IMPERVA INC
Form 10-K
February 27, 2017

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
Commission file number: 001-35338

Imperva, Inc.

(Exact name of registrant as specified in its charter)

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| Delaware | 03-0460133 |
| (State or Other Jurisdiction of Incorporation or Organization) | (I.R.S. Employer Identification No.) |

3400 Bridge Parkway

Redwood Shores, California 94065

(Address of Principal Executive Offices, including Zip Code)

(650) 345-9000

(Registrant’s Telephone Number, including Area Code)

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 Stock Market LLC |

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

None

(Title of Class)

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 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 Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically 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 check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405) 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):

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

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

The aggregate market value of voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2016 (the last business day of the registrant's most recently completed second fiscal quarter), based upon the closing price of the common stock reported by the New York Stock Exchange on such date, was approximately $1,390 million. Shares of common stock held by each executive officer and director of the registrant have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

The number of outstanding shares of the registrant’s common stock as of February 15, 2017 was 33,395,393.

2016 ANNUAL REPORT ON FORM 10-K

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Documents Incorporated by Reference

Portions of the definitive proxy statement for our 2017 Annual Meeting of Stockholders are incorporated by reference in Part III of this Form 10-K. We intend to file the definitive proxy statement with the Securities and Exchange Commission, or SEC, within 120 days of the year ended December 31, 2016.

Forward Looking Statements

The information in this Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Such statements are based upon current expectations that involve risks and uncertainties. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. Words such as "may," "will," "should," "could," "estimate," "predict," "potential," "continue," "strategy," "believe," "anticipate," "plan," "expect," "intend" and similar expressions or variations are intended to identify forward-looking statements. Our actual results and the timing of certain events may differ significantly from the results discussed in the forward-looking statements. Factors that might cause or contribute to such differences include, but are not limited to, those discussed elsewhere in this Annual Report on Form 10-K in the section titled "Risk Factors" and the risks discussed in our other filings with the SEC. We undertake no obligation to publicly release any revisions to the forward-looking statements after the date of this Annual Report on Form 10-K.

PART I

Item 1. Business

Overview

We are a leader in cyber-security solutions that protect business-critical data and applications, whether in the cloud or on premises. As organizations worldwide undergo digital transformation, their day-to-day operations are increasingly dependent upon their application and data portfolios. Extortion and theft by cybercriminals, using an evolving array of sophisticated attacks, continuously threaten these applications and data. Organizations are facing numerous challenges in providing the visibility and control required to protect business-critical applications and data from these attacks. Adoption of new technologies and architectures, such as mobile applications, web applications and big data, increases the complexity of, opens access to, and increases the vulnerability of business-critical data and applications. The increasing use of virtualization technologies and cloud delivery models, including unsanctioned, employee-adopted applications, known as “shadow IT,” is forcing organizations to operate outside of the traditional security model. Additionally, organizations must comply with complex regulatory standards enacted to protect their systems and data. We believe that these challenges are driving the need for cyber-security solutions that protect applications and data, whether in the cloud or on premises.

Our cyber-security solutions directly protect the business-critical data and applications that are being attacked, and are designed to fill the gaps left by existing endpoint and network or perimeter security solutions. Our Imperva SecureSphere platform provides database, file and web application security across various physical and virtual systems in data centers, including those in traditional on-premise data centers as well as in private, public and hybrid cloud computing environments. Our Imperva Incapsula product line provides cloud-based website security, denial of service protection and performance solutions that do not require software or hardware changes. Our Imperva CounterBreach product line uses machine learning to analyze how users access data and to spotlight data breach activity. In addition, our cloud offerings are designed to protect against the unique threats created as enterprises increasingly shift to deploying their applications and storing their data in the cloud to take advantage of the flexibility and cost-efficiency offered by cloud-based solutions.

On December 15, 2016, we acquired specified assets and liabilities of Camouflage Software, Inc., or Camouflage, for approximately $4.5 million in cash and hired nearly all of Camouflage’s employees. Based in St. John’s, Newfoundland and Labrador, Canada, Camouflage provides data discovery and data masking tools to protect sensitive and critical data. Prior to the asset purchase, we had announced a technology alliance with Camouflage in May 2016 that allowed us to sell the Camouflage solution to our customers. For more information on the Camouflage acquisition see Note 3 to the Notes to Consolidated Financial Statements.

As of December 31, 2016, Imperva had over 5,200 end user customers in more than 100 countries. For purposes of this end user customer count, we are referring to end user customers who purchased through our direct sales force or channel partners. In addition, our solutions are used to protect thousands of organizations through cloud-based deployments with our Software-as-a-Service (“SaaS”) customers and managed security service providers (“MSSPs”) and hosting partners. We primarily sell our products and services through our network of approximately 270 channel partners worldwide, including both distributors and resellers, which provide sales and support leverage to our sales organization. As of December 31, 2016, we had approximately 993 employees, including 319 employees in research and development. We generated revenue of $264.5 million in 2016, an increase of 12.9% over the $234.3 million in revenue we generated in 2015. Net loss attributable to our stockholders was $70.3 million in 2016 as compared to $48.9 million in 2015.

On February 23, 2017, we completed the sale of our Skyfence cloud access security broker business to Forcepoint LLC for approximately $40 million. For more information about the sale of the Skyfence business see Note 18 to the Notes to Consolidated Financial Statements on subsequent events.

Our Strategy

Our goal is to extend our leadership position in the cyber-security market. Key elements of our growth strategy include:

- Enhance and extend our leadership position through technological and product innovation. We intend to continue to invest in product upgrades and product line extensions as well as the development of new products and services that address emerging cyber-security and regulatory compliance requirements to maintain our technological advantages. We also intend to continue to invest in advanced threat research and increase our threat intelligence leadership as well as to continue our research and development efforts in cyber-security for cloud computing environments.

- Continue to pursue cyber-security opportunities as businesses adopt cloud computing. Our solutions are used to protect thousands of organizations through cloud-based deployments with our SaaS customers, MSSPs and hosting partners. We intend to continue to focus on capturing the expected increases in spending on securing business-critical applications and data as enterprises pursue cloud computing initiatives for both external and internal facing applications. We intend to develop and expand our relationships with MSSPs and data center hosting providers, and to increase sales to SaaS providers.
- Increase awareness of the importance of cyber-security and drive adoption of our solution. We believe the market for cyber-security is in its early stages and growing rapidly. We plan to continue to increase market awareness of the benefits of our cyber-security solutions and to invest in our brand to further extend our leadership in the cyber-security market. For example, we plan to continue to invest in a broad range of marketing programs that help connect us with potential buyers along paid, earned, shared and owned channels. To further this goal, we plan to leverage online and offline advertising initiatives, targeted event participation, global public relations efforts, direct marketing, web events and participation in social media channels, such as LinkedIn, Facebook and Twitter.
- Drive increased sales to our existing customer base. We intend to drive increased sales of our suite of cyber-security offerings within our existing customer base by deepening and broadening deployment of our offerings. Many of our customers initially deploy our solution for a limited portion of their business-critical applications and data, providing us with significant opportunities to sell them more of our products. This strategy has proved successful, as more than 52% of our revenue in 2016 was derived from repeat sales to existing customers. In addition, as a leading provider of cyber-security solutions, we believe we are well positioned to benefit as our customers expand the scope of their cyber-security and compliance initiatives both in the cloud and on premises. As of December 31, 2016, approximately 26% of our customers have purchased more than one of our SecureSphere offerings.
- Increase our sales in the mid-market and small and medium-sized business (“SMB”) market. We believe there is a significant opportunity to provide cyber-security solutions to smaller businesses as they continue to face increasing security threats and more complex compliance mandates. We plan to continue to grow our business with mid-market enterprises and SMBs by expanding our distribution channels and our cloud-based offerings.
- Pursue strategic opportunities. We intend to pursue targeted acquisition and partnership opportunities to continue to broaden our technology and offerings to better enable organizations to protect applications and data on premise and in the cloud.

Cloud and On-Premise Products

Our products include our Imperva SecureSphere platform, Imperva CounterBreach and Imperva Camouflage for enterprise data centers, and our Imperva Incapsula offering for cloud-based security services.

Our SecureSphere, CounterBreach and Camouflage product lines secure business-critical applications and data in physical and virtual data centers from hackers and malicious insiders, and provide an accelerated and cost-effective route to address regulatory compliance and establish a repeatable process for data risk management. Our SecureSphere products are built on a common modular platform, which includes a single operating system and common code base. All of our SecureSphere products can be managed either individually as stand-alone appliances or collectively from our SecureSphere MX Management Server. Our SecureSphere MX Management Server provides a single, centralized point for aggregating and managing SecureSphere security policies, real-time monitoring, logging, auditing and compliance reporting, customizable reporting and in-depth analytics. With the SecureSphere MX Management Server, administrators can simultaneously manage our database, file and web security products from a single console. CounterBreach uses machine learning to analyze how users access structured data, unstructured data, and data in the cloud in order to spotlight dangerous data access and use. Camouflage data masking discovers where sensitive data resides and prioritizes what data should be masked.

Our Payment Card Industry (“PCI”) certified Incapsula service is purpose-built to deliver cloud-based Website Security, Distributed Denial of Service (“DDoS”) Protection and Load Balancing and Failover, all of which are fully integrated with, and built on top of, a global Content Delivery Network. Our Incapsula service is designed to be easy to deploy and accessible to businesses of all sizes that want to maximize the security, speed and availability of their websites. Without needing to purchase or install any hardware or software to use our Incapsula service, we estimate that most customers can set up our Incapsula service in less than ten minutes. Our customers typically begin using our Incapsula service by changing their website's Domain Name System setting to route traffic to the Incapsula network. The global network of Incapsula servers apply security and optimization solutions to traffic on our customers' websites according to the Incapsula service options they purchase. The screened, filtered and optimized traffic is then routed by the Incapsula network to the customer's websites.

We sell our SecureSphere products primarily using perpetual software licenses installed on hardware appliances or virtual appliances. We sell our cloud-based products and services using subscription-based pricing plans. We also sell our ThreatRadar services as separate add-on, subscription services to our SecureSphere appliances.

We organize our product lines into customer-focused capability areas based on their ability to protect applications or data against attacks.

Application Protection

SecureSphere Products

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| SecureSphere Web Application Firewall: Protects business-critical web applications and data | We believe that our SecureSphere Web Application Firewall ("WAF") is one of the industry's leading solutions for protecting web assets from application attacks. Our SecureSphere WAF protects our customers' business-critical applications and data from large scale cyber-attacks, adapts to evolving threats to protect against data breaches and enables compliance with regulatory requirements. Based on the feature and traffic capacity requirements of our customers, our web application security products can be deployed as a physical or virtual appliance. Key capabilities of our SecureSphere WAF include dynamic identification of legitimate web application usage, fortification of web defenses with research-driven intelligence on current threats from the Imperva Defense Center ("IDC"), alerts and requests blocking as well as virtual patching of application vulnerabilities. |

ThreatRadar Products

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| ThreatRadar: Provides reputation and crowdsourced security intelligence services | ThreatRadar Reputation Services recognizes attack sources and dynamically adjusts web security policies within our SecureSphere WAF to provide protection against attacks. |
| | ThreatRadar Community Defense, a part of ThreatRadar Reputation Services, delivers crowd-based threat intelligence to SecureSphere WAF. ThreatRadar Community Defense gathers attack data from SecureSphere deployments around the world and uses algorithms to translate this data into attack patterns, policies and reputation data. |
| | ThreatRadar Bot Protection Services uses a client classification engine to analyze and classify incoming website traffic, and to distinguish between human and bot traffic. It also identifies good and bad bots and classifies traffic by browser type. The intelligence it collects during this process is then used by SecureSphere to drive WAF policy enforcement. |
| | ThreatRadar Account Takeover Protection protects web application accounts from being compromised by cybercriminals. The product combines awareness of credentials known to be compromised, knowledge of login device reputation and risk, detection of credential stuffing and dictionary attacks against passwords, and analysis of behavior across multiple devices and accounts to identify account takeover attempts and compromised accounts, protecting against hackers before they gain access to protected web applications and services. |

Incapsula Products

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| Incapsula Website Security: Blocks attacks against web applications to promote website safety and availability | Incapsula Website Security is a PCI-certified service with advanced bot detection and mitigation. It protects websites and applications against application layer hacking attempts and blocks scrapers, vulnerability scanners and content spammers that overload servers and steal content. Our cloud-based approach, coupled with crowdsourcing techniques, enables us to anonymously harness real data from our customer base to better understand the global attack landscape and continually improve security. |
| Incapsula Content Delivery Network: Optimizes website performance | Incapsula Content Delivery Network ("CDN") is a globally distributed network of data centers that delivers full site acceleration through intelligent caching and content optimization tools. The CDN is application-aware and dynamically profiles website resources and identifies cacheable, dynamic and static content, including content that other CDNs consider uncacheable. |
| Incapsula DDoS Protection: Safeguards networks, applications and DNS servers from volumetric and protocol-based DDoS attacks | Incapsula reroutes traffic through the Incapsula network, and subjects it to progressively more stringent layers of protection. Using sophisticated security rules and challenges, Incapsula is able to identify and filter out DDoS attack traffic, while allowing legitimate traffic to flow unhindered to protected applications such as websites, email, and FTP. |
| Incapsula Load Balancing: Balances web traffic load across multiple web servers | Incapsula Load Balancing provides layer 7 load balancing and failover as a service, so organizations can replace costly appliances with an enterprise-grade, cloud-based solution. The service supports in-datacenter and cross-datacenter high availability scenarios. It also provides real-time health monitoring to ensure that traffic is routed to a viable web server. |

Data Protection

SecureSphere Products

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| SecureSphere Database Firewall and Database Activity Monitoring: Secures business-critical data in structured repositories | SecureSphere Database Firewall and Database Activity Monitoring secure business-critical data in structured repositories in the data center. They provide comprehensive visibility and control over structured business data repositories, including database data usage, vulnerabilities, and access rights and enable security, audit, risk and IT professionals to improve data security and address compliance requirements. SecureSphere can be deployed as a physical or virtual appliance, based on the feature and traffic capacity requirements of our customers. SecureSphere Database Firewall and Database activity monitoring protect relational and big data databases running on distributed platforms and IBM z/OS. |
| SecureSphere Database Assessment Server: Finds sensitive data and runs assessments | SecureSphere Database Assessment Server automates the process of discovering databases and sensitive business data on the network and performs a security assessment to identify risks to business-critical data. It identifies database vulnerabilities and measures compliance with industry standards and best practices using tests and |

assessment policies. By identifying where databases and sensitive data are located on the network, and which databases are vulnerable or misconfigured, Database Assessment Server helps organizations prioritize their database risk mitigation efforts.

