31, 2016 and 2015.

The following table summarizes the contractual maturities of our investments at December 31, 2016 (in thousands):

	Amortized Cost	Fair Value
Due within one year	\$ 383,604	\$ 383,279
Due within one to two years	330,196	328,779
Total	<u>\$ 713,800</u>	<u>\$ 712,058</u>

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 consolidated balance sheets. The carrying value of this investment was \$0.9 million and \$1.8 million as of December 31, 2016 and 2015, respectively.

4. Property and Equipment

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

	As of December 31,	
	2016	2015
Computer equipment and software	\$ 144,892	\$ 120,886
Leasehold improvements	41,796	41,626
Furniture and fixtures	14,499	13,470
Machinery and equipment	447	447
Total property and equipment	201,634	176,429
Less: accumulated depreciation	(139,782)	(98,061)
Total property and equipment, net	\$ 61,852	\$ 78,368

During the years ended December 31, 2016 and 2015, we capitalized \$8.0 million and \$4.3 million, respectively, of software development costs related to our cloud subscription offerings. Software development costs incurred during the year ended December 31, 2014 were not material for capitalization. Amortization expense related to capitalized software development costs during the years ended December 31, 2016 and 2015 was \$2.9 million and \$0.8 million, respectively.

Depreciation and amortization expense related to property and equipment and demonstration units during the years ended December 31, 2016, 2015 and 2014 was \$51.5 million, \$61.2 million and \$46.8 million, respectively.

During the year ended December 31, 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

Acquisitions in 2016

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; 1,793,297 of which were released in February 2017 to former stockholders of iSIGHT once the threat intelligence bookings target was determined to have been achieved. 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 consolidated balance sheet as of December 31, 2016, and subsequently resulted in a cash payment of \$41.3 million during February 2017, once the threat intelligence bookings target was determined to have been achieved.

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 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 purchase price of \$261.8 million is as follows (in thousands):

	Amount
Net tangible liabilities assumed	\$ (18,248)
Intangible assets	85,100
Deferred tax liability	(11,637)
Goodwill	206,623
Total purchase price allocation	\$ 261,838

The 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):

	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 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 were scheduled to vest upon the achievement of stated

performance milestones over a period of approximately three years, subject to continuing service during that time. A portion of these awards have since been released following the achievement of the first milestone, while another portion of these awards were modified to vest subject only to continuing service. 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. Allocation of the 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 purchase price allocation	\$ 28,755

The 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):

	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.

In-process research and development of \$2.8 million obtained in our acquisition of Invotas reached technological feasibility during the year ended December 31, 2016, resulting in its reclassification to developed technology.

The results of operations of Invotas have been included in our 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 year ended December 31, 2016 . Pro forma results of operations have not been presented because the acquisition was not material to our results of operations.

Acquisitions in 2014

On May 9, 2014, we acquired all outstanding shares of privately held nPulse Technologies, Inc. (“nPulse”), a performance leader in network forensics based in Charlottesville, Virginia. The acquisition of nPulse strengthens our position as a leader in advanced threat detection and incident response management solutions.

The total purchase consideration of \$56.6 million consisted of \$55.2 million in cash, \$0.1 million of equity awards assumed, and 54,319 shares of our common stock, with a fair value of \$1.3 million which will vest upon the achievement of milestones. The number of shares was fixed at the completion of the acquisition, and is the maximum number of shares that can vest over a period of approximately three and half years from the acquisition date.

The acquisition of nPulse 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. 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 purchase price was finalized during 2015. Total allocation of the purchase price is as follows (in thousands):

	Amount
Net tangible liabilities assumed	\$ (1,833)
Intangible assets	24,700
Deferred tax asset	442
Deferred tax liability	(8,368)
Goodwill	41,671
Total purchase price allocation	<u>\$ 56,612</u>

None of the goodwill is deductible for U.S. federal income tax purposes.

Intangible assets consist primarily of developed technology, customer relationships and in-process research and development. Developed technology intangible includes 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 and services. Customer relationships intangible relates to nPulse's ability to sell existing, in-process and future products and services to its existing and potential customers. The in-process research and development intangible represents the estimated fair value of acquired research projects which have not reached technological feasibility at acquisition date, but have since been developed into products and services. The estimated useful life and fair values of the identifiable intangible assets are as follows (in thousands):

	Estimated Useful Life (in years)	Amount
Developed technology	6	\$ 10,100
Customer relationships	8	8,000
In-process research and development	N/A	6,600
Total		<u>\$ 24,700</u>

As of December 31, 2015, all in-process research and development obtained in our acquisition of nPulse was completed.

The results of operations of nPulse have been included in our consolidated statements of operations from the acquisition date. 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

There were no changes in the carrying amount of goodwill for the year ended December 31, 2015. Changes in the carrying amount of goodwill for the year ended December 31, 2016 are as follows (in thousands):

	Amount
Balance as of December 31, 2015	\$ 750,288
Goodwill acquired	227,972
Balance as of December 31, 2016	<u>\$ 978,260</u>

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

	As of December 31,	
	2016	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	(156,461)	(92,433)
Total net intangible assets	\$ 244,032	\$ 214,560

Amortization expense of intangible assets during the years ended December 31, 2016, 2015 and 2014 was \$64.0 million, \$47.1 million and \$45.2 million, respectively.

The expected future annual amortization expense of intangible assets as of December 31, 2016 is presented below (in thousands):

Years Ending December 31,	Amount
2017	\$ 59,118
2018	47,433
2019	45,547
2020	31,171
2021	29,282
2022 and thereafter	31,481
Total	\$ 244,032

6. Restructuring Charges

In addition to our previous restructuring activities, 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 years ended December 31, 2016 and 2015 (in thousands):

	Severance and related costs	Facilities costs	Total costs
Balance, December 31, 2014	\$ —	\$ 765	\$ 765
Provision for restructuring charges	—	—	—
Cash payments	—	(548)	(548)
Balance, December 31, 2015	\$ —	\$ 217	\$ 217
Provision for restructuring charges	21,529	1,492	23,021
Cash payments	(20,308)	(1,201)	(21,509)
Other adjustments	—	1,738	1,738
Balance, December 31, 2016	\$ 1,221	\$ 2,246	\$ 3,467

The total provision for restructuring charges during the year ended December 31, 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 \$3.5 million at December 31, 2016 is composed of \$1.2 million of severance payments which we expect to pay during

the first quarter of 2017, and \$2.2 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 December 31,	
	2016	2015
Product, current	\$ 8,924	\$ 8,200
Subscription and services, current	388,194	296,969
Total deferred revenue, current	397,118	305,169
Product, non-current	4,748	3,051
Subscription and services, non-current	251,650	218,778
Total deferred revenue, non-current	256,398	221,829
Total deferred revenue	\$ 653,516	\$ 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 December 31,			
	2016		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	(74,126)	(103,894)	(93,469)	(120,333)
Net carrying amount	\$ 385,874	\$ 356,106	\$ 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 December 31, 2016 will be amortized over a weighted-average remaining period of approximately 4.6 years.

Interest expense for the years ended December 31, 2016 and 2015 related to the Convertible Senior Notes consisted of the following (in thousands):

	Year Ended December 31,			
	2016		2015	
	Series A Notes	Series B Notes	Series A Notes	Series B Notes
Coupon interest	\$ 4,600	\$ 7,475	\$ 2,683	\$ 4,361
Amortization of convertible senior notes discounts and issuance costs	19,343	16,439	10,833	9,236
Total interest expense recognized	\$ 23,943	\$ 23,914	\$ 13,516	\$ 13,597
Effective interest rate on the liability component	6.5%	7.0%	6.5%	7.1%

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 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 \$14.9 million, \$14.4 million and \$10.7 million for the years ended December 31, 2016, 2015 and 2014, respectively.

The aggregate future non-cancelable minimum rental payments on our operating leases, as of December 31, 2016, are as follows (in thousands):

Years Ending December 31,	Amount
2017	\$ 15,715
2018	15,515
2019	12,173
2020	12,209
2021	10,534
2022 and thereafter	39,264
Total	\$ 105,410

Total future non-cancelable minimum rental payments have not been reduced by future minimum sublease rentals totaling \$6.9 million.

We are party to letters of credit totaling \$3.1 million and \$1.2 million as of December 31, 2016 and 2015, respectively, issued in support of operating leases at several of our facilities, as well as supporting credit limits on international credit cards. 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 December 31, 2016 and 2015, we had non-cancelable open orders of \$10.2 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 December 31, 2016, we have not accrued any significant costs for such non-cancelable commitments.