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| SecureSphere User Rights Management for Databases:<br><br>Establishes automated access rights review process and demonstrates compliance | SecureSphere User Rights Management for Databases automatically aggregates user rights across heterogeneous databases. This enables organizations to establish an automated access rights review process, identify excessive user rights, and demonstrate compliance with regulations such as Sections 302 and 404 of the Sarbanes-Oxley Act of 2002 (“SOX”) and requirements 7 and 8.5 of the PCI Data Security Standards (“PCI DSS”). |
| SecureSphere File Firewall: Protects file access activity to ensure business-critical data and applications are secured | SecureSphere File Firewall secures unstructured data, including spreadsheets, presentation slides, word processing documents, videos and PDFs that contain business-critical data and applications that our customers store in unstructured repositories, such as file servers, content management repositories, network-attached storage and storage area network devices. It provides full visibility and control over unstructured business data repositories, including file ownership, usage and access rights, and enables security, audit, risk and IT professionals to improve file data security and address compliance requirements. SecureSphere File Firewall can be deployed as a physical or virtual appliance based on feature and traffic capacity requirements of our customers. |

CounterBreach Product

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| CounterBreach: Designed to protect enterprise data from theft and loss due to compromised, malicious and careless users | CounterBreach uses machine learning to analyze how users access data in order to spotlight dangerous data access and use. CounterBreach complements machine learning with non-invasive deception technology to identify compromised end-point devices. By dynamically learning normal data access patterns and then finding anomalies, CounterBreach proactively alerts IT teams to dangerous behavior. |
| | CounterBreach provides a multi-layered solution that provides direct visibility into which users access what data, giving IT organizations insight into the ‘who,’ ‘what’ and ‘when’ of access to sensitive information; combines Imperva expertise in monitoring and protecting data with advanced machine learning to spotlight dangerous user data access activity and applies non-invasive deception techniques to identify compromised end-points. |

Camouflage Product

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| Imperva Camouflage Data Masking: Creates realistic, functional data for development, testing, and training by disguising sensitive information while maintaining the characteristics of the original data. | Imperva Camouflage Data Masking is designed to reduce data breach risk by replacing sensitive data in non-production systems, including test and development systems or data warehouses and analytical data stores, with realistic fictional data. The fictional data maintains referential integrity and is statistically accurate enabling testing, analysis and business processes to operate normally. Imperva Camouflage data masking protects data from theft and helps ensure compliance with regulations governing data transfers and data protection. |

Technology

Our solutions include several proprietary technologies described below.

SecureSphere

- Dynamic Profiling: Allows customers to create and monitor security policies based on actual application and database behavior, automatically recognizes valid application and database changes over time and automatically updates the profile according to these application and database changes.
- Universal User Tracking: Helps customers achieve the primary requirements of any audit and security process by tracking the individual end user that accessed or modified business data, including web application user tracking, web to database user tracking, SQL connection user tracking and direct user tracking that collectively enable our solution to audit end users regardless of how they connect to the database.
- Transparent Inspection: Provides application layer security without needing to intermediate web connections, allowing our solution to inspect traffic without compromising performance, latency or availability.
- Correlated Attack Validation: Provides our customers with protection against malicious activity by analyzing multiple data points, tracking events over time and correlating disparate events to identify and block sophisticated attacks.

Incapsula

- Client Classification Engine: Analyzes and classifies all incoming traffic to a website, distinguishes between human and bot traffic, identifies “good” and “bad” bots, and classifies traffic by browser type. While this technology was originally developed on the Incapsula service, we recently incorporated the technology into our ThreatRadar Bot Protection Services, which is a SecureSphere add-on service.

Camouflage

- Data Masking System: Static masking software that creates realistic, fully functional data for development, testing and training by disguising sensitive information while maintaining the characteristics of the original data.
- Data Masking across Multiple Systems: Allows masked data to be used across different technology platforms while maintaining the consistency of the data’s characteristics across those platforms.

Maintenance and Support

We offer our customers ongoing product support services for both hardware and software. These maintenance programs are typically sold to customers for one- to three-year terms at the time of the initial product sale and typically renew for successive one- to three-year periods. We offer premium levels of service which include advance replacement and greater call center availability. While some of our channel partners provide tier one support, including MSSPs and data center hosting providers, in most instances we provide tier one level support and above.

Our IDC updates are included with maintenance and support contracts. The service consists of a content delivery mechanism by which we can distribute product content enhancements to our customers. Our IDC update servers deliver various types of security content to our appliances deployed in the field without the need for our customers to install a software patch or upgrade. Examples of IDC updates include new security signatures and policies for our WAF, new database assessment tests for our discovery and assessment server and new audit policy functionality for our database products.

Professional Services and Training

Our professional services consultants assist our customers in the deployment and configuration of our products. These fee-based services, provided by our professional services consultants, include providing advice on deployment planning, network design, product configuration and implementation, automating and customizing reports and tuning policies and configuration of our products for the particular characteristics of the customer’s environment. Additionally, we provide our customers with fee-based, hands-on training classes for our solution that are offered regularly and in different parts of the world.

## Customers

We provide products and services to a variety of customers worldwide, including some of the world's largest banks, retailers, insurers, technology and telecommunication companies and hospitals, as well as U.S. and other national, state and local government agencies. As of December 31, 2016, Imperva had over 5,200 customers in more than 100 countries. In addition, our solutions are used to protect thousands of organizations through cloud-based deployments with our SaaS customers and our MSSPs and hosting partners.

In 2016 and 2015, we had one reseller that represented 13% and 18% of our total revenue respectively. In 2014, the Company did not have any reseller that represented 10% or more of the Company's total revenue. In 2016, 2015 and 2014, we generated approximately 63%, 67% and 59% of our revenue from customers in the Americas and approximately 37%, 33% and 41% from customers outside of the Americas, respectively. See Note 15 of "Notes to Consolidated Financial Statements" for information about segment disclosures and revenue by customer geographic regions.

## Sales and Marketing

We believe that our hybrid sales model, which combines the leverage of a channel sales model with the account control of a direct sales model, has played an important role in our success to date. Our hybrid model employs a direct touch sales organization and an overlay channel sales team that actively assist our extensive network of channel partners throughout the sales process. We primarily sell our products and services to our customers through our channel partners, including distributors and resellers. In 2016, our channel partners originated over 50% of our sales and fulfilled almost 86% of our sales. Although our products are designed for turnkey deployment, they are highly customizable, which allows our channel partners to provide a variety of value added services to our customers. As of December 31, 2016, our network of channel partners included approximately 270 resellers and distributors worldwide, including leading security value added resellers and some of the world's largest hosting companies.

### Sales

We support the sales of our products and services with a team of experienced channel account managers, sales professionals and sales engineers who provide business planning, joint marketing strategy, and pre-sales and operational sales support. Our overlay channel team is responsible for managing relationships with our resellers, MSSPs and distributors. Our sales professionals are responsible for assisting channel partners in gaining and supporting key customer accounts and acting as liaisons between the end customers and our marketing and product development organizations. Our sales professionals and sales engineers also directly engage with customers to address their unique security and deployment requirements. We also have an inside sales team that is principally focused on lead generation for our reseller partners and regional sales professionals. To support our broadly dispersed global channel and customer base, we had, as of December 31, 2016, sales personnel in 23 countries. We plan to continue to invest in our sales organization to support our growth, including through increased sales through our channel partners.

### Marketing

Our marketing strategy is focused on building brand awareness, driving customer demand for our security solutions and enabling both our direct and channel sales models. We execute this strategy by leveraging a combination of internal marketing professionals and a network of regional and global channel partners. Our internal marketing organization is responsible for building brand awareness, driving demand generation, supporting channel enablement and product marketing, and working with our business operations team to support channel marketing and sales support programs. We focus our resources on targeted, integrated activities that can be leveraged by partners worldwide to extend our reach. Our marketing efforts include public and analyst relations, online and offline awareness building and demand generation, seminars, tradeshows, webinars, digital and website marketing, building sales tools and collateral information regarding product awards and technical certifications and social media outreach, including our data security blog.

Research and Development

Our research and development efforts focus primarily on improving and enhancing our existing security products and services, as well as developing new products, features and functionality and conducting advanced security research. We conduct our research and development activities primarily in Israel, with small engineering teams in Redwood Shores, California; Austin, Texas; St. John’s, Newfoundland and Labrador, Canada and Kiev, Ukraine. We believe this provides us with access to some of the best engineering talent in the security industry. As of December 31, 2016, we had 319 employees dedicated to research and development, including our advanced security research group, the IDC.

When considering product improvements and enhancements, we communicate with our customers and partners who provide significant feedback for product development and innovation. We regularly release new versions of our products incorporating these improvements and enhancements. Our research and development team works with our customer support group to resolve escalated support issues by providing consultation, bug fixes and patches. Our research and development team also provides technical assistance to our other departments, including to our sales team by overseeing product pilots for potential customers.

In addition to enhancing our products and services, our research and development organization includes our IDC team. We believe our IDC team is an important differentiator for us in the security marketplace. Our IDC team performs security analysis, tracks hackers and trends in the hacker community and undertakes vulnerability discovery, in addition to providing us with regulatory compliance expertise. IDC research combines extensive lab work with hands-on testing in real world environments to ensure that our products, through advanced data security technology, deliver up-to-date threat protection and leading compliance automation. Our IDC has discovered numerous commercial application vulnerabilities and has issued numerous security advisories, providing insight into both published and unpublished security threats to help commercial application and database vendors and security professionals. Our IDC's "Hacker Intelligence Initiative" focuses on improving risk management by tracking hackers, developments in attack techniques and potential targets in known hacker forums and chat rooms. In prior years, the IDC also issued a Web Application Attack Report that provided an in-depth view of the threat landscape for the year, including hacking trends, the latest cyber-crime business models and breach analysis by geography, industry and attack type. The IDC's research is also the foundation for many of our products, product features and services, including attack signature updates, database vulnerability assessments, pre-defined compliance reports and the engine and analysis behind our crowdsourced security intelligence service, ThreatRadar Community Defense. We deliver automated feeds from our IDC to our products in the field to ensure that our customers are always armed with the latest defenses against new threats, and the most recent regulatory compliance best practices.

Our research and development expense was $62.4 million, $53.4 million and $43.1 million in 2016, 2015 and 2014, respectively.

Intellectual Property

To protect our intellectual property, both domestically and abroad, we rely primarily on patent, trademark, copyright and trade secret laws. As of December 31, 2016, we had 33 issued patents and 15 pending patent applications in the United States. The claims for which we have sought patent protection relate primarily to methods, computer programs, devices and systems we have developed for our products. We also license software from third parties for integration into our products, including open source software and other software available on commercially reasonable terms. Our industry is characterized by the existence of a large number of relevant patents and frequent claims and related litigation regarding patent and other intellectual property rights. For more information about risks related to our and third party intellectual property rights see the section entitled "Risk Factors—Risks Related to our Business—Assertions by third parties of infringement or other violations by us of their intellectual property rights could result in significant costs and substantially harm our business and operating results"; "—We rely on the availability of licenses to third-party software and other intellectual property, the loss of which could increase our costs and delay software shipments"; "—Some of our products contain "open source" software, and any failure to comply with the terms of one or more of these open source licenses could negatively affect our business"; and "—Failure to protect our proprietary technology and intellectual property rights could substantially harm our business and operating results."

Manufacturing and Suppliers

Our security hardware appliance products are manufactured to our specifications by Caswell, Inc., a Taiwanese original design manufacturer of network appliance hardware products. We have entered into non-exclusive contracts to purchase these hardware appliances from American Portwell Technology, Inc. (a wholly owned subsidiary of Portwell, Inc.), and Dan-el Technologies Ltd., which are value-added distributors of products manufactured by

Caswell, Inc. These contracts will remain in effect until terminated by either party. Such contracts are terminable by us for any reason upon six months' notice, by the value-added distributors upon nine months' notice or by either party for an uncured material breach. We currently work with American Portwell Technology and provide the value-added distributors with rolling product demand forecasts, but our contracts contain no obligation for us to purchase any minimum amount of products. We submit purchase orders that describe the types and quantities of our products to be manufactured, the delivery dates and other delivery terms. American Portwell Technology receives the hardware appliances from the manufacturer, configures and installs our proprietary software on the appliances and then undertakes quality testing at their fulfillment centers. American Portwell Technology then ships our appliances directly to our distributors, resellers or customers or our logistics partner, Base Logistics BV. We hold inventory in American Portwell Technology's fulfillment centers and in our logistics partner's warehouses, in anticipation of orders for new appliances and to support our advance replacement program with new and repaired appliances. In addition, our contracts with our value-added distributors govern their use of our intellectual property and allocate the responsibilities for warranty repair, out of warranty repair and replacement costs with respect to damaged and defective products. We believe that having third parties manufacture, configure and test our products and provide a substantial portion of our logistics enables us to efficiently allocate capital, better adjust manufacturing volumes to meet changes in demand and more quickly deliver products, allowing us to focus resources on our core competencies.

The hardware components included in our products are sourced from various suppliers by our manufacturer and are principally industry standard parts and components that are available from multiple vendors. We have limited sources of supply for certain key components of our products, such as semiconductors, printed circuit boards and hard disk drives, which exposes us to the risk of component shortages or unavailability. For more information on risks related to product manufacturing and availability of components, see the section entitled "Risk Factors–Risks Related to Our Business–Delays or interruptions in the manufacturing and delivery of SecureSphere appliances by our sole source manufacturer may harm our business."

## Competition

The market for cyber-security solutions is intensely competitive and we expect competition to increase in the future. Our primary competitors by product area include:

- Database security. International Business Machines Corporation, Intel Security group of Intel Corporation (formerly McAfee, Inc.) and Oracle Corporation
- File security. Dell EMC Corporation, Symantec Corporation and Varonis Systems, Inc.
- Web application security and DDoS. Akamai Technologies, Inc. and F5 Networks, Inc.

We believe that the principal competitive factors affecting the market for cyber-security solutions include breadth of product offerings, security effectiveness, manageability, reporting, technical features, performance, ease of use, price, professional services capabilities, distribution relationships and customer service and support. We believe that our solutions generally compete favorably with respect to such factors.

## Employees

As of December 31, 2016, our total headcount was 993 employees, with 319 in research and development, 355 in sales and marketing, 110 in services and support, 82 in manufacturing operations and 127 in a general and administrative capacity. As of December 31, 2016, our headcount was 422 people in the United States, 449 in Israel and 122 in other countries. None of our employees is represented by a labor union with respect to his or her employment with us. We have not experienced any work stoppages, and we consider our relations with our employees to be good.

## Available Information

Our Internet address is www.imperva.com. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports are available on the Investor Relations section of our website free of charge, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The information found on our website is not part of this or any other report we file with or furnish to the SEC. The SEC also maintains an Internet website that contains reports, proxy and information statements and other information regarding registrants, such as Imperva, that file electronically with the SEC. The address of the website is www.sec.gov. In addition, you may read and copy any filing that we make with the SEC at the public reference room maintained by the SEC, located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information about the public reference room.

# Item 1A. Risk Factors

## Risks Related to Our Business

We have a history of losses, we may not become profitable and our revenue growth may not continue.

We have incurred net losses in each fiscal year since our inception, including net losses attributable to our stockholders of $59.0 million in 2014, $48.9 million in 2015 and $70.3 million in 2016. As a result, we had an accumulated deficit of $276.8 million at December 31, 2016. We may not become profitable in the future if we fail to increase revenue and manage our expenses, or if we incur unanticipated liabilities. Revenue growth may slow or revenue may decline for a number of possible reasons, including slowing demand for our products or services, increasing competition, a decrease in the growth of, or decline in, our overall market, or our failure to capitalize on growth opportunities or introduce new products and services. In addition, we have incurred, and anticipate that we will continue to incur, significant legal, accounting and other expenses relating to being a public company. If our revenue does not increase at a rate to proportionally offset these expected increases in operating expense, our operating margins will suffer. Further, in future periods, our revenue could decline and, accordingly, we may not be able to achieve profitability and our losses may increase. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a consistent basis. Any failure by us to achieve, maintain or increase profitability and continue our revenue growth could cause the price of our common stock to materially decline.

Our quarterly operating results are likely to vary significantly and to be unpredictable, which could cause the trading price of our stock to decline.

Our revenue and operating results could vary significantly from period to period as a result of a variety of factors, many of which are outside of our control. As a result, comparing our revenue and operating results on a period-to-period basis may not be meaningful, and you should not rely on our past results as an indication of our future performance. We may not be able to accurately predict our future revenue or results of operations. We base our current and future expense levels on our operating plans and sales forecasts, and our operating costs are relatively fixed in the short-term. As a result, we may not be able to reduce our costs sufficiently to compensate for an unexpected shortfall in revenue, and even a small shortfall in revenue could disproportionately and adversely affect financial results for that quarter. If our revenue or operating results fall below the expectations of investors or any securities analysts that cover our stock, the price of our common stock could decline substantially.