Purchase Obligations

As of December 31, 2016, we had approximately \$20.7 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 December 31, 2016 under purchase orders outstanding as of the same date, such amounts are reflected in the consolidated balance sheet as accounts payable or accrued liabilities, and are excluded from the \$20.7 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 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. 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 9, 2016, the Supreme Court of California denied the petition for review. On December 8, 2016, the Company and the individual defendants filed a petition for a writ of certiorari before the United States Supreme Court. On February 6, 2017, the parties submitted to the Superior Court a stipulation of settlement. The terms of the settlement include a release and dismissal of all claims against all defendants without any liability or wrongdoing attributed to them. On February 7, 2017, plaintiffs filed an unopposed motion for preliminary approval of the settlement. The settlement, which is immaterial to the Company's consolidated financial statements, is subject to stockholder notice, court approval, and other customary conditions.

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 sought, 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. On November 14, 2016, the Court granted the motion to dismiss with leave to amend. The parties subsequently submitted a stipulation, which was adopted as an order of the Court on December 1, 2016, dismissing the action with prejudice as to the named plaintiffs and providing that plaintiffs would not appeal the dismissal.

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 December 31, 2016, there have been no claims under any indemnification provisions.

10. Common Shares Reserved for Issuance

Under our amended and restated certificate of incorporation, we are authorized to issue 100,000,000 shares of convertible preferred stock with a par value of \$0.0001 per share, none of which were issued and outstanding as of December 31, 2016 or 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 December 31, 2016 and 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 December 31,	
	2016	2015
Reserved under stock award plans	38,005	38,500
Convertible Senior Notes	15,141	15,141
ESPP	2,851	3,214
Total	55,997	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 10.0 million shares and 7.2 million shares of our common stock were reserved for future grants as of December 31, 2016 and 2015, respectively, under the 2013 Plan. As of January 1, 2017, an additional 8,729,801 shares of common stock became available for future grants under our 2013 Plan pursuant to provisions thereof that automatically increase the share reserve under such plan each year.

Our 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 2,850,830 shares and 3,214,287 shares of common stock were available for future issuance as of December 31, 2016 and 2015, respectively, under our ESPP. As of January 1, 2017, an additional 1,745,960 shares of common stock became available for future issuance under our ESPP pursuant to the provisions thereof that automatically increase the share reserve under such plan each year.

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 periods and a summary of information related to options outstanding 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, 2013	27,422	\$ 5.82			
Granted	676	72.60	\$ 72.60		
Exercised	(7,642)	2.97			\$ 271,236
Cancelled	(1,941)	9.10			
Assumed in acquisition	63	20.60			
Balance — December 31, 2014	18,578	\$ 9.13			
Granted	—	—	\$ —		
Exercised	(5,856)	4.97			211,854
Cancelled	(1,228)	14.57			
Balance — December 31, 2015	11,494	\$ 10.67			
Granted	—	—	\$ —		
Exercised	(2,459)	5.64			23,343
Cancelled	(950)	23.40			
Balance — December 31, 2016	8,085	\$ 10.70		5.4	\$ 40,304
Options exercisable — December 31, 2016	7,331	\$ 9.74		5.3	\$ 39,097

The aggregate intrinsic value above represents the pre-tax difference between the exercise price of stock options and the quoted market price of our stock on that day for all in-the-money stock options.

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 periods 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, 2013	3,602	\$ 27.20		
Granted	6,734	42.12		
Vested	(1,482)	16.04		
Cancelled	(809)	40.93		
Granted in acquisitions	296	26.44		
Unvested balance — December 31, 2014	8,341	\$ 39.57		
Granted	16,876	32.25		
Vested	(2,783)	35.66		
Cancelled	(2,380)	41.11		
Unvested balance — December 31, 2015	20,054	\$ 33.68		
Granted	12,711	13.76		
Vested	(6,222)	33.99		
Cancelled	(6,660)	27.17		
Unvested balance — December 31, 2016	19,883	\$ 22.23	1.5	\$ 236,605
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 — December 31, 2016	5,584	\$ 20.22	2.0	\$ 66,445

In connection with our acquisition of nPulse in May 2014, we issued 295,681 restricted stock awards at a value of \$26.44 per share. Of these awards, 54,319 were issued to former shareholders as purchase consideration, while the other 241,362 were issued into escrow for employees continuing service with the Company. The vesting of all these awards was over a period of approximately three and a half years from the acquisition date, subject to the achievement of specified performance milestones. As of December 31, 2016, all milestones had been achieved, and therefore none of these awards remain unvested.

During the year ended December 31, 2015, awards granted includes two cycles of annual refresh grants made to the general employee population.

Included in the 12.7 million shares granted during the year ended December 31, 2016 are 3.6 million shares granted to employees from acquisitions consummated in 2016.

During the years ended December 31, 2016, 2015 and 2014, we issued 3.0 million, 5.3 million and 1.7 million shares, respectively, of restricted common stock, restricted stock awards or restricted stock units to certain employees which vest upon the achievement of certain performance conditions in addition to a continued service relationship with the Company.

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. We determined valuation assumptions as follows:

Fair Value of Common Stock

We use the listed stock price on the date of grant as the fair value of our common stock.

Risk-Free Interest Rate

We base the risk-free interest rate used in the Black-Scholes option-pricing model on the implied yield available on U.S. Treasury zero-coupon issues with an equivalent expected term of the options for each option group.

Expected Term

The expected term represents the period that our stock-based awards are expected to be outstanding. We base the expected term assumption on our historical behavior combined with estimates of post-vesting holding periods.

Volatility

We determine the price volatility factor based on the historical volatilities of our peer group as we do not have sufficient trading history for our common stock.

Dividend Yield

The expected dividend assumption is based on our current expectations about our anticipated dividend policy.

The following table summarizes the assumptions used in the Black-Scholes option-pricing model to determine the fair value of our stock options granted:

	Year Ended December 31, 2014
Fair value of common stock	\$27.89 - \$75.87
Risk-free interest rate	1.8% - 2.0%
Expected term (in years)	6
Volatility	51% - 53%
Dividend yield	—%

No stock options were granted during the years ended December 31, 2016 and 2015 .

The following table summarizes the assumptions used in the Black-Scholes option-pricing model to determine the fair value of our common shares under the ESPP:

	Year Ended December 31,		
	2016	2015	2014
Fair value of common stock	\$13.12 - \$14.12	\$19.10 - \$35.16	\$27.08 - \$32.32
Risk-free interest rate	0.38% - 0.79%	0.09% - 0.50%	0.1%
Expected term (in years)	0.5 - 1.0	0.5 - 1.0	0.5 - 1.0
Volatility	57% - 63%	38% - 42%	35% - 45%
Dividend yield	—%	—%	—%

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

	Year Ended December 31,		
	2016	2015	2014
Cost of product revenue	\$ 2,092	\$ 1,588	\$ 888
Cost of subscription and services revenue	29,811	29,435	17,037
Research and development	64,755	68,329	28,968
Sales and marketing	57,750	73,286	66,773
General and administrative	43,343	49,793	38,186
Restructuring	1,144	—	—
Total	<u>\$ 198,895</u>	<u>\$ 222,431</u>	<u>\$ 151,852</u>

As of December 31, 2016 , total compensation cost related to stock-based awards not yet recognized was \$294.9 million , which is expected to be amortized on a straight-line basis over the weighted-average remaining vesting period of approximately 2.3 years .

12. Income Taxes

Loss before income taxes consisted of the following (in thousands):

	Year Ended December 31,		
	2016	2015	2014
United States	\$ (289,783)	\$ (324,805)	\$ (269,426)
Foreign	(199,067)	(210,320)	(211,018)
Total	\$ (488,850)	\$ (535,125)	\$ (480,444)

The provision for (benefit from) income taxes consisted of the following (in thousands):

	Year Ended December 31,		
	2016	2015	2014
Federal:			
Current	\$ —	\$ —	\$ 11
Deferred	(10,941)	—	(36,208)
State:			
Current	49	(160)	255
Deferred	(1,384)	—	(3,263)
Foreign:			
Current	3,156	5,604	2,945
Deferred	399	(1,354)	(394)
Total	\$ (8,721)	\$ 4,090	\$ (36,654)

Reconciliation of the federal statutory income tax rate to the effective tax rate is as follows:

	Year Ended December 31,		
	2016	2015	2014
Federal statutory rate	35.0 %	35.0 %	35.0 %
Effect of:			
State taxes, net of federal tax benefit	0.3	—	0.6
Change in valuation allowance	(16.3)	(21.0)	(11.2)
Research and development tax credit	1.1	1.1	1.2
Stock-based compensation	(2.8)	(1.1)	(1.9)
Impact of foreign tax differential	(14.7)	(14.1)	(15.6)
Non-deductible/non-taxable items	(0.8)	(0.6)	(0.2)
Other, net	—	(0.1)	(0.3)
Total	1.8 %	(0.8)%	7.6 %

The components of the deferred tax assets and liabilities are as follows (in thousands):

	As of December 31,	
	2016	2015
Deferred tax assets:		
Net operating loss carryforwards	\$ 216,397	\$ 82,201
Accruals and reserves	15,335	16,841
Stock-based compensation	48,212	59,872
Fixed assets	14,025	12,122
Deferred revenue	64,691	43,411
Research and development credits	30,852	23,445
Other deferred tax assets	673	1,017
Gross deferred tax assets	390,185	238,909
Valuation allowance	(233,783)	(81,937)
Total deferred tax assets	156,402	156,972
Deferred tax liabilities:		
Acquisition related intangibles	(93,151)	(81,621)
Convertible senior notes	(61,811)	(73,427)
Other deferred tax liabilities	(7)	(92)
Total deferred tax liabilities	(154,969)	(155,140)
Total net deferred tax assets	\$ 1,433	\$ 1,832

A valuation allowance is provided when it is more likely than not that the deferred tax asset will not be realized. Our valuation allowance increased by approximately \$151.8 million during the year ended December 31, 2016, primarily as a result of additional deferred tax assets recorded during the year for net operating loss carryforwards.

As of December 31, 2016, we had federal and state net operating loss carry forwards of approximately \$602.3 million and \$705.0 million, respectively, available to reduce future taxable income, if any. If not utilized, the federal net operating loss carry forwards will expire from the years ending December 31, 2024 through 2036 while state net operating loss carry forwards will expire from the years ending December 31, 2017 through 2036.

We also have federal and state research and development tax credit carry forwards of approximately \$21.6 million and \$13.6 million, respectively. If not utilized, the federal credit carry forwards will expire in various amounts from the years ended December 31, 2024 through 2036. The state credit will carry forward indefinitely.

Utilization of the net operating loss carry forwards and credits may be subject to an annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986, as amended, and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization.

On January 1, 2016, we adopted ASU 2016-09 which changes the accounting for employee share-based payments. Under the new guidance, excess tax benefits or tax deficiencies associated with share-based payment awards will be recognized in the income statement when the awards vest or settle, rather than in stockholders' equity. As a result, the table of deferred tax assets shown above includes certain deferred tax assets as of December 31, 2016 that arose directly from tax deductions related to equity compensation greater than compensation recognized for financial reporting in the amount of \$117.3 million.

As of December 31, 2016, we had \$43.6 million of unrecognized tax benefits, of which if recognized, \$1.8 million would affect our effective tax rate. We file income tax returns in U.S. federal, state and foreign jurisdictions. As we have net operating loss carry forwards for U.S. federal and state jurisdictions, the statute of limitations is open for all tax years. For foreign jurisdictions, the tax years open to examination include the years 2012 and forward. We do not expect the unrecognized tax benefits to change significantly over the next 12 months. We recognize both interest and penalties associated with uncertain tax positions as a component of income tax expense. During the year ended December 31, 2016, we recognized a \$31,000 decrease to interest and penalties. During the years ended December 31, 2015 and 2014, we recognized interest and penalties of \$183,000 and \$115,000, respectively. As of December 31, 2016 and 2015, our total accrual for interest and penalties was \$367,000 and \$398,000, respectively. The ultimate amount and timing of any future cash settlements cannot be predicted with reasonable certainty.

A reconciliation of gross unrecognized tax benefits is as follows (in thousands):

	Year Ended December 31,		
	2016	2015	2014
Unrecognized tax benefits at the beginning of the period	\$ 31,902	\$ 21,264	\$ 10,887
Additions for tax positions related to the current year	12,435	10,614	10,452
Increases related to prior year tax positions	561	24	—
Decreases related to prior year tax positions	(1,213)	—	(52)
Decreases based on settlements with taxing authorities	(48)	—	—
Lapse of statute of limitations	—	—	(23)
Unrecognized tax benefits at the end of the period	<u>\$ 43,637</u>	<u>\$ 31,902</u>	<u>\$ 21,264</u>

As of December 31, 2016, we have not made any tax provision for U.S. federal and state income taxes on approximately \$23.6 million of undistributed earnings in foreign subsidiaries, which we expect to reinvest outside of the U.S. indefinitely. If we were to repatriate these earnings to the U.S., we would be subject to U.S. income taxes and subject to an adjustment for foreign tax credits and foreign withholding taxes. Determination of the amount of unrecognized deferred tax liability related to these earnings is not practicable.

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 years ended December 31, 2016, 2015 and 2014, 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):

	Year Ended December 31,		
	2016	2015	2014
Numerator:			
Net loss	\$ (480,129)	\$ (539,215)	\$ (443,790)
Denominator:			
Weighted average number of shares outstanding—basic and diluted	163,211	154,120	142,176
Net loss per share—basic and diluted	<u>\$ (2.94)</u>	<u>\$ (3.50)</u>	<u>\$ (3.12)</u>

The following outstanding options, unvested shares and units, ESPP shares, shares issuable upon the conversion of our Convertible Senior Notes and shares contingently issuable 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 December 31,		
	2016	2015	2014
Options to purchase common stock	8,085	11,494	18,578
Unvested early exercised common shares	—	936	2,382
Unvested restricted stock awards and units	19,883	20,054	8,341
Convertible senior notes	15,141	15,141	—
iSIGHT earn-out contingently issuable shares	1,793	—	—
ESPP shares	314	210	124

In February 2017, we released 1,793,297 shares of common stock issued to former stockholders of iSIGHT as the threat intelligence bookings target associated with the release of these shares was determined to have been achieved. If all the necessary conditions for release were satisfied prior to December 31, 2016, the release would have increased the number of weighted average shares outstanding used to compute basic net loss per share for the year ended December 31, 2016.

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):

	Year Ended December 31,		
	2016	2015	2014
Revenue:			
United States	\$ 488,623	\$ 439,205	\$ 319,144
EMEA	102,288	80,960	57,721
APAC	95,285	73,009	34,284
Other	27,918	29,793	14,513
Total revenue	<u>\$ 714,114</u>	<u>\$ 622,967</u>	<u>\$ 425,662</u>

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

	As of December 31,	
	2016	2015
Property and Equipment, net:		
United States	\$ 43,214	\$ 57,537
International	18,638	20,831
Total property and equipment, net	<u>\$ 61,852</u>	<u>\$ 78,368</u>

For the years ended December 31, 2016 and 2015, one distributor represented 19% and 17%, respectively, and one reseller represented 12% and 13%, respectively, of the Company's total revenue. For the year ended December 31, 2014, no distributor represented 10% or greater of the Company's total revenue, and one reseller represented 11% of the Company's total revenue.

As of December 31, 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 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Limitations on Effectiveness of Controls

In designing and evaluating our disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2016. The term "disclosure controls and procedures," as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (or the "Exchange Act"), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Based on our evaluation, our chief executive officer and chief financial officer concluded that, as of December 31, 2016, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Annual Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2016 based on the criteria related to internal control over financial reporting described in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2016.

Deloitte & Touche LLP, the independent registered public accounting firm that audited the consolidated financial statements included in this Form 10-K, has issued a report, included herein, on the effectiveness of the Company's internal control over financial reporting as of December 31, 2016.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
FireEye, Inc.
Milpitas, California

We have audited the internal control over financial reporting of FireEye, Inc. and subsidiaries (the "Company") as of December 31, 2016, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements and financial statement schedule as of and for the year ended December 31, 2016 of the Company and our report dated February 24, 2017 expressed an unqualified opinion on those financial statements and financial statement schedule.

/s/ DELOITTE & TOUCHE LLP

San Jose, California
February 24, 2017

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item is incorporated by reference to our Proxy Statement for our 2017 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2016 .

As part of our system of corporate governance, our board of directors has adopted a code of business conduct and ethics. The code applies to all of our employees, officers (including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions), agents and representatives, including our independent directors and consultants, who are not employees of ours, with regard to their FireEye-related activities. Our code of business conduct and ethics is available on our website at www.fireeye.com . We will post on this section of our website any amendment to our code of business conduct and ethics, as well as any waivers of our code of business conduct and ethics, that are required to be disclosed by the rules of the SEC or the NASDAQ Stock Market.

Item 11. Executive Compensation

The information required by this item is incorporated by reference to our Proxy Statement for our 2017 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2016 .

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this item is incorporated by reference to our Proxy Statement for our 2017 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2016 .

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated by reference to our Proxy Statement for our 2017 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2016 .

Item 14. Principal Accountant Fees and Services

The information required by this item is incorporated by reference to our Proxy Statement for our 2017 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2016 .

PART IV

Item 15. Exhibits, Financial Statement Schedules

Documents filed as part of this report are as follows:

1. Consolidated Financial Statements:

Our Consolidated Financial Statements are listed in the “Index to Consolidated Financial Statements” in Part II, Item 8 of this Annual Report on Form 10-K.

2. Financial Statement Schedules:

Schedule II - Valuation and Qualifying Accounts is included below, and should be read in conjunction with the Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K. All other schedules have been omitted because they are not required, not applicable, or the required information is included elsewhere in this Annual Report on Form 10-K.