In addition to other risk factors listed in this section, factors that may individually or cumulatively affect our operating results from period to period include:

- the level of demand for our products and services, and the timing of orders from our channel partners and customers;
- the timing of sales and shipments of products during a quarter, which may depend on many factors such as inventory and logistics and our ability to ship new products on schedule and accurately forecast inventory requirements;
- the mix of products sold, the mix of revenue between products and services, including subscription services, and the degree to which products and services are bundled and sold together for a package price;
- the budgeting, procurement and work cycles of our customers, which may result in seasonal variation as our business and the market for solutions such as ours mature;
- changes in customer renewal rates for our services;
- general economic conditions, both domestically and in our foreign markets, and economic conditions specifically affecting industries in which our customers participate;
- the timing of satisfying revenue recognition criteria for our sales, including shipping and delivery terms, particularly where we accrue the associated commission expense in a different period, which may be affected by the extent to which we bring on new resellers and distributors, and our ability to establish vendor-specific objective evidence of fair value, or VSOE, for new products and maintain VSOE for maintenance and services;
- future accounting pronouncements or changes in our accounting policies; and
- increases or decreases in our expenses caused by fluctuations in foreign currency exchange rates, since a significant portion of our expenses are incurred and paid in the Israeli shekel and other currencies besides the U.S. dollar.

Reliance on a concentration of shipments at the end of the quarter could cause our revenue to fall below expected levels, resulting in a decline in our stock price.

Historically, we have received a significant majority of a quarter’s sales orders and generated a significant majority of a quarter’s revenue during the last two weeks of the quarter. The fact that so many orders arrive at the end of a quarter means that our revenue may shift from one quarter to the next if we cannot fulfill all of the orders and satisfy all of the revenue recognition criteria under our accounting policies before the quarter ends.

This pattern is a result of customer buying habits and the efforts of our sales force and channel partners to meet or exceed quarterly quotas. If expected revenue at the end of any quarter is delayed because anticipated purchase orders fail to materialize, our logistics partners fail to ship or deliver products on time, we fail to manage our inventory properly, we fail to release new products on schedule, or for any other reason, then our revenue for that quarter could fall below our expectations or those of securities analysts and investors, resulting in a decline in our stock price.

We rely on third party channel partners to generate a significant portion, and to fulfill a substantial majority, of our revenue, and if we fail to expand and manage our distribution channels, our revenue could decline and our growth prospects could suffer.

Historically our channel partners have originated more than 45%, and fulfilled approximately 85% or more, of our revenue, and we expect that channel sales will represent a substantial portion of our revenue for the foreseeable future. Our ability to expand our distribution channels depends in part on our ability to educate our channel partners about our products and services, which are often complex. Our agreements with our channel partners are generally non-exclusive and many of our channel partners have more established relationships with our competitors. If our channel partners choose to place greater emphasis on products and services of their own or those offered by our competitors, our ability to grow our business and sell our products may be adversely affected. If our channel partners do not effectively market and sell our products and services, or if they fail to meet the needs of our customers, then our ability to grow our business and sell our products may be adversely affected. The loss of one or more of our larger channel partners, who may cease marketing our products with limited or no notice, and our possible inability to replace them could adversely affect our sales. Our failure to recruit additional channel partners, or any reduction or delay in their sales of our products and services or conflicts between channel sales and our direct sales and marketing activities could materially and adversely affect our results of operations.

We face intense competition, especially from larger, better-known companies and we may lack sufficient financial or other resources to maintain or improve our competitive position.

The market for cyber-security products is intensely competitive and we expect competition to intensify in the future. Our competitors include companies such as Akamai Technologies, Inc., F5 Networks, Inc., International Business Machines Corporation ("IBM"), Intel Security group of Intel Corporation ("Intel"), Oracle Corporation ("Oracle"), Symantec Corporation and other point solution security vendors.

Many of our existing and potential competitors may have substantial competitive advantages such as:

- greater name recognition and longer operating histories;
- larger sales and marketing budgets and resources and the capacity to leverage their sales efforts and marketing expenditures across a broader portfolio of products;
- broader, deeper or otherwise more well-established relationships with customers and potential customers;
- broader distribution networks and more established relationships with distributors;
- wider geographic presence;
- access to larger customer bases;
- greater customer support resources;
- greater resources to make acquisitions;
- greater resources to develop and introduce products that compete with our products;
- lower labor and development costs; and
- substantially greater financial, technical and other resources.

As a result, they may be able to adapt more quickly and effectively to new or emerging technologies and changing opportunities, standards or customer requirements. In addition, these companies could reduce the price of their competing products, resulting in intensified pricing pressures within the markets in which we compete. Further, some of our larger competitors have substantially broader product offerings and leverage their relationships based on other products or incorporate functionality into existing products in a manner that discourages customers from purchasing our products.

Our competitors may offer a bundled product offering, and our customers may elect to accept this offering from our competitors, even if it has more limited functionality than our product offering, instead of adding the additional appliances required to implement our offering. The consolidation in our industry, such as IBM's acquisition of Guardium, Inc., Oracle's acquisition of Secerno, Ltd. and Intel's acquisition of McAfee, Inc., increases the likelihood of competition based on integration or bundling, particularly where our competitors' products and offerings are effectively integrated, and we believe that consolidation in our industry may increase the competitive pressures we face on all our products and services. If we are unable to sufficiently differentiate our products and services from the integrated or bundled products of our competitors, such as by offering enhanced functionality, performance or value, we may see a decrease in demand for those products or services, which would adversely affect our business, operating results and financial condition. Further, it is possible that continued industry consolidation may impact customers' perceptions of the viability of smaller or even medium-sized software firms and consequently customers' willingness to purchase from firms of our size. Similarly, if customers seek to concentrate their software purchases in the product portfolios of a few large providers or have already deployed products that are similar to ours, we may be at a competitive disadvantage notwithstanding the superior performance that we believe our products and services can deliver. Larger competitors are also often in a better position to withstand any significant reduction in capital spending by customers, and will therefore not be as susceptible to economic downturns.

Many of our smaller competitors that specialize in providing protection from a single type of cyber-security threat may deliver these specialized cyber-security products to the market more quickly than we can or may introduce innovative new products or enhancements before we do. Conditions in our markets could change rapidly and significantly as a result of technological advancements.

We may not compete successfully against our current or potential competitors. Companies competing with us may introduce products that have greater performance or functionality, are easier to implement or use, or incorporate technological advances that we have not yet developed or implemented. Our current and potential competitors may also establish cooperative relationships among themselves or with third parties that may further enhance their resources. In addition, companies competing with us may price their products more competitively than ours, or have an entirely different pricing or distribution model. Increased competition could result in fewer customer orders, price reductions, reduced operating margins and loss of market share. Further, we may be required to make substantial additional investments in research and development and marketing and sales in order to respond to such competitive threats, and we cannot assure you that we will be able to compete successfully in the future.

We operate in an evolving market that has not yet reached widespread adoption. New or existing technologies that may be perceived to address the risks in novel ways could gain wide adoption and supplant some or all of our products and services, making analysis of trends or predictions about our business difficult and potentially weakening our sales and our financial results.

We operate in new, rapidly evolving categories in the security industry that focus on securing our customers' business-critical data and applications. We offer database, file and web application security in an integrated, modular cyber-security solution and cloud-based offerings. Because we depend in part on the market's acceptance of our products and customers may choose to acquire technologies that are not directly comparable to ours, it is difficult to evaluate trends that may affect our business, including how large the cyber-security market will be and what products customers will adopt. For example, organizations that use other security products, such as network firewalls, security information and event management products or data loss prevention solutions, may believe that these security solutions sufficiently protect access to sensitive data. Therefore, they may continue to devote their IT security budgets to these products and may not adopt our cyber-security solutions in addition to such products. If customers do not recognize the benefits that our cyber-security solutions offer in addition to other security products, then our revenue may not grow as anticipated or may decline, and our stock price could decline.

The introduction of products and services embodying new technologies could render some or all of our existing products and services obsolete or less attractive to customers. Other cyber-security technologies exist or could be developed in the future, and our business could be materially adversely affected if such technologies are widely adopted. We may not be able to successfully anticipate or adapt to changing technology or customer requirements on a timely basis, or at all. Currently less than 30% of our customers have purchased more than one of our database, file and web security product families. Even if customers purchase our products, they may not make repeat purchases or purchase other elements of our SecureSphere product line or our Incapsula, CounterBreach and Camouflage product lines, which may be exacerbated by the rapid evolution of our market. If we are unable to sell additional products from multiple product families to our customers, then our revenue may not grow as anticipated or may decline, and our stock price could decline. If we fail to keep up with technological changes or to convince our customers and potential customers of the value of our solutions even in light of new technologies, our business, financial condition and results of operations could be materially and adversely affected.

In addition, because of our rapidly evolving market, any predictions about our revenue in future periods may not be as accurate as they would be if we operated in a more established market.

If we do not successfully anticipate market needs and opportunities or changes in the legal, regulatory and industry standard landscape and make timely enhancements to our products and develop new products that meet those needs, we may not be able to compete effectively and our ability to generate revenue will suffer.

The cyber-security market is characterized by rapid technological advances, changes in customer requirements, including changes driven by legal, regulatory and self-regulatory compliance mandates, frequent new product introductions and enhancements and evolving industry standards in computer hardware and software technology. Customers and industry analysts expect speedy introduction of software and new functionality to respond to new threats, requirements and risks and we may be unable to meet these expectations. As a result, we must continually improve our products and introduce new solutions in response to changes in operating systems, application software, computer and communications hardware, networking software, data center architectures, programming tools and computer language technology. Moreover, the technology in our products is especially complex because it needs to effectively identify and respond to methods of attack and theft, while minimizing the impact on network, database, file system and web application performance. In addition, our products must successfully interoperate with products from other vendors.

We cannot guarantee that we will be able to anticipate future market needs and opportunities or be able to develop product enhancements or new products to meet such needs or opportunities in a timely manner or at all. Since developing new products or new versions of, or add-ons to, existing products is complex, the timetable for their commercial release is difficult to predict and may vary from our historical experience, which could result in delays in their introduction from anticipated or announced release dates. We may not offer updates as rapidly as new threats affect our customers or our newly developed products or enhancements may have defects, errors or failures. If we do not quickly respond to the rapidly changing and rigorous needs of our customers by developing and introducing on a timely basis new and effective products, upgrades and services that can respond adequately to new security threats, our competitive position, business and growth prospects will be harmed.

Even if we are able to anticipate, develop and commercially introduce enhancements and new products, there can be no assurance that we will be successful in developing sufficient market awareness of them or that such enhancements or new products will achieve widespread market acceptance. Diversifying our product offerings will require significant investment and planning, will bring us more directly into competition with software providers that may be better established or have greater resources than we do, will require additional investments of time and resources in the development and training of our channel and strategic partners and will entail a significant risk of failure.

Further, one factor that drives demand for our products and services is the legal, regulatory and industry standard framework in which our customers operate, which we expect will continue to be a factor for the foreseeable future. For example, many of our customers purchase our web application security products to help them comply with the security standards developed and maintained by the Payment Card Industry Security Standards Council (the “PCI Council”), which apply to companies that process or store credit card information. Laws, regulations and industry standards are subject to drastic changes that, particularly in the case of industry standards, may arrive with little or no notice, and these could either help or hurt the demand for our products. If we are unable to adapt our products and services to changing regulatory standards in a timely manner, or if our products fail to assist our customers with their compliance initiatives, our customers may lose confidence in our products and could switch to competing solutions. In addition, if regulations and standards related to cyber-security are changed in a manner that makes them less onerous, our customers may view government and industry regulatory compliance as less critical to their businesses, and our customers may purchase fewer of our products and services, or none at all. In either case, our sales and financial results would suffer.

Real or perceived errors, failures or bugs in our products, particularly those that result in our customers experiencing security breaches, could adversely affect our reputation and business could be harmed.

Our products and services are very complex and have contained and may contain undetected defects or errors, especially when first introduced or when new versions are released. Defects in our products may impede or block network traffic or cause our products or services to fail to help secure business-critical data and applications. Defects in our products may lead to product returns and require us to implement design changes or software updates. Any defects or errors in our products, or the perception of such defects or errors, could result in:

- expenditure of significant financial and product development resources in efforts to analyze, correct, eliminate or work around errors or defects;
- loss of existing or potential customers or channel partners;
- delayed or lost revenue;
- delay or failure to attain market acceptance;
- delay in the development or release of new products or services;
- negative publicity, which will harm our reputation;
- warranty claims against us, which could result in an increase in our provision for doubtful accounts;
- an increase in collection cycles for accounts receivable or the expense and risk of litigation; and

harm to our results of operations.
Data thieves are sophisticated, often affiliated with organized crime and operate large scale and complex automated attacks. In addition, their techniques change frequently and generally are not recognized until launched against a target. If we fail to identify and respond to new and complex methods of attack and to update our products to detect or prevent such threats in time to protect our customers' business-critical data and applications, our business and reputation will suffer.

In addition, many of our customers use our products in applications that are critical to their businesses and may have a greater sensitivity to defects in our products than to defects in other, less critical, software products. An actual or perceived security breach or theft of the business-critical data of one of our customers, regardless of whether the breach is attributable to the failure of our products or services, could adversely affect the market's perception of our security products. Despite our best efforts, there is no guarantee that our products will be free of flaws or vulnerabilities, and, even if we discover these weaknesses, we may be unable to correct them promptly, if at all. Our customers may also misuse our products, which could result in a breach or theft of business-critical data.

Although we have limitation of liability provisions in our standard terms and conditions of sale, they may not fully or effectively protect us from claims as a result of federal, state or local laws or ordinances or unfavorable judicial decisions in the United States or other countries. The sale and support of our products also entail the risk of product liability claims. We maintain insurance to protect against certain claims associated with the use of our products, but our insurance coverage may not adequately cover all claims asserted against us, or cover only a portion of such claims. In addition, even claims that ultimately are unsuccessful could result in our expenditure of funds in litigation and divert management's time and other resources.

False detection of security breaches or false identification of malicious sources could adversely affect our business.

Our cyber-security products may falsely detect threats that do not actually exist. For example, our ThreatRadar Reputation Services product relies on information on attack sources aggregated from third-party data providers who monitor global malicious activity originating from anonymous proxies, specific IP addresses, botnets and phishing sites. If the information from these data providers is inaccurate, the potential for false positives increases. These false positives, while typical in the industry, may affect the perceived reliability of our products and may therefore adversely impact market acceptance of our products. If our products and services restrict access to important databases, files or applications based on falsely identifying users or traffic as an attack or otherwise unauthorized, then our customers' businesses could be adversely effected. Any such false identification of users or traffic could result in negative publicity, loss of customers and sales, increased costs to remedy any problem and costly litigation.

Our success in acquiring and integrating other businesses, products or technologies could impact our financial position.

In order to remain competitive, we may seek to acquire additional businesses, products or technologies, any of which could be material to our business, operating results and financial condition. For example, we acquired assets from Camouflage Software Inc. in December 2016, Tomium Software, LLC in January 2014, acquired Skyfence Networks Ltd. ("Skyfence") in February 2014 and acquired the remaining portion of Incapsula that we did not already own in March 2014. The environment for acquisitions in the markets in which we operate is very competitive and acquisition candidate purchase prices will likely exceed what we would prefer to pay, but may be required to pay in order to make an acquisition. Furthermore, we may not find suitable acquisition candidates, and acquisitions we complete may be difficult to successfully integrate into our overall business. Achieving the anticipated benefits of future acquisitions will depend in part upon whether we can integrate acquired operations, products and technology in a timely and cost-effective manner.