3. Exhibits:

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

SCHEDULE II

VALUATION AND QUALIFYING ACCOUNTS

(in thousands)

	Balance at beginning of period	Charged to cost and expenses	Write-offs, net of recoveries	Balance at end of period
Allowance for doubtful accounts receivable				
Year ended December 31, 2014	\$ 20	\$ 566	\$ —	\$ 586
Year ended December 31, 2015	586	1,342	93	2,021
Year ended December 31, 2016	\$ 2,021	\$ 1,560	\$ (1,991)	\$ 1,590

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 24, 2017 .

FIREEYE, INC.

By: /s/ KEVIN R. MANDIA
Kevin R. Mandia
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL THESE PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Kevin R. Mandia, Frank E. Verdecanna and Alexa King, and each of them, his or her attorneys-in-fact, each with full power of substitution, for him or her in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each said attorneys-in-fact or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/S/ KEVIN R. MANDIA</u> Kevin R. Mandia	Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	February 24, 2017
<u>/S/ FRANK E. VERDECANNA</u> Frank E. Verdecanna	Executive Vice President, Chief Financial Officer and Chief Accounting Officer <i>(Principal Financial and Accounting Officer)</i>	February 24, 2017
<u>/S/ DEEPAK AHUJA</u> Deepak Ahuja	Director	February 24, 2017
<u>/S/ KIMBERLY ALEXY</u> Kimberly Alexy	Director	February 24, 2017
<u>/S/ RONALD E. F. CODD</u> Ronald E. F. Codd	Director	February 24, 2017
<u>/S/ WILLIAM M. COUGHRAN JR.</u> William M. Coughran Jr.	Director	February 24, 2017
<u>/S/ STEPHEN PUSEY</u> Stephen Pusey	Director	February 24, 2017
<u>/S/ ENRIQUE SALEM</u> Enrique Salem	Director	February 24, 2017

EXHIBIT INDEX

Exhibit No.	Description of Exhibit	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
2.1+	Agreement and Plan of Merger, dated as of January 14, 2016, by and among the Registrant, Iris Merger Corporation, iSIGHT Security, Inc. and Shareholder Representative Services LLC.	8-K	001-36067	2.1	January 20, 2016
3.1	Amended and Restated Certificate of Incorporation of the Registrant.	8-K	001-36067	3.1	September 25, 2013
3.2	Amended and Restated Bylaws of the Registrant.	8-K	001-36067	3.1	August 4, 2016
4.1	Form of the Registrant's common stock certificate.	S-1/A	333-190338	4.1	September 9, 2013
4.2	Indenture, dated as of June 2, 2015, between the Registrant and U.S. Bank National Association.	8-K	001-36067	4.1	June 5, 2015
4.3	Form of Global 1.000% Convertible Senior Note due 2035 (included in Exhibit 4.2).	8-K	001-36067	4.2	June 5, 2015
4.4	Indenture, dated as of June 2, 2015, between the Registrant and U.S. Bank National Association.	8-K	001-36067	4.3	June 5, 2015
4.5	Form of Global 1.625% Convertible Senior Note due 2035 (included in Exhibit 4.4).	8-K	001-36067	4.4	June 5, 2015
10.1†	Form of Indemnification Agreement between the Registrant and certain of its officers and directors.	S-1	333-190338	10.1	August 2, 2013
10.2†	Employee Incentive Plan.	S-1	333-190338	10.17	August 2, 2013
10.3†	Change of Control Severance Policy for Officers.	S-1/A	333-190338	10.27	August 21, 2013
10.4†	2004 Stock Option Plan, as amended, including form agreements under 2004 Stock Option Plan.	S-1	333-190338	10.5	August 2, 2013
10.5†	2008 Stock Plan, as amended, including form agreements under 2008 Stock Plan.	S-1/A	333-190338	10.6	September 9, 2013
10.6†	2013 Equity Incentive Plan, including form agreements under 2013 Equity Incentive Plan.	S-1/A	333-193717	10.6	March 3, 2014
10.7†	2013 Employee Stock Purchase Plan, as amended and restated as of August 2, 2016.	10-Q	001-36067	10.1	November 4, 2016
10.8†	Mandiant Corporation 2011 Equity Incentive Plan, as amended, including form agreements under Mandiant Corporation 2011 Equity Incentive Plan.	S-1	333-193717	10.8	February 3, 2014
10.9†	Outside Director Compensation Policy, as amended and currently in effect.	10-Q	001-36067	10.1	August 5, 2016
10.10†	Offer Letter between the Registrant and David DeWalt, dated June 15, 2016.	8-K	001-36067	10.1	June 20, 2016
10.11†	Offer Letter between the Registrant and Ashar Aziz, dated November 26, 2012.	S-1	333-190338	10.10	August 2, 2013
10.12†	Offer Letter between the Registrant and Enrique Salem, dated February 2, 2013.	S-1	333-190338	10.11	August 2, 2013
10.13†	Offer Letter between the Registrant and Ronald E. F. Codd, dated July 28, 2012.	S-1	333-190338	10.12	August 2, 2013
10.14†	Offer Letter between the Registrant and Kimberly Alexy, dated December 12, 2014.	8-K	001-36067	10.1	January 8, 2015
10.15†	Offer Letter between the Registrant and Stephen Pusey, dated June 12, 2015.	8-K	001-36067	10.1	June 17, 2015

10.16†	Offer Letter between the Registrant and Deepak Ahuja, dated August 27, 2015.	8-K	001-36067	10.2	September 8, 2015
10.17†	Offer Letter between the Registrant and Alexa King, dated August 1, 2013.	S-1/A	333-190338	10.16	August 21, 2013
10.18†	Offer Letter, between the Registrant and Kevin Mandia, dated December 24, 2013.	8-K	001-36067	10.1	January 2, 2014
10.19†	Offer Letter between the Registrant and Travis Reese, dated June 27, 2016	10-Q	001-36067	10.3	August 5, 2016
10.20†	Offer Letter between the Registrant and Michael Berry, dated August 25, 2015.	8-K	001-36067	10.1	September 8, 2015
10.21*†	Offer Letter between the Registrant and William Robbins, dated October 31, 2016.				
10.22†	Key Employee Non-Competition Agreement, dated as of December 30, 2013, by and between Kevin Mandia and the Registrant.	8-K	001-36067	10.3	January 2, 2014
10.23†	Key Employee Non-Competition Agreement, dated as of December 30, 2013, by and between Travis Reese and the Registrant.	10-Q	001-36067	10.4	August 5, 2016
10.24†	Transition Agreement between the Registrant and Michael J. Berry, dated as of February 2, 2017.	8-K	001-36067	10.1	February 2, 2017
10.25	Lease, dated as of January 15, 2008, by and between the Registrant and Silicon Valley CA-I, LLC, as amended and currently in effect.	S-1/A	333-190338	10.3	August 21, 2013
10.26	Sixth Amendment, dated as of January 23, 2014, to the Lease dated as of January 15, 2008 by and between the Registrant and Silicon Valley CA-I, LLC.	10-Q	001-36067	10.3	May 14, 2014
10.27	Seventh Amendment, dated as of March 24, 2014, to the Lease dated as of January 15, 2008 by and between the Registrant and Silicon Valley CA-I, LLC.	10-Q	001-36067	10.4	May 14, 2014
10.28	Lease, dated as of March 11, 2010, by and between the Registrant and Silicon Valley CA-I, LLC, as amended, assigned and currently in effect.	S-1	333-190338	10.4	August 2, 2013
10.29	Lease, dated as of August 4, 2016, by and between the Registrant and 601 McCarthy Owner, LLC.	8-K	001-36067	10.1	August 16, 2016
10.30††	Flextronics Design and Manufacturing Services Agreement, dated as of September 28, 2012, by and between the Registrant and Flextronics Telecom Systems, Ltd.	S-1/A	333-190338	10.19	September 9, 2013
10.31	Amendment to Flextronics Design and Manufacturing Services Agreement, effective as of August 1, 2013, by and among the Registrant, FireEye Ireland Limited and Flextronics Telecom Systems, Ltd.	10-Q	001-36067	10.3	November 5, 2014
10.32	Design Statement of Work A-1 to Flextronics Design and Manufacturing Services Agreement, dated December 4, 2013, by and among the Registrant, FireEye Ireland Limited and Flextronics Telecom Systems, Ltd.	10-Q	001-36067	10.4	November 5, 2014
10.33	Purchase Agreement, dated May 27, 2015, among the Registrant and Morgan Stanley & Co. LLC and J.P. Morgan Securities LLC, as representatives of the several Initial Purchasers named in Schedule I thereto	8-K	001-36067	10.1	May 29, 2015
10.34	Forward Stock Purchase Transaction, dated May 27, 2015, between the Registrant and Morgan Stanley & Co. LLC.	8-K	001-36067	10.2	May 29, 2015

10.35	Forward Stock Purchase Transaction, dated May 27, 2015, between the Registrant and Morgan Stanley & Co. LLC.	8-K	001-36067	10.3	May 29, 2015
21.1*	List of subsidiaries of the Registrant.				
23.1*	Consent of Deloitte & Touche LLP, independent registered public accounting firm.				
24.1	Power of Attorney (included on the signature page to this Annual Report on Form 10-K).				
31.1*	Rule 13a-14(a) / 15(d)-14(a) Certification of Principal Executive Officer.				
31.2*	Rule 13a-14(a) / 15(d)-14(a) Certification of Principal Financial Officer.				
32.1**	Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101.INS*	XBRL Instance Document.				
101.SCH*	XBRL Taxonomy Extension Schema Document.				
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document.				
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document.				
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document.				
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document.				

* Filed herewith.

** Furnished herewith.

+ The schedules and other attachments to this exhibit have been omitted. The Registrant agrees to furnish a copy of any omitted schedules or attachments to the SEC upon request.

† Indicates a management contract or compensatory plan or arrangement.

†† Portions of this exhibit have been granted confidential treatment by the Securities and Exchange Commission.



October 31, 2016

William Robbins
(Via Email)

Dear Bill,

FireEye Inc., a Delaware corporation (the "Company"), is pleased to offer you employment on the following terms:

1. Title. You will be employed as **Executive Vice President, Worldwide Sales**, reporting to the Company's Chief Executive Officer. This is a full-time position.

2. Cash Compensation. You will receive an annual base salary of **\$450,000** per year, payable in accordance with the Company's normal payroll practices and subject to normal withholding taxes. This salary will be subject to adjustment pursuant to the Company's employee compensation policies in effect from time to time. In addition, you will be eligible to be considered for an incentive bonus for each fiscal year of the Company under the Company's Employee Incentive Plan (the "Incentive Plan") or any successor plan. The bonus (if any) will be awarded based on objective and/or subjective criteria established by the Company's Chief Executive Officer and approved by the Company's Board of Directors (the "Board") and/or the Compensation Committee of the Board (the "Compensation Committee"), as applicable. Your initial annual target bonus will be equal to **\$350,000**, bringing your total target cash compensation to **\$800,000** per year. The bonus is currently scheduled to be paid annually, and only if you are still employed by the Company at the time of payment. The terms and conditions of your bonus will be set forth in the Incentive Plan. The determinations of the Board and/or the Compensation Committee, as applicable, with respect to your bonus will be final and binding. Your cash compensation for 2016 will be pro-rated based on your start date.

3. Employee Benefits. You will be eligible to participate in the Company's employee benefit plans made available to similarly situated employees of the Company so long as such plans are kept in force by the Company and provided you meet the eligibility requirements and other terms, conditions, and restrictions of such respective plans and programs.

4. Equity Awards.

(a) RSU Awards. Management of the Company ("Management") will recommend that the Compensation Committee grant you restricted stock units convertible into **200,000** shares of the Company's Common Stock (the "RSUs"). The RSUs will be granted pursuant to the Company's 2013 Equity Incentive Plan (the "2013 Plan") and will be subject to the Company's standard form of award agreement and Compensation Committee approval after the commencement of your employment. The RSUs will vest over a four year period from November 15, 2016, with 25% of the RSUs vesting on November 15, 2017 and 6.25% of the RSUs vesting each quarter thereafter over the remaining three years, subject to your continued service to the Company through each applicable vesting date.

In addition, in the event your employment with the Company commences on or prior to December 15, 2016 and you forfeit any bonus payment and/or equity vesting that you would otherwise have received after the date hereof from your current employer had you remained employed with your current employer through December 16, 2016, Management will recommend that the Compensation Committee grant you restricted stock units convertible into a number of shares (not to exceed 125,000 shares) of the Company's Common Stock with a value approximately equal to the value of such forfeited bonus payment and/or equity vesting, as applicable (the "Short-Term RSUs"). The Short-Term RSUs, if any, will be granted pursuant to the 2013

Plan and will be subject to the Company's standard form of award agreement and Compensation Committee approval after the commencement of your employment. The Short-Term RSUs, if any, will vest on January 2, 2017, subject to your continued service to the Company through such vesting date.

(b) PSU Award. Management will also recommend that the Compensation Committee grant you restricted stock units with performance-based vesting for a target of **200,000** shares of the Company's Common Stock (the "PSUs"). The PSUs will be subject to performance-based vesting as shall be approved by the Compensation Committee and set forth in your award agreement and will vest in four equal annual installments (1/4, 1/4, 1/4 and 1/4) over a four year period from February 15, 2017, subject to your continued service to the Company through each applicable vesting date.

5. Severance & Change of Control Benefits. Upon your employment with the Company, you will be designated as an officer as such term is used the meaning of Section 16 of the Securities Exchange Act of 1934, as amended (a "Section 16 Officer"). As a Section 16 Officer, you are eligible for benefits in the Company's Change of Control Severance Policy for Officers and your participation agreement thereunder (the "Severance Policy"). The Severance Policy is attached to this letter as Exhibit A.

6. Insider Trading. The Company's insider trading policy applies to all of our employees, directors and consultants and our affiliates. The insider trading policy prohibits you from buying or selling shares when you have "inside information." Inside information is material information about us that is not yet public but that a reasonable investor would consider important in deciding whether to buy or sell shares. You will be eligible to participate in any plan that is established to permit employees to automatically buy or sell shares during periods when they possess inside information.

7. Tax Matters.

(a) Withholding. All forms of compensation referred to in this Agreement are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law.

(b) Section 409A. The Company intends that all payments and benefits provided under this offer letter or otherwise are exempt from, or comply with, the requirements of Section 409A of the Internal Revenue Code of 1986, as amended, and any guidance promulgated thereunder ("Section 409A") so that none of the payments or benefits will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to so comply or be exempt. In no event will the Company reimburse you for any taxes that may be imposed on you as a result of Section 409A. Each payment and benefit payable hereunder is intended to constitute a separate payment for purposes of Section 1.409A-2(b)(2) of the Treasury Regulations.

(c) Tax Advice. You are encouraged to obtain your own tax advice regarding your compensation from the Company. You agree that the Company does not have a duty to design its compensation policies in a manner that minimizes your tax liabilities, and you will not make any claim against the Company, the Board or the Compensation Committee related to tax liabilities arising from your compensation.

8. Eligibility. On your first day of work you will be required to prove your eligibility for employment under the Immigration and Reform Control Act of 1986, as well as to sign and comply with the Company's standard invention assignment and proprietary information agreement which requires, among other provisions, the assignment of patent rights to any invention made during your employment at the Company and non-disclosure of proprietary information. I have attached a copy of this agreement for your review.

9. At Will Employment. It is our desire that our association be long-lasting and mutually rewarding. You should, however, understand that all employees are employed "at will", which means that

each employee, as well as the Company, has the right to terminate the employment relationship at any time for any reason, with or without cause and your duties and responsibilities are subject to change at any time.

10. No External Consulting. By signing this letter, you agree that as long as you are employed at the Company, you will not consult for other companies or organizations, even if they are deemed as non-competitive to the Company. Any external consulting agreement you undertake must be approved in writing by the Company's Chief Executive Officer.

11. No Conflict. By signing this letter, you confirm that you have not entered into any agreement either written or oral in conflict with this Agreement or employment with Company and that you will not violate any agreement with or rights of any third party, or use or disclose any third party's confidential information or intellectual property, when acting within the scope of your employment or otherwise on behalf of the Company.

12. Entire Agreement. This letter and the documents referred to herein constitute the entire agreement and understanding between you and the Company with respect to the subject matter described in this letter, and supersede and replace any prior understandings or agreements, whether oral or written, between you and the Company regarding such subject matter.

13. Expiration and Contingency of Offer. This offer shall **expire on November 15, 2016** and is contingent on your signing the Company's standard invention assignment and proprietary information agreement, eligibility for employment under the Immigration and Reform Control Act of 1986, and your successful completion of a background check. If you are not eligible for employment or do not pass the background check, this offer of employment will be rescinded. The Company reserves the right to obtain relevant background reports at any time after receipt of your authorization and, if you are hired or engaged by the Company, any time throughout your employment or contract period.

Please indicate your acceptance to the foregoing terms by signing this letter where indicated below and returning it to me. We are delighted that you will be joining our team. We believe you will make an outstanding contribution to the Company and we are looking forward to working with you. If you have any questions, please do not hesitate to contact me.

Very truly yours,

/s/ Kevin Mandia

Kevin Mandia
Chief Executive Officer

AGREED TO AND ACCEPTED BY:

/s/ Bill T. Robbins

(Sign Name)

William Robbins

(Print Name)

Date: Nov 14, 2016

Start date: November 18, 2016

Exhibit A

Change of Control Severance Policy for Officers

(adopted and effective July 30, 2013)

This Change of Control Severance Policy for Officers (the “**Policy**”) is an “employee welfare benefit plan,” as defined in Section 3(1) of the Employee Retirement Income Security Act of 1974, as amended (“**ERISA**”). This document constitutes both the written instrument under which the Policy is maintained and the required summary plan description for the Policy.