Acquisitions involve many risks, including the following:

- an acquisition may negatively impact our results of operations because it:
- may require us to incur charges and substantial debt or liabilities,
- may cause adverse tax consequences, substantial depreciation or deferred compensation charges,
- may result in acquired in-process research and development expenses or in the future may require the amortization, write-down or impairment of amounts related to deferred compensation, goodwill and other intangible assets, or
- may not generate sufficient financial return to offset acquisition costs;
-

we may encounter difficulties or unforeseen expenditures in integrating the business, technologies, products, personnel or operations of any company that we acquire, particularly if key personnel of the acquired company decide not to work for us;

- an acquisition and integration process is complex, expensive and time consuming, and may disrupt our ongoing business, divert resources, increase our expenses and distract our management;
- an acquisition may result in a delay or reduction of customer purchases for both us and the company acquired due to customer uncertainty about continuity and effectiveness of service from either company;
- we may encounter difficulties in, or may be unable to, successfully sell any acquired products;

- we may obtain unanticipated or unknown liabilities or become exposed to unanticipated risks in connection with any acquisition; and
- an acquisition may involve the entry into geographic or business markets in which we have little or no prior experience.

If we are unable to effectively execute acquisitions, our business, financial condition and results of operations could be adversely affected.

From time to time, we may seek to divest or wind down portions of our business, both acquired or otherwise, that are no longer core to the business, which could materially affect our cash flows and results of operations.

On February 23, 2017, we completed the sale of the assets of our Skyfence business to Forcepoint LLC. The disposition of the Skyfence assets or any other future dispositions we make may involve risks and uncertainties, including our ability to sell these businesses on terms acceptable to us, or at all. Any such dispositions could result in disruption to other parts of our business, potential loss of employees or customers, exposure to unanticipated liabilities or result in ongoing obligations and liabilities to us following any such divestiture. For example, in connection with a disposition, we may enter into transition services agreements or other strategic relationships, including long-term research and development arrangements, sales arrangements or agree to provide certain indemnities to the purchaser in any such transaction, which may result in additional expense and may adversely affect our financial condition and results of operations. In addition, dispositions may include the transfer or division of technology and/or the licensing of certain IP rights to third party purchasers, which could limit our IP rights or our ability to assert our IP rights against such purchasers or other third parties.

Our business and operations experienced rapid growth in 2015 and slowed growth in 2016. If we do not appropriately manage any future growth, or are unable to improve our systems and processes, our operating results will be negatively affected.

We have experienced volatile growth over the last several years. We grew from 723 employees as of December 31, 2014 to 923 employees as of December 31, 2015 to 993 employees as of December 31, 2016. This growth has placed, and will continue to place, a strain on our employees, management systems and other resources. Managing our growth has required, and will continue to require, significant expenditures and allocation of valuable management resources. We rely heavily on information technology systems to help manage critical functions, such as order processing, revenue recognition, financial forecasts and inventory and supply chain management. To manage any future growth effectively, we must continue to improve our information technology and financial infrastructure, operating and administrative systems and controls, and continue to manage headcount, capital and processes in an efficient manner. We may not be able to successfully implement improvements to these systems and processes in a timely manner.

In addition, we rely heavily on hosted SaaS technologies from third parties in order to operate critical functions of our business, including enterprise resource planning services from NetSuite Inc. and customer relationship management services from salesforce.com, inc. If these services become unavailable due to extended outages or interruptions or because they are no longer available on commercially reasonable terms or prices, our expenses could increase, our ability to manage our finances could be interrupted and our processes for managing sales of our products and services and supporting our customers could be impaired until equivalent services, if available, are identified, obtained and integrated; all of which could harm our business. Also, our systems and processes may not prevent or detect all errors, omissions or fraud. Our failure to improve our systems and processes, or their failure to operate in the intended manner, may result in our inability to manage the growth of our business and to accurately forecast our revenue, expenses and earnings, or to prevent certain losses. Our productivity and the quality of our products and services may also be adversely affected if we do not integrate and train our new employees quickly and effectively. Any future growth would add complexity to our organization and require effective coordination across our organization. If we fail to achieve the necessary level of efficiency in our organization as it grows or otherwise fail to manage any future growth effectively, we could incur increased costs, and experience a loss of customer and investor confidence in our internal systems and processes, any of which could result in harm to our business, results of operations and financial condition.

If we are unable to hire, retain and motivate qualified personnel, our business would suffer.

We depend on the continued contributions of our senior management and other key employees to execute on our business plan, and to identify and pursue new opportunities and product innovations. The loss of services of senior management or other key employees, particularly Anthony Bettencourt, our Chairman, President and Chief Executive Officer, and Amichai Shulman, one of our founders and our Chief Technology Officer, could significantly delay or prevent the achievement of our development and strategic objectives.

Our future success depends, in part, on our ability to continue to attract and retain highly skilled technical, managerial, finance and other personnel, particularly in our sales and marketing, research and development and professional service departments. Any of our employees may terminate their employment at any time. Competition for highly skilled personnel is frequently intense, globally for sales personnel, as well as in the San Francisco Bay Area and in Tel Aviv, Israel, the locations in which we have a substantial presence and need for highly-skilled personnel. We may be unable to attract and retain suitably qualified individuals who are capable of meeting our growing technical, operational and managerial requirements, on a timely basis or at all, and we may be required to pay increased compensation in order to do so. If we are unable to attract and retain the qualified personnel we need to succeed, our business will suffer.

Volatility or lack of performance in our stock price may also affect our ability to attract and retain our key employees. Employees may be more likely to leave us if the shares or RSUs they hold have declined in value or if the exercise prices of the options that they hold exceed the market price of our common stock. If we are unable to retain our employees, our business, operating results and financial condition will be harmed.

Actions that we are taking to restructure our business may be costly and may not be as effective as anticipated.

In November 2016, we announced a restructuring plan and cost reduction initiatives to reduce expenses, streamline the organization, and reallocate resources to align more closely with future business needs. As a result of these actions, we incurred additional costs that have the effect of reducing operating margins. We cannot be sure that the cost reduction and streamlining initiatives will be achieved or as successful in reducing our overall expenses as we expect or that additional costs will not offset any such reductions or streamlining. If we are unable to realize the expected outcomes from the restructuring efforts, if our operating costs are higher than we expect or if we do not maintain adequate control of our costs and expenses, our business and operating results may be harmed.

Delays or interruptions in the manufacturing and delivery of SecureSphere appliances by our sole source manufacturer may harm our business.

Our hardware appliances are built by a single manufacturer. Our reliance on a sole manufacturer, particularly a foreign manufacturer, involves several risks, including a potential inability to obtain an adequate supply of appliances and limited control over pricing, quality and timely delivery of products. In addition, replacing this manufacturer may be difficult and could result in an inability or delay in obtaining products. As a result, we may be unable to fulfill customer orders and our operating results may fluctuate from period to period, particularly if a disruption occurs near the end of a fiscal period.

Our manufacturer’s ability to timely manufacture and ship our appliances in large quantities depends on a variety of factors. The manufacturer relies on a limited number of sources for the supply of functional components, such as semiconductors, printed circuit boards and hard disk drives. Functional component supply shortages or delays could prevent or delay the manufacture and shipment of appliances and, in the event of shortages or delays, we may not be able to procure alternative functional components on similar pricing terms, if at all. In addition, contractual restrictions or claims for infringement of intellectual property rights may restrict our manufacturer’s use of certain components. These restrictions or claims may require our manufacturer to utilize alternative components or obtain additional licenses or technologies, and may impede its ability to manufacture and deliver appliances on a timely or cost-effective basis. If at some point, the manufacturer is no longer financially viable, we may lose our source of supply with little or no notice or recourse. Further, even if quality products are timely manufactured, delays in shipping may occur, resulting in delayed satisfaction of a primary revenue recognition criterion.

In the event of an interruption from this manufacturer or any quality control issues with this manufacturer, we may be unable to develop alternate or secondary sources in a timely manner. If we are unable to procure our appliances in quantities sufficient to meet our requirements, we will not be able to deliver products to our channel partners and customers, which would materially and adversely affect present and future sales.

A failure to manage excess inventories or inventory shortages could result in decreased revenue and gross margins and harm our business.

We purchase products from our manufacturing partner outside of, and in advance of, reseller or customer orders and hold our products in inventory. If we fail to accurately predict demand and as a result our manufacturer maintains insufficient hardware or component inventory or excess inventory, we may be unable to timely deliver products to our distributors or customers or may have substantial inventory expense. Because our channel partners do not purchase our products in advance of customer orders, our difficulty in accurately forecasting demand for our hardware products may be exacerbated. There is a risk we may incorrectly forecast demand and may be unable to sell excess products ordered from our manufacturing partner. Inventory levels in excess of customer demand may result in inventory write-downs, and the sale of excess inventory at discounted prices could significantly impair our brand image and have an adverse effect on our financial condition and results of operations.

Conversely, if we underestimate demand for our products or if our manufacturing partner fails to supply products we require in a timely manner, we may experience inventory shortages. Inventory shortages might delay shipments to resellers, distributors and customers or cause us to lose sales. Further, as the size of individual orders increases, the risk that we may be unable to deliver unforecasted orders also increases, particularly near the end of quarterly periods. These shortages may diminish the loyalty of our channel partners or customers.

The difficulty in forecasting demand also makes it difficult to estimate our future financial condition and results of operations from period to period. A failure to accurately predict the level of demand for our products could adversely affect our net revenue and net income, and we are unlikely to forecast such effects with any certainty in advance.

We have operations outside of the United States and a significant portion of our customers and suppliers are located outside of the United States, which subjects us to a number of risks associated with conducting international operations.

We market and sell our products throughout the world and have personnel in many parts of the world. In addition, we have sales offices and research and development facilities outside the United States and we conduct, and expect to continue to conduct, a significant amount of our business with companies that are located outside the United States, particularly in Israel, Asia and Europe. We also source our components for our products and deliver our services from various geographical regions. Therefore, we are subject to risks associated with having international sales and worldwide operations, including:

- challenges caused by distance, language, cultural and ethical differences and the competitive environment;
- multiple and conflicting laws and regulations, including complications due to unexpected changes in these laws and regulations;
- trade and foreign exchange restrictions;
- foreign currency exchange fluctuations and foreign exchange controls;
- economic, social or political instability in foreign markets;
- greater difficulty in enforcing contracts, accounts receivable collection and longer collection periods;
- changes in regulatory requirements;
- difficulties and costs of staffing and managing foreign operations or relationships with channel partners;
- the uncertainty and limitation of protection for intellectual property rights in some countries;
- costs of complying with U.S. and foreign laws and regulations, including import and export control laws, tariffs, trade barriers, economic sanctions and other regulatory or contractual limitations on our ability to sell our products in certain foreign markets, and the risks and costs of non-compliance or complaints of non-compliance;
- heightened risks of unethical, unfair or corrupt business practices, actual or claimed, in certain geographies and of improper or fraudulent sales arrangements that may impact financial results and result in restatements of, and irregularities in, financial statements;
- the potential that our operations in the U.S. may limit the acceptability of our products to some foreign customers, and that our international sourcing and operations may limit the acceptability of our products to some U.S. customers;
- the potential for acts of terrorism, hostilities or war;
- management communication and integration problems resulting from cultural differences and geographic dispersion; and
- multiple and possibly overlapping tax structures.

Our product and service sales may be subject to foreign governmental regulations, which vary substantially from country to country and change from time to time. Failure to comply with these regulations could adversely affect our business. Violations of laws or key control policies by our employees, contractors, channel partners or agents could result in delays in revenue recognition, financial reporting misstatements, fines, penalties or the prohibition of the importation or exportation of our products and services and could have a material adverse effect on our business and results of operations.

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

Sales to U.S. and foreign federal, state and local governmental agency customers have accounted for approximately 15% of our bookings for the year ended December 31, 2014, 13% for the year ended December 31, 2015 and 11% of our bookings for the year ended December 31, 2016, and sales to government entities may increase. Sales into government entities are subject to a number of risks. Selling to government entities can be highly competitive, expensive and time consuming, often requiring significant upfront time and expense without any assurance that we will complete a sale. Accordingly:

- changes in fiscal or contracting policies or decreases and uncertainties in available government funding;
- changes in government programs or applicable requirements;
- the adoption of new laws or regulations or changes to existing laws or regulations;
- changes in political or social attitudes with respect to security issues; and
- potential delays or changes in the government appropriations process, including actions such as spending freezes implemented to address political or fiscal policy concerns,

could cause governments and governmental agencies to delay or refrain from purchasing our products and services in the future or otherwise have an adverse effect on our business, financial condition and results of operations.

Most of our sales to government entities have been made indirectly through our channel partners. Government entities may have 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 results of operations.

In addition, for purchases by the U.S. federal government, we must comply with laws and regulations relating to U.S. federal government contracting, which affect how we and our channel partners do business in connection with U.S. federal agencies. These laws and regulations may impose added costs on our business, and failure to comply with these or other applicable regulations and requirements, including non-compliance in the past, could lead to claims for damages from our channel partners, penalties, termination of contracts and suspension or debarment from government contracting for a period of time. Any such damages, penalties, disruption or limitation in our ability to do business with the U.S. federal government may adversely impact our results of operations.

Our business in countries with a history of corruption and transactions with foreign governments increase the risks associated with our international activities.

As we operate and sell internationally, we are subject to the U.S. Foreign Corrupt Practices Act, or the FCPA, and other laws that prohibit improper payments or offers of payments to foreign governments and their officials and political parties for the purpose of obtaining or retaining business. We have operations, deal with and make sales to governmental customers in countries known to experience corruption, particularly certain emerging countries in Africa, East Asia, Eastern Europe, South America and the Middle East. Our activities in these countries create the risk of unauthorized payments or offers of payments by one of our employees, consultants, sales agents or channel partners that could be in violation of various anti-corruption laws, even though these parties may not be under our control. While we have implemented safeguards to prevent these practices by our employees, consultants, sales agents and channel partners, our existing safeguards and any future improvements may prove to be less than effective, and our employees, consultants, sales agents or channel partners may engage in conduct for which we might be held responsible. Violations of the FCPA may result in severe criminal or civil sanctions, including suspension or debarment from U.S. government contracting, and we may be subject to other liabilities, which could negatively affect our business, operating results and financial condition.

We rely significantly on revenue from maintenance and support which may decline and, because we recognize revenue from such services over the term of the relevant service period, downturns or upturns in sales are not immediately reflected in full in our operating results.

Our maintenance and support revenue accounted for 33% of our total revenue for 2014, 28% of our total revenue for 2015 and 30% of our total revenue for 2016. Sales of new maintenance and support contracts or renewal of such services contracts may decline or fluctuate as a result of a number of factors, including customers' level of satisfaction with our products and services, the prices of our products and services, the prices of products and services offered by our competitors or reductions in our customers' spending levels. If our sales of new or renewal services contracts decline, our revenue or revenue growth may decline and our business will suffer. In addition, we recognize service revenue ratably over the term of the relevant service period, which is usually one to three years. As a result, much of the revenue we report each quarter is the recognition of deferred revenue from services contracts entered into during previous quarters. Consequently, a decline in new or renewal services 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 downturns in new or renewal sales of our services would not be reflected in full in our results of operations until future periods.

If we are unable to increase sales to large customers, our results of operations may suffer.

We continuously seek to increase sales of our products to large enterprises, managed security service providers ("MSSPs"), cloud hosting providers and government entities. Sales to large enterprises, MSSPs, cloud hosting providers and government entities involve risks that may not be present, or are present to a lesser extent, in sales to small and mid-sized entities. These risks include:

- preexisting relationships with larger, entrenched providers of security solutions who have access to key decision makers within the organization and who also have the ability to bundle competing products with a broader product offering;
- increased purchasing power and leverage held by large customers in negotiating contractual arrangements with us;
- more stringent requirements in our support service contracts, including stricter support response times, and increased penalties for any failure to meet support requirements; and
- longer sales cycles, including lengthening of sales cycles due to competitive pressures or the evaluation by customers of both our cloud security solutions from Incapsula and our on-premise products as potential alternatives, and the associated risk that substantial time and resources may be spent on a potential customer who elects not to purchase our products and services.