Eligible Employee : With respect to the Change of Control Severance Benefits described in the following section, you are an eligible employee under this Policy (an “**Eligible Employee**”) if, as of immediately prior to the beginning of the Change of Control Period (as defined below) of FireEye, Inc. (the “**Company**”), (1) you are an employee at the Vice President or Senior Vice President level at grade 13 or above; and (2) you and the Company have executed a Participation Agreement (as defined below).

With respect to Severance Benefits Outside of the Change of Control Period described below, you are an Eligible Employee if, on the date that the Company terminates your employment other than for Cause, death or disability outside of the Change of Control Period (as defined below), (1) you are an employee at the Vice President or Senior Vice President level at grade 13 or above; and (2) you and the Company have executed a Participation Agreement.

Change of Control Severance Benefits : If you are an Eligible Employee for Change of Control Severance Benefits (as specified above), you will be eligible for severance benefits under this Policy if: (1) during the Change of Control Period, (2) your employment terminates as a result of an Involuntary Termination (a “**COC Qualified Termination**”). If, and only if, you are such an Eligible Employee and your employment terminates as a result of a COC Qualified Termination, you will be eligible to receive the applicable Equity Vesting, Cash Severance and COBRA Benefit described herein. All severance benefits under this Policy shall be subject to your compliance with the Release Requirement (as defined below).

Equity Vesting : Upon a COC Qualified Termination, subject to the Release Requirement, 100% of the then-unvested shares subject to each of your then-outstanding equity awards shall immediately vest and, in the case of options and stock appreciation rights, shall become exercisable (for avoidance of doubt, no more than 100% of the shares subject to the outstanding portion of an equity award may vest and, with respect to an option or stock appreciation right, become exercisable pursuant to this provision). For purposes of this paragraph, unvested performance-based awards will vest at the maximum level of achievement. Subject to any payment delay necessary to comply with Section 409A (as defined below), any restricted stock units, performance shares and/or performance units that vest under this paragraph will be settled on the 61st day following your Qualified Termination.

Cash Severance : Upon a COC Qualified Termination, subject to the Release Requirement, you will receive a lump-sum severance payment equal to (A) the pro-rata portion of your target bonus based on the number of days you had been employed with the Company (or its successor) during the fiscal year of the Qualified Termination (the “**Pro-Rated Bonus**”), plus (B) an amount of your Base Salary that would be paid for a period of twelve (12) months.

Subject to any payment delay necessary to comply with Section 409A (as defined below), your severance payment will be paid in cash and in full on the 61st day following your Qualified Termination. If you die before all amounts have been paid, such unpaid amounts will be paid to your designated beneficiary, if living, or otherwise to your personal representative in a lump-sum payment (less any withholding taxes) as soon as possible following your death.

COBRA Benefit : Upon a COC Qualified Termination, subject to the Release Requirement, if you make a valid election under COBRA (as defined below) to continue your health coverage, the Company will for 12 months pay the cost of such continuation coverage for you and any eligible spouse or dependents that were covered under the Company's health care plans immediately prior to the date of your eligible termination ("**COBRA Benefit**"). Notwithstanding the preceding, if the Company determines in its sole discretion that it cannot provide COBRA Benefit without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company will instead provide you a taxable lump-sum payment in an amount equal to 12 months of the COBRA Benefit *multiplied by* the monthly COBRA premium that you would be required to pay to continue your group health coverage in effect on the date of termination of employment (which amount will be based on the premium for the first month of COBRA coverage). If the Company provides for a taxable cash payment in lieu of the COBRA Benefit, then such cash payment will be made regardless of whether you elect COBRA continuation coverage and such payment shall be made in full on the 61st day following your termination of employment, subject to the Release Requirement and the Section 409A paragraph.

Severance Benefits Outside of the Change of Control Period : If you are an Eligible Employee for Severance Benefits Outside of the Change of Control Period (as specified above), you will be eligible for severance benefits under this paragraph if (1) outside of the Change of Control Period, (2) the Company terminates your employment other than Cause, death or disability (a "**Non-COC Qualified Termination**"). If, and only if, you are such an Eligible Employee and your employment terminates as a result of a Non-COC Qualified Termination, then (x) for a Section 16 Officer (as defined below), you will be eligible to receive the Cash Severance and COBRA Benefit described above, except that the Cash Severance will not include the Pro-Rated Bonus; and (y) for an Eligible Employee other than a Section 16 Officer, you will be eligible to receive fifty percent (50%) of the Cash Severance and six (6) months of the COBRA Benefit described above, except that the Cash Severance will not include the Pro-Rated Bonus. For the avoidance of doubt, there shall be no Equity Vesting as a result of a Non-COC Qualified Termination. All severance benefits under this paragraph shall be subject to your compliance with the Release Requirement.

Release : The receipt of any severance payments or benefits pursuant to this Policy is subject to your signing and not revoking the Company's then-standard separation agreement and release of claims (the "**Release**" and such requirement, the "**Release Requirement**"), which must become effective and irrevocable no later than the sixtieth (60th) day following your Qualified Termination (the "**Release Deadline**"). If the Release does not become effective and irrevocable by the Release Deadline, you will forfeit any right to severance payments or benefits under this Policy. In no event will severance payments or benefits be paid or provided until the Policy until the Release actually becomes effective and irrevocable.

For purposes of this Policy, the following terms shall have the following meanings:

“**Base Salary**” means your annual base salary as in effect immediately prior to your Qualified Termination date or, if greater, at the level in effect immediately prior to the Change of Control.

“**Board**” means the Board of Directors of the Company.

“**Cause**” means (a) your unauthorized use or disclosure of the Company’s confidential information or trade secrets, which use or disclosure causes material harm to the Company; (b) your material breach of any material agreement between you and the Company; (c) your material failure to comply with the Company’s material written policies or rules; (d) your conviction of, or plea of “guilty” or “no contest” to, a felony under the laws of the United States or any state thereof; (e) your gross negligence or willful misconduct in the performance of your duties; (f) your continuing failure to perform assigned duties after receiving written notification of the failure from the Chief Executive Officer; or (g) your failure to cooperate in good faith with a governmental or internal investigation of the Company or its directors, officers or employees, if the Company has requested your cooperation; provided, however, that “Cause” will not be deemed to exist in the event of subsections (b), (c) or (f) above unless you have been provided with (i) 30 days’ written notice by the Board of the act or omission constituting “Cause” and (ii) 30 days’ opportunity to cure such act or omission, if capable of cure.

“**Change of Control**” means the occurrence of any of the following events:

A. Change in Ownership of the Company. A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group (“**Person**”), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than fifty percent (50%) of the total voting power of the stock of the Company; provided, however, that the acquisition of additional stock by any one Person who is considered to own more than fifty percent (50%) of the total voting power of the stock of the Company will not be considered a Change of Control; or

B. Change in Effective Control of the Company. If the Company has a class of securities registered pursuant to Section 12 of the Exchange Act, a change in the effective control of the Company which occurs on the date that a majority of members of the Board is replaced during any 12 month period by directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this clause (B), if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change of Control; or

C. Change in Ownership of a Substantial Portion of the Company’s Assets. A change in the ownership of a substantial portion of the Company’s assets which occurs on the date that any Person acquires (or has acquired during the 12 month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than 50% of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, however, that for purposes of this subsection, the following will not constitute a change in the ownership of a substantial portion of the Company’s assets: (i) a transfer to an entity that is controlled by the Company’s stockholders immediately after the transfer, or (ii) a transfer of assets by the Company to: (a) a stockholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company’s stock, (b) an entity, fifty percent (50%) or more

of the total value or voting power of which is owned, directly or indirectly, by the Company, (c) a Person, that owns, directly or indirectly, fifty percent (50%) or more of the total value or voting power of all the outstanding stock of the Company, or (d) an entity, at least fifty percent (50%) of the total value or voting power of which is owned, directly or indirectly, by a Person.

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

“ **Change of Control Period** ” means the period three (3) months prior to, and twelve (12) months following, a Change of Control.

“ **COBRA** ” means the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended.

“ **Effective Date** ” means July 30, 2013.

“ **Good Reason** ” means your resignation after one of the following conditions has come into existence without your consent: (a) a material reduction in your duties, authority, reporting relationship, or responsibilities (for illustrative purposes, (x) for an Eligible Employee that is or had been the Chief Executive Officer of the Company, not reporting to the board of directors of the ultimate parent company shall be considered a material reduction in reporting relationship, (y) for Eligible Employees (other than the Chief Executive Officer of the Company) that report or had reported to the Chief Executive Officer of the Company at any time prior to a Change of Control, your not directly reporting to the Chief Executive Officer of the Company or after a Change in Control your not reporting directly to the individual who was the Chief Executive Officer of the Company as of immediately prior to the Change of Control, in each case, shall be considered a material reduction in your duties, authority, reporting relationship, or responsibilities for purposes of sub-section (a)); (b) a material reduction in your annual cash compensation; (c) a requirement that you relocate to a location more than twenty (20) miles from your then-current office location; (d) a material breach by the Company of your employment agreement or any other agreement between you and the Company; or (e) a failure by any successor entity to assume this Policy.