In addition, product purchases by large enterprises, MSSPs, cloud hosting providers and government entities are frequently subject to budget constraints, multiple approvals, and unplanned administrative, processing and other delays. Further, large enterprises, MSSPs, cloud hosting providers and government entities typically have longer implementation cycles; require greater product functionality and scalability and a broader range of services; demand that vendors take on a larger share of risks; sometimes require acceptance provisions that can lead to a delay in revenue recognition; and expect greater payment flexibility from vendors. Additionally, the ongoing increase in the number of security vendors competing for these entities' business, who in some cases use overlapping or confusing messaging, may combine with these factors to extend the sales cycles for our products and services. All these factors can add risk to doing business with these customers. If our sales expectations for large customers do not materialize in a particular quarter or at all, then our business, financial condition and results of operations could be materially and adversely affected.

If our existing and potential customers migrate to hosted, cloud-based data centers that do not deploy our products, our revenue could suffer.

The majority of our current sales are made through a model in which our channel partners sell our cyber-security solutions to large enterprise customers that operate their own data centers and have the ability to choose the cyber-security solutions and configurations to fit their environment. If our large enterprise customers and potential customers choose to outsource the hosting of their data centers to large, multi-tenancy hosting providers like Rackspace Hosting, Inc., Amazon Web Services ("AWS") and Savvis, Inc. (dba CenturyLink Technology Solutions), they may not be able to choose what cyber-security solutions are deployed in these hosted environments, and our current sales model may not be effective. Although we work with large hosting services providers, like Rackspace Hosting, Inc., AWS and Savvis, Inc., to integrate our cyber-security solutions into their hosting environments so that our solutions may be offered to their hosting customers, we cannot guarantee that all such hosting service providers will adopt our solutions, offer them as a choice to their customers or promote our solutions over those of our competitors. Even if these large hosting services providers integrate our cyber-security solutions into their hosting environments and promote our solutions, they may be able to negotiate larger discounts than individual enterprise customers and, consequently, the average selling price of our products may decrease and our revenue would suffer.

Alternatively, they may offer services based on our competitors' products at lower cost or bundled with other services that we do not offer, and their customers may choose those services even if they would otherwise choose our products if making a decision on a stand-alone basis.

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

Our functional and reporting currency is the U.S. dollar and we generate a majority of our revenue in U.S. dollars. However, in 2014, 2015 and 2016, we incurred approximately 32%, 27% and 38%, respectively, of our expenses outside of the United States in foreign currencies, primarily the Israeli shekel, principally with respect to salaries and related personnel expenses associated with our Israeli operations. The exchange rate between the U.S. dollar and foreign currencies has fluctuated substantially in recent years and may continue to fluctuate substantially in the future. We expect that a majority of our revenue will continue to be generated in U.S. dollars for the foreseeable future and that a significant portion of our expenses, including personnel costs, as well as capital and operating expenditures, will continue to be denominated in Israeli shekels. Our results of operations may be adversely affected by foreign exchange fluctuations.

We use forward foreign exchange contracts to hedge or mitigate the effect of changes in foreign exchange rates on our operating expenses denominated in certain foreign currencies. However, this strategy cannot eliminate our exposure to foreign exchange rate fluctuations and involves costs and risks of its own, such as cash expenditures, ongoing management time and expertise, external costs to implement the strategy and potential accounting implications. Additionally, our hedging activities may contribute to increased losses as a result of volatility in foreign currency markets.

Assertions by third parties of infringement or other violations by us of their intellectual property rights could result in significant costs and substantially harm our business and operating results.

Patent and other intellectual property disputes are common in the IT security industry. Some companies in the IT security industry, including some of our competitors, own large numbers of patents, copyrights, trademarks and trade secrets, which they may use to assert claims against us. This disparity between our patent portfolio and the patent portfolios of our most significant competitors may increase the risk that they may sue us for patent infringement and may limit our ability to counterclaim for patent infringement or settle through patent cross-licenses. In addition, there are patent holding companies or other patent owners who are solely or primarily in the business of building portfolios of patents and asserting them against operating companies, often with little merit, and who have no relevant product revenue so that potential assertions of our patents (and potential patents) against such companies may provide little or no deterrence. Third parties have asserted and may in the future assert claims of infringement, misappropriation or other violations of intellectual property rights against us. For example, in May 2010, F5 Networks, Inc., an IT infrastructure company that competes with us in the web application firewall market, filed a lawsuit against us alleging patent infringement. In September 2010, we filed a counterclaim alleging patent infringement by F5 Networks, Inc. In February 2011, we entered into a settlement and license agreement with F5 Networks, Inc., which dismissed the litigation. Third parties may also assert such claims against our customers or channel partners whom we typically indemnify against claims that our products infringe, misappropriate or otherwise violate the intellectual property rights of third parties. As the numbers of products and competitors in our market increase and overlaps occur, claims of infringement, misappropriation and other violations of intellectual property rights may increase. Also, to the extent we hire personnel from competitors, we may be subject to allegations that they have been improperly solicited or have divulged proprietary or other confidential information.

We cannot assure you that we are not infringing or otherwise violating any third-party intellectual property rights. Further, any claim of infringement, misappropriation or other violation of intellectual property rights by a third party, even those without merit, could be asserted against us, cause us to incur substantial costs defending against the claim and could distract our management from our business. An adverse outcome of an IP dispute may require us to pay substantial damages, including treble damages, if we are found to have willfully infringed a third party’s patents or copyrights; cease making, licensing or using solutions that are alleged to infringe or misappropriate the intellectual property of others; expend additional development resources to attempt to redesign our products or services or otherwise to develop non-infringing technology, which may not be successful; enter into potentially unfavorable royalty or license agreements in order to obtain the right to use necessary technologies or intellectual property rights; and indemnify our customers and partners. Royalty or licensing agreements, if required or desirable, may be unavailable on terms acceptable to us, or at all, or may require significant royalty payments and other expenditures. In addition, some licenses may be non-exclusive, and therefore our competitors may have access to the same technology licensed to us. Any of these events could seriously harm our business, financial condition and results of operations.

We rely on the availability of licenses to third-party software and other intellectual property, the loss of which could increase our costs and delay software shipments.

Many of our products and services include software or other intellectual property licensed from third parties, and we also use software and other intellectual property licensed from third parties in our business. This exposes us to risks over which we may have little or no control. For example, a licensor may have errors or defects in its products that harm our business, may have difficulties keeping up with technological changes or may stop supporting the software or other intellectual property that it licenses to us. Also, it will be necessary in the future to renew licenses, expand the scope of existing licenses or seek new licenses, relating to various aspects of these products and services, or otherwise relating to our business, which may result in increased license fees. In addition, a direct or indirect licensor may assert that we or our customers are in breach of the terms of a license, which could, among other things, give such licensor the right to terminate a license or seek damages from us, or both. Moreover, the inclusion in our products and services of software or other intellectual property licensed from third parties on a nonexclusive basis could limit our ability to differentiate our products from those of our competitors.

Licensed software may not continue to be available on commercially reasonable terms, or at all. While we believe that there are currently adequate replacements for third-party software, any loss of the right to use any of this software could result in delays in producing or delivering our software until equivalent technology is identified and integrated, which delays could harm our business. Our business would be disrupted if any of the software we license from others or functional equivalents of this software were either no longer available to us or no longer offered to us on commercially reasonable terms. In either case, we would be required to either redesign our products to function with software available from other parties or to develop these components ourselves, which would result in increased costs and could result in delays in our product shipments and the release of new product offerings. Furthermore, we might be forced to limit the features available in our current or future products. If we fail to maintain or renegotiate any of these software licenses, we could face significant delays and diversion of resources in attempting to license and integrate a functional equivalent of the software. Any of these events could have a material adverse effect on our business, financial condition and results of operations.

Some of our products contain "open source" software, and any failure to comply with the terms of one or more of these open source licenses could negatively affect our business.

Certain of our products are distributed with software licensed under "open source" licenses. Some of these licenses contain requirements that we make available source code for modifications or derivative works we create based upon the open source software, and that we license these modifications or derivative works under the terms of a particular open source license or subject to certain license requirements. If we combine our proprietary software with open source software in a certain manner, we could, under certain provisions of the open source licenses, be required to release the source code of our proprietary software. In addition to risks related to license requirements, usage of open source software can subject us to greater risks than use of third-party commercial software, as licensors of open source software generally do not provide warranties or any indemnification for infringement of third party intellectual property rights. We have established processes to help alleviate these risks, including a review process for screening requests from our development organization for the use of open source software, but we cannot be sure that all open source software is submitted for approval prior to use in our products. In addition, open source license terms may be ambiguous and many of the risks associated with use of open source software cannot be eliminated, and could, if not properly addressed, negatively affect our business. If we were found to have inappropriately used open source software, we might be required to re-engineer our products, to release proprietary source code, to discontinue the sale of our products in the event re-engineering could not be accomplished on a timely basis or to take other remedial action that may divert resources away from our development efforts, any of which could adversely affect our business, operating results and financial condition. Disclosing the source code of our proprietary software could make it easier for malicious third parties to discover vulnerabilities in our cyber-security products and allow our competitors to create similar products with decreased development effort and time. Any of these events could have a material adverse effect on our reputation, business, financial condition and results of operations.

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

Our success depends, in part, on our ability to protect proprietary methods and technologies that we develop under the intellectual property laws of the United States and other countries, so that we can prevent others from using our inventions and proprietary information. We attempt to protect our intellectual property under patent, trademark, copyright and trade secret laws, and through a combination of confidentiality procedures, contractual provisions and other methods, all of which offer only limited protection. If we fail to protect our intellectual property rights adequately, our competitors might gain access to our technology, and our business might be harmed. In addition, defending our intellectual property rights might entail significant expenses. Any of our patents, copyrights, trademarks or other intellectual property rights may be challenged by others or invalidated through administrative process or litigation. Imperva and its subsidiaries had 33 issued patents and 15 patent applications pending as of December 31, 2016 in the United States. Our issued patents, which are limited in number compared to some of our competitors, may not provide us with any competitive advantages or may be challenged by third parties, and our patent applications may never be granted at all. Additionally, the process of obtaining patent protection is expensive and time-consuming, and we may not be able to prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. Further, for strategic and other reasons we may choose not to seek patent protection for certain innovations and may choose not to pursue patent protection in certain jurisdictions. Even if issued, there can be no assurance that our patents will adequately protect our intellectual property, as the legal standards relating to the validity, enforceability and scope of protection of patent and other intellectual property rights are uncertain.

Any patents that are issued may subsequently be invalidated or otherwise limited, enabling other companies to better develop products that compete with ours, which could adversely affect our competitive business position, business prospects and financial condition. In addition, issuance of a patent does not guarantee that we have a right to practice the patented invention. Patent applications in the United States are typically not published until 18 months after filing, or in some cases not at all, and publications of discoveries in industry-related literature lag behind actual discoveries. We cannot be certain that we were the first to make the inventions claimed in our issued patents or pending patent applications or otherwise used in our products, that we were the first to file for protection in our patent applications, or that third parties do not have blocking patents that could be used to prevent us from marketing or practicing our patented products or technology. Effective patent, trademark, copyright and trade secret protection may not be available to us in every country in which our products and services are available. The laws of some foreign countries may not be as protective of intellectual property rights as those in the United States, and mechanisms for enforcement of intellectual property rights may be inadequate. Accordingly, despite our efforts, we may be unable to prevent third parties from infringing upon or misappropriating our intellectual property.

We might be required to spend significant resources to monitor and protect our intellectual property rights. We may initiate claims or litigation against third parties for infringement of our proprietary rights or to establish the validity of our proprietary rights. Any litigation, whether or not it is resolved in our favor, could result in significant expense to us and divert the efforts of our technical and management personnel, which may adversely affect our business, operating results and financial condition.

We may become subject to claims for remuneration or royalties for assigned service invention rights by our Israeli employees, which could result in litigation and adversely affect our business.

We have entered into assignment of invention agreements with our Israeli employees pursuant to which such individuals agree to assign to us all rights to any inventions created in the scope of their employment or engagement with us. A significant portion of our intellectual property has been developed by our Israeli employees in the course of their employment for us. Under the Israeli Patents Law, 5727-1967 (the “Patents Law”), inventions conceived by an employee during the scope of his or her employment with a company are regarded as “service inventions,” which belong to the employer, absent a specific agreement between the employee and employer giving the employee service invention rights. The Patents Law also provides that if there is no such agreement between an employer and an employee, the Israeli Compensation and Royalties Committee (the “Committee”), a body constituted under the Patents Law, shall determine whether the employee is entitled to remuneration for his or her inventions. The Committee has previously held that employees may be entitled to remuneration for intellectual property that they develop during their service for a company despite their explicit waiver of such right. In a recent decision, however, the Committee overturned its position and upheld that an employee’s waiver of his right to remuneration is valid and binding. The plaintiff in this last case filed a petition with the Israeli Supreme Court requesting to remand the case to the Committee for a second review, but the Israeli Supreme Court decided on July 8, 2015 that the Committee acted within its administrative authority and that it would not intervene in the Committee’s decision. Even though the recent decision still stands, the Committee’s inconsistency raises doubt as to the outcome in different sets of circumstances. Thus, although our Israeli employees have agreed to assign to us service invention rights, we may face claims demanding remuneration in consideration for assigned inventions. As a consequence of such claims, we could be required to pay additional remuneration or royalties to our current and/or former Israeli employees, or be forced to litigate such claims, which could negatively affect our business.

Confidentiality agreements with partners, employees, consultants and others may not adequately prevent disclosure of trade secrets and other proprietary information.

In order to protect our proprietary technology, processes and methods, we rely in part on confidentiality agreements and other restrictions with our customers, partners, employees, consultants and others. These agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. Despite our efforts to protect our proprietary technology, processes and methods, unauthorized parties may attempt to misappropriate, reverse engineer or otherwise obtain and use them. We may be unable to determine the extent of any unauthorized use or infringement of our products, technologies or intellectual property rights. In addition, others may independently develop identical or substantially similar technology and in these cases we would not be able to assert any trade secret rights against those parties. Moreover, policing unauthorized use of our technologies, products and intellectual property is difficult, expensive and time-consuming, particularly in foreign countries where the laws may not be as protective of intellectual property rights as those in the United States and where mechanisms for enforcement of intellectual property rights may be weak. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

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 business activities are subject to various restrictions under U.S. export controls and trade and economic sanctions laws, including the U.S. Commerce Department's Export Administration Regulations and economic and trade sanctions regulations maintained by the U.S. Treasury Department's Office of Foreign Assets Control ("OFAC"). If we fail to comply with these laws and regulations, we could be subject to civil or criminal penalties and reputational harm. U.S. export control laws and economic sanctions laws also prohibit certain transactions with U.S. embargoed or sanctioned countries, governments, persons and entities.

Many of our products incorporate encryption technology and may be exported outside the U.S. only if we obtain an export license or qualify for an export license exception. Compliance with applicable regulatory requirements regarding the export of our products may prevent our customers with international operations from deploying our products throughout their global systems or, in some cases, prevent the export of our products to some countries altogether. Further, various countries regulate the import of encryption technology and appliance-based products and have enacted laws that could limit our ability to distribute products, could create delays in the introduction of our products in those countries or could limit our customers' ability to implement our products in those countries.

U.S. export control laws and economic sanctions prohibit the shipment of certain products to U.S. embargoed or sanctioned countries, governments and persons. While we and our channel partners take precautions to prevent our products from being shipped to, downloaded or accessed by U.S. sanctions targets, our products could be shipped to, downloaded or accessed by persons located in countries that are the subject of U.S. embargoes despite our efforts. Any such shipment or access could have negative consequences, including government investigations, penalties and reputational harm. For example, in 2015, we discovered that some of our free downloadable software evaluation products may have been downloaded by a limited number of persons located in countries that are the subject of U.S. embargoes. We terminated the unauthorized accounts, filed an initial disclosure with the U.S. Commerce Department's Bureau of Industry and Security ("BIS") and with OFAC and filed final reports with BIS and OFAC on September 2, 2015 and September 22, 2015, respectively. We have implemented new screening measures designed to prevent users in embargoed countries and prohibited persons from purchasing, downloading or accessing our free downloadable evaluation software or other products or services. OFAC issued a cautionary letter on October 14, 2015 as a final enforcement response to the apparent violations and did not impose any monetary penalties. BIS issued a warning letter on October 5, 2016 in response to the apparent violations and closed the matter, having determined not to take any further action. Even though we take precautions to prevent transactions with U.S. sanctions targets, any such precautions, or any new precautions we may implement in the future, may be ineffective. Similar future circumstances or violations may result in more burdensome remedies including material penalties. As a result, there is risk that in the future we could provide our products to or permit our products to be downloaded or accessed by such targets despite these precautions. This could result in negative consequences to us, including government investigations, penalties and reputational harm.

In the future, there may be changes in our products or changes in export and import regulations or economic sanctions. Similarly, there may be shifts in the enforcement or scope of existing regulations or restrictions or changes in the countries, governments, persons or technologies targeted by such regulations and restrictions. Such changes and shifts may create delays in the introduction and sale of our products in international markets, could result in decreased use of our products or, in some cases, prevent the sale of our products to certain countries, governments or persons altogether, including by current customers or potential customers. Any such limitation, delay, restriction or reduction could adversely affect our business, financial condition, results of operations and prospects.

Conditions in Israel may limit our ability to develop and sell our products. This could result in a decline in revenue.

Our principal research and development facilities are located in Israel. Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its neighboring countries, as well as incidents of civil unrest, and a number of state and non-state actors have publicly committed to its destruction. Political, economic and military conditions in Israel could directly affect our operations. We could be adversely affected by any major hostilities involving Israel, including acts of terrorism or any other hostilities involving or threatening Israel, the interruption or curtailment of trade between Israel and its trading partners, a significant increase in inflation or a significant downturn in the economic or financial condition of Israel. Any on-going or future violence between Israel and the Palestinians, including a resumption of the conflict in Gaza, armed conflicts, terrorist activities, tension along the Israeli borders or with other countries in the region, including Iran, or political instability in the region could disrupt international trading activities in Israel and may materially and negatively affect our business and could harm our results of operations.

Certain countries, as well as certain companies and organizations, continue to participate in a boycott of Israeli firms, firms with large Israeli operations and others doing business with Israel and Israeli companies. In addition, such boycott, restrictive laws, policies or practices may change over time in unpredictable ways, and could, individually or in the aggregate, have a material adverse effect on our business in the future.

Some of our employees in Israel are obligated to perform annual military reserve duty in the Israel Defense Forces, depending on their age and position in the armed forces. Furthermore, they may be called to active reserve duty at any time under emergency circumstances for extended periods of time. For example, in 2014, approximately 51 of our employees in Israel were called for active reserve duty, each serving for an average of approximately two weeks. Our operations could be disrupted by the absence, for a significant period, of one or more of our executive officers or key employees due to military service, and any significant disruption in our operations could harm our business.

Our internal network system and website may be subject to intentional disruption that could adversely impact our reputation and future sales.

Because we are a leading provider of cyber-security products, hackers and others may try to access our data or compromise our systems. Similarly, experienced computer programmers may attempt to penetrate our network security or the security of our website and cause interruptions of our services. Because the techniques used by such computer programmers to access or sabotage networks change frequently and may not be recognized until launched against a target, we may be unable to anticipate these techniques. The theft and/or unauthorized use or publication of our trade secrets and other confidential business information as a result of such an event could adversely affect our competitive position, reputation, brand and future sales of our products, and could impair our ability to operate our business, including our ability to provide subscription or maintenance and support services to our customers. We could suffer monetary and other losses and reputational harm in the event of such incidents.

Outages, interruptions or delays in hosting services could impair the delivery of our cloud-based security services and harm our business.

We operate infrastructure that supports our ThreatRadar and Security Operations Center ("SOC") services and use third party hosting facilities for certain ThreatRadar services. Despite precautions taken within our own internal network and at these third party facilities, the occurrence of a natural disaster or an act of terrorism or other unanticipated problems could result in lengthy interruptions in our services.

The cloud-based security services that we provide through our subsidiary, Incapsula, are operated from a network of third party facilities that host the software and systems that operate these security services. Any damage to, or failure of, our internal systems or systems at third party hosting facilities could result in outages or interruptions in our cloud-based services. Outages or interruptions in our cloud-based security services may cause our customers and potential customers to believe our cloud-based security services are unreliable or suffer from perceived vulnerabilities, cause us to issue credits or pay penalties, cause customers to terminate their subscriptions and adversely affect our renewal rates and our ability to attract new customers, ultimately harming our business and revenue. Our Incapsula service has experienced outages in the past and we may continue to experience such outages in the future.

Changes in our provision for income taxes or adverse outcomes resulting from examination of our income tax returns could adversely affect our results.

We are subject to income taxation in the United States and numerous foreign jurisdictions. Determining our provision for income taxes requires significant management judgment. In addition, our provision for income taxes is subject to volatility and could be adversely affected by many factors, including, among other things, changes to our operating or holding structure, changes in the amounts of earnings in jurisdictions with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities and changes in tax laws. We are subject to ongoing tax examinations in various jurisdictions. Tax authorities may disagree with our intercompany charges, cross-jurisdictional transfer pricing, determinations regarding the inclusion of stock-based compensation expense as part of a cost-plus arrangement or other matters and assess additional taxes. While we regularly assess the likely outcomes of these examinations to determine the adequacy of our provision for income taxes, there can be no assurance that the outcomes of such examinations will not have a material impact on our operating results and cash flows.

Significant judgment is required to determine the recognition and measurement attributes prescribed in Accounting Standards Codification ("ASC") 740-25 (formerly referred to as Financial Interpretation No. 48, "Accounting for Uncertainty in Income Taxes-an interpretation of FASB Statement No. 109"). In addition, ASC 740-25 applies to all income tax positions, including the potential recovery of previously paid taxes, which if settled unfavorably could adversely impact our provision for income taxes or additional paid-in capital. In addition, we are subject to the continuous examination of our income tax returns by the U.S. Internal Revenue Service and other tax authorities. We regularly assess the likelihood of adverse outcomes resulting from these examinations to determine the adequacy of our provision for income taxes. There can be no assurance that the outcomes from these continuous examinations will not have an adverse effect on our results of operations.

Our ability to use our net operating loss carryforwards may be subject to limitations and may result in increased future tax liability to us.

Generally, a change of more than 50% in the ownership of a corporation's stock, by value, over a three-year period constitutes an ownership change for U.S. federal and applicable state income tax purposes. An ownership change may limit a company's ability to use its net operating loss carryforwards attributable to the period prior to such change. We have not performed a detailed analysis to determine whether an ownership change under Section 382 of the Internal Revenue Code of 1986, as amended, has occurred after each of our previous private placements of preferred stock or after the issuance of shares of common stock in connection with our initial public offering and follow-on public offering. In the event we have undergone an ownership change under Section 382, if we earn net taxable income, our ability to use our pre-change net operating loss carryforwards to offset U.S. federal taxable income may become subject to limitations, which could potentially result in increased future tax liability to us.

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

A significant natural disaster, such as an earthquake, fire or a flood, or a significant power outage could have a material adverse impact on our business, financial condition and results of operations. Our corporate headquarters are located in the San Francisco Bay Area, a region known for seismic activity, on land reclaimed from the bay that is susceptible to high liquefaction risk in the event of an earthquake. In addition, natural disasters could affect our manufacturing vendors or logistics providers' ability to perform services such as manufacturing products on a timely basis and assisting with shipments on a timely basis. In the event 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 missing financial targets, such as revenue and shipment targets, for a particular quarter. Further, if a natural disaster occurs in a region from which we derive a significant portion of our revenue, customers in that region may delay or forego purchases of our products, which may materially and adversely impact our results of operations for a particular period. In addition, acts of terrorism could cause disruptions in our business or the business of our manufacturer, logistics providers, partners, customers or the economy as a whole. Given our typical concentration of sales at each quarter end, any disruption in the business of our manufacturer, logistics providers, partners or customers that impacts sales at the end of our quarter could have a significant adverse impact on our quarterly results. All of the aforementioned risks may be augmented if the business continuity plans for us and our suppliers prove to be inadequate. To the extent that any of the above results 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.

Risks Related to Ownership of our Common Stock

If we fail to maintain an effective system of disclosure controls and procedures and internal controls over financial reporting, our ability to produce accurate financial statements or comply with applicable regulations could be impaired.

As a public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), and the rules and regulations of the NASDAQ Stock Market LLC. We expect that the requirements of these rules and regulations will continue to increase our legal, accounting and financial compliance costs, make some activities more difficult, time-consuming and costly and place strains on our personnel, systems and resources.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. We are continuing to develop and refine our disclosure controls and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we file with the SEC is recorded, processed, summarized and reported within the time periods specified in SEC's rules and forms. Our current controls and any new controls that we develop may become inadequate because of changes in conditions, and the degree of compliance with the policies or procedures may deteriorate. In addition, weaknesses in our internal controls over financial reporting may be discovered in the future. Our filings with the SEC are subject to periodic review by the SEC, and our auditors are subject to periodic inspection by the Public Company Accounting Oversight Board. Any failure to maintain effective controls over financial reporting, any difficulties encountered in the implementation of additional controls or the improvement of existing controls, or any issues that emerge as a result of regulatory review, could harm our operating results or cause us to fail to meet our reporting obligations and may result in a revision or restatement of our prior period financial statements. Any failure to maintain effective internal controls also could adversely affect the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting that we are required to include in our annual reports filed with the SEC under Section 404 of the Sarbanes-Oxley Act.

Ineffective disclosure controls and procedures and internal control over financial reporting could also cause investors to lose confidence in our reported financial and other information, which would likely have a negative effect on the trading price of our common stock.

For example, in connection with the review of our unaudited interim condensed consolidated financial statements in our Form 10-Q filed with the SEC on November 7, 2014, management, including our Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of our disclosure controls and procedures as of September 30, 2014. Based on that assessment, management concluded that our disclosure controls and procedures were not effective as of September 30, 2014, because of a material weakness in internal control over financial reporting related to insufficient oversight and review controls to ensure the proper determination of stock-based compensation expense for certain complex equity awards that were not issued in the ordinary course. While these control deficiencies were remediated, we continue to identify risks and make improvements to our internal controls and we cannot assure you that additional material weaknesses in our internal control over financial reporting will not be identified in the future.

In order to maintain and improve the effectiveness of our disclosure controls and procedures and internal control over financial reporting, we have expended significant resources, and anticipate that we will continue to add personnel and provide significant management oversight, which involve substantial accounting-related costs. Any failure to maintain the adequacy of our internal controls, or consequent inability to produce accurate financial statements on a timely basis, could increase our operating costs and could materially impair our ability to operate our business. In the event that we are not able to continue to demonstrate compliance with Section 404 of the Sarbanes-Oxley Act in a timely manner, that our internal controls are perceived as inadequate or that we are unable to produce timely or accurate financial statements, investors may lose confidence in our operating results and our stock price could decline. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed on the NASDAQ Global Select Market.

We also have implemented elements of a disaster recovery/business continuity plan for our accounting and related information technology systems but we have not yet implemented a complete disaster recovery/business continuity plan that covers all of our operations. If the elements that we have developed and plan to develop in the future prove inadequate in the circumstances of a particular disaster or other business continuity event, our ability to maintain timely accounting and reporting may be materially impaired.

Market volatility may affect our stock price and the value of your investment

The trading prices of the securities of technology companies generally, and of our stock in particular, have been highly volatile. The market price of our common stock may fluctuate significantly in response to a number of factors, most of which we cannot predict or control, including:

- announcements of new products, services or technologies, commercial relationships, acquisitions, dispositions, strategic partnerships, joint ventures, capital commitments or other events by us or our competitors;
- fluctuations in operating performance and in stock market prices and trading volumes of securities of other technology companies generally, or those in our industry in particular;
- general market conditions and overall price and volume fluctuations in U.S. equity markets;
- actual or anticipated variations in our operating results, or the operating results of our competitors;
- the financial and other projections we may provide to the public, any changes in these projections or our failure to meet these projections or changes in our financial guidance or securities analysts' estimates of our financial performance;
- failure of securities analysts to maintain coverage of us, changes in financial or other estimates by any securities analysts who follow us, or our failure to meet these estimates or the expectations of our investors;
- ratings or other changes by any securities analysts who follow our company or our industry;
- announcements of restructurings, reductions in force, departure of key employees and/or consolidation of operations;
- sales or purchases of large blocks of our common stock, including by our executive officers, directors, significant stockholders and activist stockholders;
- rumors and market speculation involving Imperva or other companies in our industry; and
- lawsuits threatened or filed against us and changing legal or regulatory developments in the United States and other countries.

In addition, the stock market in general, and the NASDAQ Stock Market in particular, have experienced substantial price and volume volatility that is often seemingly unrelated to the operating performance of particular companies. These broad market fluctuations or factors affecting us more specifically may cause the trading price of our common stock to decline. In the past, securities class action litigation has often been brought against a company after a period of volatility in the market price of its common stock.

We face risks related to securities litigation that could result in significant legal expenses and settlement or damage awards.

We are currently and may in the future become subject to claims and litigation alleging violations of the securities laws or similar claims, which could harm our business and require us to incur significant costs. For example, on April 11, 2014, a purported stockholder class action lawsuit was filed in the United States District Court for the Northern District of California against us and certain of our officers alleging that defendants made false and misleading statements and purporting to assert claims for violations of the federal securities laws, and seeking unspecified compensatory damages and other relief. Regardless of the outcome, this matter or future litigation may require significant attention from management and could result in significant legal expenses, settlement costs or damage awards that could have a material impact on our financial position, results of operations and cash flows.

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

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our industry. If we do not establish and maintain adequate research coverage or if one or more of the analysts who covers us downgrades our stock or publishes inaccurate or unfavorable research about our business, our stock price would likely decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which could cause our stock price and trading volume to decline.

We do not intend to pay dividends on our common stock so any returns will be limited to the value of our stock.

We have never declared or paid any cash dividend on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to the value of their stock.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our restated certificate of incorporation and amended and restated bylaws may delay or prevent an acquisition of us or a change in our management. These provisions include:

- authorizing "blank check" preferred stock, which could be issued by the board without stockholder approval and may contain voting, liquidation, dividend and other rights superior to our common stock, which would increase the number of outstanding shares and could thwart a takeover attempt;
- a classified board of directors whose members can be dismissed only for cause;
- the prohibition on actions by written consent of our stockholders;
- the limitation on who may call a special meeting of stockholders;
- the establishment of stock ownership and advance notice requirements for stockholders who intend to submit proposals to be acted upon at stockholder meetings, including nominations of persons for election to our board of directors; and
- the requirement that at least 75% of our outstanding capital stock must approve any amendment of the foregoing second through fifth provisions.

In addition, because we are incorporated in Delaware, we are governed by the provisions of the anti-takeover provisions of the Delaware General Corporation Law, which may discourage, delay or prevent a change in control by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change of control would be beneficial to our existing stockholders. Although we believe these provisions collectively provide for an opportunity to obtain greater value for stockholders by requiring potential acquirers to negotiate with our board of directors, they would apply even if an offer rejected by our board were considered beneficial by some stockholders. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management.