“ **Involuntary Termination** ” means either (a) a termination of employment by the Company other than for Cause, death or disability; or (b) your resignation for Good Reason.

“ **Participation Agreement** ” means an agreement in substantially the form attached hereto as Exhibit A.

“ **Qualified Termination** ” means either a COC Qualified Termination or a Non-COC Qualified Termination. “ **Section 16 Officer** ” means an officer for purposes of Section 16 of the Securities Exchange Act of 1934, as amended.

Section 409A : The Company intends that all payments and benefits provided under this Policy or otherwise are exempt from, or comply with, the requirements of Section 409A of the Internal Revenue Code of 1986, as amended, and any guidance promulgated thereunder (“ **Section 409A** ”) so that none of the payments or benefits will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to so comply. No payment or benefits to be paid to you, if any, pursuant to this Policy or otherwise, when considered together

with any other severance payments or separation benefits that are considered deferred compensation under Section 409A (together, the “**Deferred Payments**”) will be paid or otherwise provided until you have a “separation from service” within the meaning of Section 409A. If, at the time of your termination of employment, you are a “specified employee” within the meaning of Section 409A and the payment of the Deferred Payments will be delayed to the extent necessary to avoid the imposition of the additional tax imposed under Section 409A, which generally means that you will receive payment on the first payroll date that occurs on or after the date that is 6 months and 1 day following your termination of employment. The Company reserves the right to amend the Policy as it deems necessary or advisable, in its sole discretion and without the consent of any Eligible Employee or any other individual, to comply with Section 409A the Code or to otherwise avoid income recognition under Section 409A prior to the actual payment of any benefits or imposition of any additional tax.

In no event will the Company reimburse you for any taxes that may be imposed on you as a result of Section 409A. Each payment and benefit payable hereunder is intended to constitute a separate payment for purposes of Section 1.409A-2(b)(2) of the Treasury Regulations.

Parachute Payments.

Reduction of Severance Benefits. Notwithstanding anything set forth herein to the contrary, if any payment or benefit that an Eligible Employee would receive from the Company or any other party whether in connection with the provisions herein or otherwise (the “**Payment**”) would (i) constitute a “parachute payment” within the meaning of Section 280G of the Internal Revenue Code of 1986, as amended (the “**Code**”), and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the “**Excise Tax**”), then such Payment shall be equal to the Best Results Amount. The “**Best Results Amount**” shall be either (x) the full amount of such Payment or (y) such lesser amount as would result in no portion of the Payment being subject to the Excise Tax, whichever of the foregoing amounts, taking into account the applicable federal, state and local employment taxes, income taxes and the Excise Tax, results in the Eligible Employee’s receipt, on an after-tax basis, of the greater amount notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in payments or benefits constituting “parachute payments” is necessary so that the Payment equals the Best Results Amount, reduction shall occur in the following order: reduction of cash payments; cancellation of accelerated vesting of stock awards; reduction of employee benefits. In the event that acceleration of vesting of stock award compensation is to be reduced, such acceleration of vesting shall be cancelled in the reverse order of the date of grant of the Eligible Employee’s stock awards unless the Eligible Employee elects in writing a different order for cancellation. The Eligible Employee shall be solely responsible for the payment of all personal tax liability that is incurred as a result of the payments and benefits received under this Policy, and the Eligible Employee will not be reimbursed by the Company for any such payments.

Determination of Excise Tax Liability. The Company shall select a professional services firm to make all of the determinations required to be made under these paragraphs relating to “Parachute Payments”. The Company shall request that firm provide detailed supporting calculations both to the Company and the Eligible Employee prior to the date on which the event that triggers the Payment occurs if administratively

feasible, or subsequent to such date if events occur that result in parachute payments to the Eligible Employee at that time. For purposes of making the calculations required under these paragraphs relating to “Parachute Payments”, the firm may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith determinations concerning the application of the Code. The Company and the Eligible Employee shall furnish to the firm such information and documents as the firm may reasonably request in order to make a determination under these paragraphs relating to “Parachute Payments”. The Company shall bear all costs the firm may reasonably incur in connection with any calculations contemplated by these paragraphs relating to “Parachute Payments”. Any such determination by the firm shall be binding upon the Company and the Eligible Employee, and the Company shall have no liability to the Eligible Employee for the determinations of the firm.

Administration : The Policy will be administered by the Compensation Committee of the Board or its delegate (in each case, an “ **Administrator** ”). The Administrator will have full discretion to administer and interpret the Policy. Any decision made or other action taken by the Administrator with respect to the Policy, and any interpretation by the Administrator of any term or condition of the Policy, or any related document, will be conclusive and binding on all persons and be given the maximum possible deference allowed by law. The Administrator is the “named fiduciary” of the Policy for purposes of ERISA and will be subject to the fiduciary standards of ERISA when acting in such capacity.

Attorneys Fees : The Company and each Eligible Employee bear their own attorneys’ fees incurred in connection with any disputes between them, except that if an Eligible Employee is successful in any such dispute, the Company agrees to pay Eligible Employee’s reasonable and documented legal fees associated with the dispute.

Exclusive Benefits : Except as may be set forth in your Participation Agreement, this Policy is intended to be the only agreement between you and the Company regarding any severance payments or benefits to be paid to you on account of a termination of employment whether unrelated to, concurrent with, or following, a Change of Control. Accordingly, by executing your Participation Agreement, you hereby forfeit and waive any rights to any severance or change of control benefits set forth in any employment agreement, offer letter and/or equity award agreement, except as set forth in this Policy and/or in your Participation Agreement.

Withholding : The Company is authorized to withhold from any payments or benefits all federal, state, local and taxes required to be withheld therefrom and any other required payroll deductions.

Amendment or Termination : The Company reserves the right to amend or terminate the Policy at any time, without advance notice to any Eligible Employee or other individual and without regard to the effect of the amendment or termination on any Eligible Employee or on any other individual. Notwithstanding the preceding, (a) any amendment to the Policy that causes an individual or group of individuals to cease to be an Eligible Employee will not be effective unless it is both approved by the Administrator and communicated to the affected individual(s) in writing at least 6 months prior to the effective date of the amendment or termination, and (b) no amendment or termination of the Policy shall be made within 24 months following a Change of Control to the extent that such amendment or reduction would reduce the benefits provided hereunder or impair an Eligible Employee’s eligibility under the Policy (unless the affected

Eligible Employee consents to such amendment or termination). Any amendment or termination of the Policy will be in writing. Any action of the Company in amending or terminating the Policy will be taken in a non-fiduciary capacity.

Claims Procedure : Any Eligible Employee who believes he or she is entitled to any payment under the Policy may submit a claim in writing to the Administrator. If the claim is denied (in full or in part), the claimant will be provided a written notice explaining the specific reasons for the denial and referring to the provisions of the Policy on which the denial is based. The notice will also describe any additional information needed to support the claim and the Policy's procedures for appealing the denial. The denial notice will be provided within 90 days after the claim is received. If special circumstances require an extension of time (up to 90 days), written notice of the extension will be given within the initial 90-day period. This notice of extension will indicate the special circumstances requiring the extension of time and the date by which the Administrator expects to render its decision on the claim.

Appeal Procedure : If the claimant's claim is denied, the claimant (or his or her authorized representative) may apply in writing to the Administrator for a review of the decision denying the claim. Review must be requested within 60 days following the date the claimant received the written notice of their claim denial or else the claimant loses the right to review. The claimant (or representative) then has the right to review and obtain copies of all documents and other information relevant to the claim, upon request and at no charge, and to submit issues and comments in writing. The Administrator will provide written notice of the decision on review within 60 days after it receives a review request. If additional time (up to 60 days) is needed to review the request, the claimant (or representative) will be given written notice of the reason for the delay. This notice of extension will indicate the special circumstances requiring the extension of time and the date by which the Administrator expects to render its decision. If the claim is denied (in full or in part), the claimant will be provided a written notice explaining the specific reasons for the denial and referring to the provisions of the Policy on which the denial is based. The notice shall also include a statement that the claimant will be provided, upon request and free of charge, reasonable access to, and copies of, all documents and other information relevant to the claim and a statement regarding the claimant's right to bring an action under Section 502(a) of ERISA.

Additional Information.