The announcement that we have concluded our review of strategic alternatives and will remain a standalone company may create uncertainty about our prospects.

On August 4, 2016, we announced that we retained advisors to assist us in a comprehensive review of strategic alternatives and on November 3, 2016, we announced that we had concluded the review process. The process did not result in a transaction or any other specific strategic action, but did result in a restructuring plan that was also announced. These announcements may create uncertainty about our prospects as a standalone entity, and may lead to a perception of instability, irrespective of the actual circumstances, which may be exploited by our competitors, cause concern to our current or potential customers and partners, and make it more difficult to attract and retain qualified personnel. Such issues or perceptions, may negatively impact our business, disrupt our operations and divert the attention of management and our employees, all of which could materially and adversely affect our operations and operating results. In addition, our stock price may experience periods of increased volatility as a result of prolonged rumors and speculation about our business. Further, while we have concluded the review of strategic alternatives, it is possible that a strategic transaction or other type of strategic action may arise in the future.

Our business could be negatively affected by stockholder activism, which could impact the trading price and volatility of our common stock.

An activist investor, Elliott Associates, L.P., and its affiliates, took an ownership position in our common stock in June 2016 and disclosed in a Schedule 13D that it economically owns approximately 7% of our common stock (with additional economic exposure through derivatives of approximately 4% of our common stock) and expressing an intent to engage in substantive discussions with our management, our Board of Directors and others relating to strategic and operational opportunities for us that it believes would meaningfully increase value to our stockholders. Responding to actions by an activist stockholder, such as public proposals and requests for special meetings, potential nominations of candidates for election to our board of directors, requests to pursue a strategic combination or other transaction, or other special requests, can be costly and time-consuming, disrupt our operations and divert the attention of management and our employees. Additionally, perceived uncertainties as to our future direction or changes to the composition of our board may be exploited by our competitors, cause concern to our current or potential customers and partners, and make it more difficult to attract and retain qualified personnel. Such uncertainties may adversely impact our business and future financial results. In addition, our stock price may experience periods of increased volatility as a result of stockholder activism, including in reaction to any future acquisition or disposition of our common stock by Elliott or other activists.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

Our corporate headquarters are located in Redwood Shores, California in an office consisting of approximately 82,000 square feet. This includes 8,404 sq. ft. that was added pursuant to the Fourth and Sixth amendments to the lease for this office and for which the lease period commenced on March 1, 2016. The lease for our corporate headquarters expires in December 2020. Our offices in Texas, where we employ sales, support, research and development and professional services employees, consist of approximately 17,134 square feet and the leases for these offices expire in January 2018 and in April 2021. Our office in Tel Aviv, Israel, where we employ our SecureSphere research and development team, consists of approximately 8,417 square meters (approximately 90,600 square feet). The lease for 937 square meters (approximately 10,000 square feet) of this office expires in December 2016 and the lease for the remainder of the office expires in January 2027. The majority of our Incapsula team is in offices in Rehovot, Israel that consist of 2,900 square meters (approximately 31,200 square feet). The lease for a portion of the office space expires in January 2022 and the lease for the remainder of the space expires in May 2025. We also have a number of sales offices around the world. We believe that our facilities are suitable to meet our needs for the foreseeable future; however, we will continue to seek additional space as needed to accommodate our growth.

Item 3. Legal Proceedings

From time to time, we may be subject to legal proceedings and claims in the ordinary course of business.

On April 11, 2014, a purported shareholder class action lawsuit was filed in the United States District Court for the Northern District of California against us and certain of our current and former officers. On August 7, 2014, the Court entered an order appointing lead plaintiff and counsel for the purported class. The lead plaintiff filed an amended complaint on October 10, 2014. The lawsuit named us and certain of our current and former officers and purported to bring suit on behalf of those investors who purchased our publicly traded securities between May 2, 2013 and April 9, 2014. The plaintiff alleged that defendants made false and misleading statements about our operations and business and financial results and purported to assert claims for violations of the federal securities laws. The amended complaint sought unspecified compensatory damages, interest thereon, costs incurred in the action and equitable/injunctive or other relief. On January 6, 2015, defendants filed a motion to dismiss the amended complaint. On September 17, 2015, the Court granted defendants' motion to dismiss with leave to amend. The lead plaintiff filed an amended complaint on January 13, 2016, again naming the same current and former officers, alleging false and misleading statements about our operations and business and financial results, and seeking the same relief. On February 10, 2016, defendants filed a motion to dismiss the amended complaint. On May 16, 2016, the Court granted the motion in part and denied the motion in part. On September 7, 2016, defendants filed their operative answer to the amended complaint. On October 19, 2016, plaintiff filed a motion for class certification.

In addition, we have received, and may in the future continue to receive, claims from third parties asserting, among other things, infringement of their intellectual property rights. Future litigation may be necessary to defend ourselves, our channel partners and our customers by determining the scope, enforceability and validity of third-party proprietary rights or to establish our proprietary rights.

Further, the ultimate outcome of any litigation is uncertain and, regardless of outcome, litigation can have an adverse impact on us because of defense costs, potential negative publicity, diversion of management resources and other factors. Accordingly, there can be no assurance that existing or future legal proceedings arising in the ordinary course of business or otherwise will not have a material adverse effect on our business, consolidated financial position, results of operations or cash flows.

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 for Common Stock

Our common stock was listed on the New York Stock Exchange under the symbol “IMPV” from our IPO in November 2011 to December 12, 2016. Since December 13, 2016, it has been listed on the NASDAQ Stock Market. The following table sets forth, for the periods indicated, the high and low intra-day prices for our common stock as reported on the New York Stock Exchange or the NASDAQ Stock Market, as applicable.

| Fiscal 2015 | High | Low |
|---|---|---|
| First Quarter | $51.19 | $38.20 |
| Second Quarter | $69.01 | $40.74 |
| Third Quarter | $74.00 | $53.54 |
| Fourth Quarter | $77.99 | $57.08 |
| Fiscal 2016 | High | Low |
| First Quarter | $61.29 | $33.92 |
| Second Quarter | $51.26 | $33.27 |
| Third Quarter | $53.71 | $42.58 |
| Fourth Quarter | $54.22 | $35.10 |
| Fiscal 2017 | High | Low |
| First Quarter (through February 15, 2017) | $46.75 | $37.45 |

Stockholders

As of February 15, 2017, we had 31 record holders of our common stock.

Dividend Policy

We have never declared or paid cash dividends on our common stock. We currently intend to retain any future earnings and do not expect to pay any dividends in the foreseeable future. Any determination to pay dividends in the future will be at the discretion of our board of directors and will be dependent on a number of factors, including our earnings, capital requirements and overall financial conditions.

Stock Price Performance Graph

The following graph shows a comparison from December 31, 2011 through December 31, 2016 of the cumulative total return for an investment of $100 (and the reinvestment of dividends) in our common stock, the NYSE Composite Index and the S&P Information Technology Index. Such returns are based on historical results and are not intended to suggest future performance. Our common stock was listed on the New York Stock Exchange from November 2011 to December 12, 2016. Since December 13, 2016, it has been listed on the NASDAQ Stock Market. In future years, we will compare our common stock to a NASDAQ composite index.

| | 12/11 | 12/12 | 12/13 | 12/14 | 12/15 | 12/16 |
|---|---|---|---|---|---|---|
| Imperva Inc. | 100.00 | 90.58 | 138.26 | 142.00 | 181.87 | 110.31 |
| NYSE Composite | 100.00 | 115.99 | 146.47 | 156.36 | 149.97 | 167.87 |
| S&P Information Technology | 100.00 | 114.82 | 147.47 | 177.13 | 187.63 | 213.61 |

The above information under the heading “Stock Price Performance Graph” shall not be deemed to be “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section or Sections 11 and 12(a)(2) of the Securities Act of 1933, as amended, and shall not be incorporated by reference into any registration statement or other document filed by us with the Securities and Exchange Commission, whether made before or after the date of this Annual Report on Form 10-K, regardless of any general incorporation language in such filing, except as shall be expressly set forth by specific reference in such filing.

Use of Proceeds from Public Offering of Common Stock

The Form S-1 Registration Statement (Registration No. 333-175008) relating to our IPO was declared effective by the SEC on November 8, 2011. The net proceeds to us of our IPO after deducting $6.9 million of underwriters' discounts and $5.8 million of offering expenses were $86.2 million. Since the IPO, we have invested approximately $29.4 million of the net proceeds as follows: in January 2012, we invested $3.5 million in Incapsula, our majority owned subsidiary, and received in exchange an additional 4,375,000 shares of Incapsula's Series A-1 Preferred Stock; in October 2013, we loaned $1.1 million to Incapsula at a rate of 2% per annum with a maturity date of December 31, 2014; in January 2014, we paid approximately $4.7 million in cash as part of the consideration in connection with our purchase of certain assets and liabilities of Tomium; in February 2014, we paid $8.6 million in cash, and in February 2016 released an additional $7.6 million, as part of the consideration in connection with the acquisition of Skyfence; and in December 2016, we paid approximately $3.9 million in cash as consideration for our purchase of certain assets and liabilities of Camouflage Software.  We expect to use the remaining net IPO proceeds for working capital and general corporate purposes, including acquisitions. Although we may also use a portion of the net proceeds for acquisition of complementary businesses, technologies or other assets, we have no present understandings, commitments or agreements to enter into any acquisitions.

Our management will retain broad discretion in the allocation and use of the net proceeds of our IPO, and investors will be relying on the judgment of our management regarding the application of the net proceeds. Pending specific utilization of the net proceeds as described above, we have invested the net proceeds of the offering in short-term, interest-bearing obligations. The goal with respect to the investment of the net proceeds will be capital preservation and liquidity so that such funds are readily available to fund our operations.

Item 6. Selected Financial Data

The following selected consolidated financial data should be read in conjunction with “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. The selected financial data in this section is not intended to replace the financial statements and is qualified in its entirety by the consolidated financial statements and related notes thereto included elsewhere in this Annual Report on Form 10-K. Our historical results of operations are not necessarily indicative of results to be expected for any future period.

| | Years Ended December 31, | | | | |
|---|---|---|---|---|---|
| | 2016 | 2015 | 2014 | 2013 | 2012 |
| | (dollars in thousands, except per share amounts) | | | | |
| Consolidated Statement of Operations Data: | | | | | |
| Net revenue: | | | | | |
| Products and license | $86,798 | $107,563 | $74,299 | $72,153 | $59,490 |
| Services | 177,657 | 126,735 | 89,711 | 65,606 | 44,745 |
| Total net revenue | 264,455 | 234,298 | 164,010 | 137,759 | 104,235 |
| Cost of revenue: | | | | | |
| Products and license | 9,525 | 10,947 | 9,248 | 8,756 | 8,530 |
| Services | 44,307 | 36,633 | 27,335 | 20,940 | 13,374 |
| Total cost of revenue[1] | 53,832 | 47,580 | 36,583 | 29,696 | 21,904 |
| Gross profit | 210,623 | 186,718 | 127,427 | 108,063 | 82,331 |
| Operating expenses: | | | | | |
| Research and development[1] | 62,402 | 53,376 | 43,052 | 27,556 | 20,555 |
| Sales and marketing[1] | 156,465 | 136,292 | 106,382 | 81,500 | 53,509 |
| General and administrative[1] | 51,260 | 43,440 | 34,499 | 24,436 | 15,371 |
| Restructuring charges | 8,118 | — | — | — | — |
| Amortization of purchased intangibles | 1,408 | 1,408 | 1,269 | — | — |
| Total operating expenses | 279,653 | 234,516 | 185,202 | 133,492 | 89,435 |
| Loss from operations | (69,030 ) | (47,798 ) | (57,775 ) | (25,429 ) | (7,104 ) |
| Other income (expense), net | (77 ) | (402 ) | (220 ) | (125 ) | (243 ) |
| Loss before provision for income taxes | (69,107 ) | (48,200 ) | (57,995 ) | (25,554 ) | (7,347 ) |
| Provision for income taxes | 1,172 | 682 | 1,181 | 777 | 545 |
| Net loss | (70,279 ) | (48,882 ) | (59,176 ) | (26,331 ) | (7,892 ) |
| Loss attributable to non - controlling interest | — | - | 213 | 1,153 | 505 |
| Net loss attributable to Imperva, Inc. stockholders | $(70,279 ) | $(48,882 ) | $(58,963 ) | $(25,178 ) | $(7,387 ) |
| Net loss per share of common stock attributable to Imperva, Inc. stockholders, basic and diluted[2] | $(2.18 ) | $(1.64 ) | $(2.28 ) | $(1.04 ) | $(0.32 ) |
| Shares used in computing net loss per share of common stock, basis and diluted[2] | 32,284 | 29,849 | 25,806 | 24,300 | 22,916 |

1 Includes stock-based compensation as follows (in thousands):

| | Years Ended December 31, | | | | |
|---|---|---|---|---|---|
| | 2016 | 2015 | 2014 | 2013 | 2012 |
| Cost of revenue | $4,664 | $3,862 | $2,058 | $1,440 | $469 |
| Research and development | 14,711 | 13,831 | 8,799 | 3,660 | 1,227 |
| Sales and marketing | 20,510 | 16,717 | 13,558 | 8,537 | 2,543 |
| General and administrative | 17,131 | 16,554 | 12,858 | 8,857 | 1,729 |
| Restructuring charges | 5,859 | - | - | - | - |

2 Please see Note 17 to our audited consolidated financial statements for an explanation of the calculations of our basic and diluted net loss per share of common stock.

| | Years Ended December 31, | | | | |
|---|---|---|---|---|---|
| | 2016 | 2015 | 2014 | 2013 | 2012 |
| | (in thousands) | | | | |
| Consolidated Balance Sheet Data: | | | | | |
| Cash and cash equivalents and short-term investments | $261,092 | $264,807 | $109,720 | $115,085 | $102,327 |
| Working capital | $194,149 | $214,173 | $78,244 | $103,214 | $92,796 |
| Total assets | $408,819 | $397,669 | $220,645 | $176,491 | $153,957 |
| Deferred revenue, current and long-term | $130,471 | $106,657 | $81,175 | $63,052 | $46,291 |
| Non - controlling interest | $- | $- | $- | $(2,614 ) | $(1,104 ) |
| Total stockholders' equity | $231,963 | $240,201 | $97,243 | $86,222 | $84,231 |

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 "Selected Consolidated Financial Data" and consolidated financial statements and notes thereto included elsewhere in this Annual Report on Form 10-K. This Annual Report on Form 10-K contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These statements are often identified by the use of words such as "may," "will," "expect," "believe," "anticipate," "intend," "could," "estimate," or "conti similar expressions or variations. These statements are based on the beliefs and assumptions of our management based on information currently available to management. Such forward-looking statements are subject to risks, uncertainties and other factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified herein, and those discussed in the section titled "Risk Factors," set forth in Item 1A of this Annual Report on Form 10-K and in our other SEC filings. You should review these risk factors for a more complete understanding of the risks associated with an investment in our securities. We disclaim any obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.

Overview

We were incorporated as a Delaware corporation in 2002 with the vision of protecting high-value applications and data assets within the enterprise. Since that time we have been investing in our cyber-security solutions to meet the rapidly evolving demands of customers. We shipped our initial web application security and data security products in 2002. In 2006, we expanded our database security product to include compliance features. In 2010, we launched our file security offering. In addition, in 2010, we launched our cloud-based initiatives with ThreatRadar. In 2011, we introduced our cloud-based offering for mid-market enterprises and small and medium-sized businesses ("SMB") that we provide through Incapsula, Inc., which was majority owned by Imperva until March 2014 when we acquired the remaining portion of Incapsula that we did not already own in order to more fully integrate their operations with ours. In January 2014, we acquired certain assets and liabilities of Tomium Software, LLC to accelerate our mainframe data security solutions. In February 2014, we acquired Skyfence Networks Ltd. to further our ability to secure cloud and Software as a Service ("SaaS") applications. In December 2016, we acquired certain assets and liabilities of Camouflage Software, Inc., to further our data masking, security and compliance solutions in the cloud and on-premises. In February 2017, we sold the assets of the Skyfence business to Forcepoint LLC. We intend to continue pursuing cloud-based SaaS security offerings.