Plan Name: FireEye, Inc.
Change of Control Severance Policy for Officers

Plan Sponsor: FireEye, Inc.
1440 McCarthy Boulevard, Milpitas, CA, 95035

Identification Number: 550

Plan Year: Company's Fiscal Year

Plan Administrator: FireEye, Inc.
Attention: Administrator of the FireEye, Inc.
Change of Control Severance Policy for Officers
1440 McCarthy Boulevard

Milpitas, CA 95035

Agent for Service of

Legal Process:

FireEye, Inc.
Attention: General Counsel
1440 McCarthy Boulevard
Milpitas, CA 95035

Service of process may also be made upon the Plan Administrator.

Type of Plan:

Severance Plan/Employee Welfare Benefit Plan

Plan Costs:

The cost of the Policy is paid by the Company.

Statement of ERISA Rights.

Policy Eligible Employees have certain rights and protections under ERISA:

They may examine (without charge) all Policy documents, including any amendments and copies of all documents filed with the U.S. Department of Labor, such as the Policy's annual report (Internal Revenue Service Form 5500). These documents are available for review in the Company's Human Resources Department.

They may obtain copies of all Policy documents and other Policy information upon written request to the Plan Administrator. A reasonable charge may be made for such copies.

In addition to creating rights for Eligible Employees, ERISA imposes duties upon the people who are responsible for the operation of the Policy. The people who operate the Policy (called "fiduciaries") have a duty to do so prudently and in the interests of Eligible Employees. No one, including the Company or any other person, may fire or otherwise discriminate against an Eligible Employee in any way to prevent them from obtaining a benefit under the Policy or exercising rights under ERISA. If an Eligible Employee's claim for a severance benefit is denied, in whole or in part, they must receive a written explanation of the reason for the denial. An Eligible Employee has the right to have the denial of their claim reviewed. (The claim review procedure is explained above.)

Under ERISA, there are steps Eligible Employees can take to enforce the above rights. For instance, if an Eligible Employee requests materials and does not receive them within 30 days, they may file suit in a federal court. In such a case, the court may require the Administrator to provide the materials and to pay the Eligible Employee up to \$110 a day until they receive the materials, unless the materials were not sent because of reasons beyond the control of the Plan Administrator. If an Eligible Employee has a claim which is denied or ignored, in whole or in part, he or she may file suit in a state or federal court. If it should happen that an Eligible Employee is discriminated against for asserting their rights, he or she may seek assistance from the U.S. Department of Labor, or may file suit in a federal court.

In any case, the court will decide who will pay court costs and legal fees. If the Eligible

Employee is successful, the court may order the person sued to pay these costs and fees. If the Eligible Employee loses, the court may order the Eligible Employee to pay these costs and fees, for example, if it finds that the claim is frivolous.

If an Eligible Employee has any questions regarding the Policy, please contact the Plan Administrator. If an Eligible Employee has any questions about this statement or about their rights under ERISA, they may contact the nearest area office of the Employee Benefits Security Administration (formerly the Pension and Welfare Benefits Administration), U.S. Department of Labor, listed in the telephone directory, or the Division of Technical Assistance and Inquiries, Employee Benefits Security Administration, U.S. Department of Labor, 200 Constitution Avenue, N.W. Washington, D.C. 20210. An Eligible Employee may also obtain certain publications about their rights and responsibilities under ERISA by calling the publications hotline of the Employee Benefits Security Administration.

**Change of Control Severance Policy for Officers
Participation Agreement**

This Participation Agreement (“ **Agreement** ”) is made and entered into by and between **William Robbins** on the one hand, and FireEye, Inc. (the “ **Company** ”) on the other.

RECITALS

The Company adopted a Change of Control Severance Policy for Officers (the “ **Policy** ”) to assure that the Company will have the continued dedication and objectivity of the participants in the Policy, notwithstanding the possibility, threat or occurrence of a Change of Control.

The Company has designated you as eligible for protection under the Policy and this Agreement, subject to your qualifying as an Eligible Employee under the Policy on the date of a Qualified Termination.

Unless otherwise defined herein, the terms defined in the Policy, which is hereby incorporated by reference, shall have the same defined meanings in this Agreement.

AGREEMENT

NOW, THEREFORE , in consideration of the mutual covenants contained herein, the parties hereto agree as follows:

Participation.

You have been designated as an Eligible Employee in the Policy, a copy of which is attached hereto, subject to your satisfying the criteria of being an Eligible Employee on the date of a Qualified Termination. Your participation in the Policy is contingent upon your agreeing to the terms of this Policy.

The terms and conditions of your participation in the Policy are as set forth in the Policy.

Other Provisions.

You agree that the Policy constitutes the entire agreement of the parties hereto and supersedes in their entirety all prior representations, understandings, undertakings or agreements (whether oral or written and whether expressed or implied) of the parties, and shall specifically supersede any severance payment and/or change of control provisions of any offer letter, employment agreement, or equity award agreement entered into between the you and Company.

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

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the day and year set forth below.

FIREEYE, INC.

ELIGIBLE EMPLOYEE

By: _____

Signature: _____

Date: _____

Date: _____

[Signature Page of the Participation Agreement]

LIST OF SUBSIDIARIES OF THE REGISTRANT

<u>Name of Subsidiary</u>	<u>State or Other Jurisdiction of Incorporation or Organization</u>
Critical Intelligence, Inc.	Idaho
FireEye Australia Pty Ltd	Australia
FireEye Canada Limited	British Columbia
FireEye Cybersecurity Private Limited	India
FireEye Deutschland GmbH	Germany
FireEye Hong Kong Limited	Hong Kong
FireEye International, LLC	Delaware
FireEye Ireland Limited	Ireland
FireEye Israel Ltd	Israel
FireEye K.K.	Japan
FireEye Korea Limited	Republic of Korea
FireEye Technologies Malaysia SDN BHD	Malaysia
FireEye Mexico S.A. de C.V.	Mexico
FireEye Netherlands B.V.	Netherlands
FireEye Philippines Corporation	Philippines
FireEye Saudi Arabia Limited	Kingdom of Saudi Arabia
FireEye Singapore Private Limited	Singapore
FireEye Software (Shanghai) Company Limited	China
FireEye South Africa (Pty) Ltd	South Africa
FireEye Sweden Aktiebolag	Sweden
FireEye Taiwan Ltd.	Taiwan
FireEye Technologie Deutschland GmbH	Germany



FireEye Technologies India Private Limited	India
FireEye Technology Limited	Ireland
FireEye UK Ltd.	United Kingdom
Invotas Cyber Solutions, Inc.	Delaware
Invotas International LLC	Delaware
iSIGHT Partners Australia Pty Ltd	Australia
iSIGHT Partners Europe Holdings B.V.	Netherlands
iSIGHT Partners Federal, Inc.	Texas
iSIGHT Partners Ukraine LLC	Ukraine
iSIGHT Risk Management Private Limited	India
iSIGHT Security, Inc. (d/b/a iSIGHT Partners, Inc.)	Texas
Mandiant, LLC	Delaware
Mandiant Ltd.	United Kingdom

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-209771, 333-202445, 333-196490, 333-193716 and 333-191299 on Form S-8 of our reports dated February 24, 2017, relating to the consolidated financial statements and financial statement schedule of FireEye, Inc. and subsidiaries (the "Company") and the effectiveness of the Company's internal control over financing reporting, appearing in this Annual Report on Form 10-K of the Company for the year ended December 31, 2016.

/s/ DELOITTE & TOUCHE LLP

San Jose, California
February 24, 2017

CERTIFICATION

I, Kevin R. Mandia, certify that:

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

Date: February 24, 2017

/s/ Kevin R. Mandia

Kevin R. Mandia

Chief Executive Officer

(Principal Executive Officer)

CERTIFICATION

I, Frank E. Verdecanna, certify that:

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

Date: February 24, 2017

/s/ Frank E. Verdecanna

Frank E. Verdecanna

Executive Vice President, Chief Financial Officer and Chief Accounting Officer

(Principal Financial and Accounting Officer)

SECTION 1350 CERTIFICATIONS

I, Kevin R. Mandia, certify to the best of my knowledge, pursuant to 18 U.S.C. Section 1350, that the Annual Report of FireEye, Inc. on Form 10-K for the fiscal year ended December 31, 2016 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-K fairly presents, in all material respects, the financial condition and results of operations of FireEye, Inc.

Date: February 24, 2017

/s/ Kevin R. Mandia

Kevin R. Mandia

Chief Executive Officer

(Principal Executive Officer)

I, Frank E. Verdecanna, certify to the best of my knowledge, pursuant to 18 U.S.C. Section 1350, that the Annual Report of FireEye, Inc. on Form 10-K for the fiscal year ended December 31, 2016 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-K fairly presents, in all material respects, the financial condition and results of operations of FireEye, Inc.

Date: February 24, 2017

/s/ Frank E. Verdecanna

Frank E. Verdecanna

Executive Vice President, Chief Financial Officer and Chief Accounting Officer

(Principal Financial and Accounting Officer)