Our research and development efforts are focused primarily on improving and enhancing our existing cyber-security solutions and services, as well as developing new products and services and conducting advanced security research. We conduct most of our research and development activities in Israel, and we believe this provides us with access to some of the best engineering talent in the security industry. As of December 31, 2016, we had 319 employees dedicated to research and development, including our advanced security research group, the Imperva Defense Center ("IDC"). Our research and development expense was $62.4 million, $53.4 million, and $43.1 million for the years ended December 31, 2016, 2015 and 2014, respectively.

We derive our revenue from sales and licenses of our products and sales of our services. Products and license revenue is generated primarily from sales of perpetual software licenses installed on hardware appliances or virtual appliances for our SecureSphere product line. Services revenue consists of maintenance and support, professional services and training and subscriptions. A majority of our revenue is derived from customers in the Americas region. In 2016, 62.5% of our total revenue was generated from the Americas, 19.2% from Europe, Middle East and Africa ("EMEA") and 18.3% from Asia Pacific (“APAC”).

We market and sell our products through a hybrid sales model, which combines a direct touch sales organization and an overlay channel sales team that actively assist our extensive network of channel partners throughout the sales process. We also provide our channel partners with marketing assistance, technical training and support. We primarily sell our products and services through our channel partners, including distributors and resellers, which sell to end-user customers, who we refer to in this Annual Report on Form 10-K as our customers. We have a network of approximately 270 channel partners worldwide, including both resellers and distributors. In 2016, our channel partners originated over 50%, and fulfilled almost 86%, of our sales. We work with many of the world’s leading security value-added resellers, and our partners include some of the largest hosting companies for cloud-based deployments.

As of December 31, 2016, Imperva had over 5,200 customers in more than 100 countries. In addition, our solutions are used to protect thousands of organizations through cloud-based deployments with our Software-as-a-Service (“SaaS”) customers and our managed security service provider (“MSSP”) and hosting partners.

Our net revenue has increased in each of the last three years, growing from $164.0 million in 2014 to $234.3 million in 2015 to $264.5 million in 2016. We have incurred net losses attributable to our stockholders of $59.0 million, $48.9 million and $70.3 million in 2014, 2015 and 2016, respectively. As of December 31, 2016, we had an accumulated deficit of $276.8 million.

Opportunities, Challenges and Risks

We believe that the growth of our business and our future success are dependent upon many factors, including our ability to maintain our technology leadership, improve our sales and marketing, address the needs of smaller enterprises and compete effectively in the marketplace for cyber-security solutions. While each of these areas presents significant opportunities for us, they also pose important challenges and risks that we must successfully address in order to sustain the growth of our business and improve our results of operations.

Maintain Technology Leadership. As a result of the rise in sophisticated attacks by hackers and malicious insiders, the difficulty in complying with regulations governing business data and the growing complexity of, and open access to, data centers, we believe that enterprises are struggling to provide visibility and control over high-value business applications and data assets that they need to protect. In addition, organizations are increasingly taking advantage of cloud-based services and virtualization technologies, and these new technologies and architectures are increasing the complexity of, and accessibility to, the data center. We believe these challenges are driving the need for a new protection layer positioned closely around the applications and data assets in the data center. We expect that as enterprises recognize the growing risk to high-value business data and the need to comply with increasing regulatory compliance mandates, their spending will increase on solutions designed to control and protect such data. We believe that traditional security and compliance products do not address the evolving needs of enterprises or do not do so adequately, and that this presents us with a large market opportunity. To capitalize on this opportunity, we have introduced and expect that in the future we will need to continue to introduce innovations to our broad business security solutions, including solutions to address cyber-security opportunities that arise as enterprises pursue cloud computing initiatives. We cannot assure you that our products will achieve widespread market acceptance or that we will properly anticipate future customer needs. Moreover, if our products do not satisfy evolving customer requirements, we will not capture the increase in spending that we expect will result from enterprises seeking to secure data across various systems in the data center.

Invest in Sales and Marketing. In order to capitalize on the anticipated increase in spending in the cyber-security market, we will need to continue to invest significant resources to further strengthen our existing relationships with channel partners, extend our global network by adding new channel partners and grow our sales and marketing team. Any investments that we make in our sales and marketing will occur in advance of our experiencing any benefits from such investments, and so it may be difficult for us to determine if we are efficiently allocating our resources in this area. We cannot assure you that the investments that we intend to make to strengthen our sales and marketing efforts will enable us to capitalize on the expected increase in spending in the cyber-security market or result in an increase in revenue or an improvement in our results of operations.

Address Needs of Smaller Enterprises. As market awareness of the benefits of a comprehensive cyber-security solution increases, we believe there is a significant opportunity to provide cyber-security solutions to smaller enterprises as they confront increasing security threats and compliance mandates. To capitalize on this opportunity, we intend to increase our business with mid-market enterprises and SMBs by expanding our cloud-based service offerings and our distribution channel. We have made, and may in the future continue to make, significant investments in our cloud-based security products to address the business security needs of mid-market enterprises and SMBs. If our cloud-based security products, which are relatively new, fail to gain broad acceptance with mid-market enterprises and SMBs, our revenue growth, results of operations and competitive position in our industry could suffer.

Compete Effectively. We operate in an intensely competitive market that has witnessed significant consolidation in recent years with large companies acquiring many of our competitors. We track our success rate in competitive sales opportunities against certain competitors, some of which generate higher revenues and have greater market capitalizations than we do, and many of which are more established or have greater name recognition within our industry. Based upon our internal tracking of the results of such competitive sales opportunities, we believe that we have historically competed favorably against our larger competitors, and that we have a proven track record of successfully competing against such larger competitors. Nonetheless, some of our larger competitors have numerous advantages, including, but not limited to, greater financial resources, broader product offerings and more established relationships with channel partners and customers. If we are unable to compete effectively for a share of the business security market, our business, results of operations and financial condition could be materially and adversely affected.

To date, we have incurred, and continue to incur, losses from operations and net losses. However, we believe that our existing cash, cash equivalents and short-term investments will be sufficient to meet our working capital and capital expenditure needs for at least the next 12 months. Further, we expect that, if we successfully execute our business plan and strategy, our loss from operations and our net losses will decline, and that we will reach profitability. Should we need additional cash in the future, we may enter into one or more lines of credit or raise funds through the sale of equity securities.

Key Metrics of Our Business

We monitor the key financial metrics discussed below to help us evaluate growth trends, establish budgets, measure the effectiveness of our sales and marketing efforts and assess operational efficiencies.

Net Revenue. We measure our net revenue to assess the acceptance of our products from our customers, our growth in the markets we serve and to help us establish our strategic and operating plans for future periods. We discuss the components of our net revenue in “—Financial Overview— Net Revenue” below.

Gross Margin. We monitor our gross margin to assess the impact on our current and forecasted financial results from any changes to the pricing and mix of products we are selling to our customers.

Loss from Operations. We track our loss from operations to assess how effectively we are planning and monitoring our operations as well as controlling our operational costs, which are primarily driven by headcount.

Cash, Cash Equivalents and Short-term Investments. We evaluate the level of our cash, cash equivalents and short-term investments to ensure we have sufficient liquidity to fund our operations, including the development of future products and product enhancements and the expansion into new sales channels and territories.

Number of Customers. We believe our customer count is a key indicator of our market penetration, the productivity of our sales organization and the value that our products bring to our customer base. We also believe our existing customers represent significant future revenue opportunities for us.

We discuss for the periods presented revenue, gross margin, the components of loss from operations and number of customers further below under “—Segments” and “—Results of Operations”, as applicable, and we discuss our cash and cash equivalents under “—Liquidity and Capital Resources.”

We also believe that deferred revenue and cash flow from operations are key financial metrics for our business. The components of deferred revenue and cash flow from operations, as well as our rationale for monitoring these metrics, are discussed immediately below this table:

| | Years ended (or as of December 31) | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| | (in thousands, except number of customers and percentages) | | |
| Net revenue | $264,455 | $234,298 | $164,010 |
| Gross margin | 79.6 % | 79.7 % | 77.7 % |
| Loss from operations | $(69,030 ) | $(47,798 ) | $(57,775 ) |
| Total deferred revenue | $130,471 | $106,657 | $81,175 |
| Cash, cash equivalents and short-term investments | $261,092 | $264,807 | $109,720 |
| Net cash provided by operations | $22,494 | $23,867 | $4,126 |
| Number of customers | 5,291 | 4,541 | 3,785 |

Deferred Revenue

Our deferred revenue consists of amounts that have been invoiced but that have not yet been recognized as revenue. The majority of our deferred revenue balance consists of the unrecognized portion of services revenue from maintenance and support, and subscription contracts. We monitor our deferred revenue balance because it represents a significant portion of revenue to be recognized in future periods. We also assess the increase in our deferred revenue balance plus revenue we recognized in a particular period as a measure of our sales activity for that period. While the change in our deferred revenue and revenue recognized in a given period comprise the majority of our sales activity during that period, they do not constitute the entire sales activity during the period. Our total sales activity also includes sales of products and services for which we have not yet met the criteria to recognize revenue or add such amounts to our deferred revenue balance. Revenue and deferred revenue from these transactions is recognized or recorded in future periods when we have met the required criteria. We discuss for the periods presented deferred revenue further below under "—Results of Operations."

Net Cash Provided by Operations

We monitor cash flow from operations as a measure of our overall business performance. Our cash flow from operations is driven primarily by sales of our products and licenses and, to a lesser extent, from up-front payments from customers under maintenance and support contracts. Our primary uses of cash in operating activities are for personnel-related expenditures, costs of acquiring the hardware used for our appliances, sales, marketing and promotional expenses and costs related to our facilities. Monitoring cash flow from operations enables us to analyze our financial performance without the non-cash effects of certain items such as depreciation and amortization and stock-based compensation expenses, thereby allowing us to better understand and manage the cash needs of our business.

Segments

Operating segments are components of an enterprise for which separate financial information is available and is evaluated regularly by our chief operating decision maker in deciding how to allocate resources and in assessing performance. Our chief operating decision maker is the Chief Executive Officer.

We operate our business in one operating segment, which is the development, marketing, sales, service and support of cyber-security solutions that protect business critical data and applications, whether in the cloud or on premises.

Financial Overview

Net Revenue

We derive our revenue from sales and licenses of our products and sales of our 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 price is fixed or determinable and collection is probable.

Our net revenue is comprised of the following:

- Products and License Revenue—Product and license revenue is generated from sales of perpetual software licenses installed on hardware appliances or virtual appliances for our SecureSphere product line. Our SecureSphere product line consists of database security, file security and web application security. We offer multiple hardware appliance versions that accompany our software, each with different throughput capacities. Perpetual software license revenue is generated from sales of our appliances, licenses for additional users and add-on software modules. We also generate a small amount of hardware revenue from sales of spares or replacement appliances, demonstration units, third-party OEM units and accessories.
- Services Revenue—Services revenue consists of maintenance and support, professional services and training and subscriptions. Maintenance and support revenue is generated from support services that are bundled with appliances and add-on software modules. There are three levels of maintenance and support—Standard, Enhanced and Premium—and these are usually offered through agreements for one to three-year terms. Maintenance and support includes major and minor when-and-if available software updates; customer care, which includes our designated support engineer and Imperva resident engineer programs; content updates from our advanced security research group, the IDC, and hardware replacement. Professional services revenue consists of fees we earn related to implementation and consulting services we provide our customers. Training services revenue consists of fees we earn related to training customers and partners on the use of our products. Subscription revenue is generated from sales of our cloud-based services. We expect that the services revenue from maintenance and support contracts will continue to grow along with the increase in the size of our installed base. We also expect subscription revenue will increase as our cloud-based services continue to increase.

A majority of our products and services are sold to customers in the United States, however, a significant portion of our revenue is generated from international sales. See Note 15 of “Notes to Consolidated Financial Statements” for a discussion of our financial information by geographic region. Our revenue by geographic region is as follows (in thousands):

| | Years ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| United States | $143,607 | $141,225 | $87,155 |
| EMEA | 50,838 | 47,429 | 39,579 |
| APAC | 48,391 | 30,180 | 27,798 |
| Other | 21,619 | 15,464 | 9,478 |
| Total net revenue | $264,455 | $234,298 | $164,010 |

Cost of Revenue

Our total cost of revenue is comprised of the following:

- Cost of Products and License Revenue—Cost of products and license revenue is comprised primarily of third-party hardware costs and royalty fees. Our cost of products and license revenue also includes personnel costs related to our operations team, shipping costs and write-offs for excess and obsolete inventory.
- Cost of Services Revenue—Cost of services revenue is primarily comprised of personnel costs of our technical support team, our professional consulting services and training teams and our Security Operations Center (“SOC”) team. Cost of services revenue also includes facilities costs, subscription fees and depreciation. We expect that our cost of services revenue will increase in absolute dollars as we increase our headcount.

Operating Expenses

Our operating expenses consist of research and development, sales and marketing, general and administrative expenses, restructuring charges and amortization of acquired intangible assets. Personnel costs are the most significant component of our operating expenses and consist of wages, benefits and bonuses and, with regard to the sales and marketing expense, sales commissions. Personnel costs also include stock-based compensation. We expect personnel costs to continue to increase in absolute dollars as we hire new employees to continue to grow our business.

Research and Development

Our research and development is focused on maintaining and improving our existing products and on new product development. A majority of our research and development expenses are comprised of personnel costs including stock-based compensation, and, to a lesser extent, facility costs, hardware prototype costs, laboratory expenses and depreciation. We expense research and development costs as incurred. We expect our research and development expenses to increase in absolute dollars as we continue to enhance our existing products and develop new products and services that address the emerging market for business security and regulatory compliance.

Sales and Marketing

Sales and marketing expense is the largest component of our operating expenses and consists primarily of personnel costs, including commissions, stock-based compensation and travel expenses. Sales and marketing expenses also include costs related to marketing and promotional activities, third-party referral fees and, to a lesser extent, facilities costs and depreciation. We expect our sales and marketing expenses to increase in absolute dollars as we expand our sales and marketing efforts worldwide.

General and Administrative

General and administrative expense consists primarily of personnel costs, including stock-based compensation, as well as professional fees, facilities costs and depreciation. General and administrative personnel costs include our executive, finance, purchasing, order entry, human resources, information technology and legal functions. Our professional fees consist primarily of accounting, external legal, information technology and other consulting costs.

Restructuring charges

In October 2016, we initiated a business restructuring plan to reduce sales, marketing and general and administrative expenses through reductions in headcount and spending generally. The expenses incurred primarily consisted of employee severance charges and other termination-related costs. We do not expect to incur significant additional restructuring costs associated with this plan in future periods. We did not incur any expenses related to restructuring activities in 2015 and 2014.

Amortization of Acquired Intangible Assets

Amortization of acquired intangible assets consists of amortization of intangible assets from the acquisitions of Skyfence and Tomium that occurred in the first quarter of 2014 and Camouflage in the fourth quarter of 2016.

Other Income (Expense), net

Other income (expense), net is comprised of the following items:

- Interest Income—Interest income consists of interest earned on our cash, cash equivalents and short-term investments. We expect interest income will vary each reporting period depending on our average investment balances during the period and market interest rates.
- Interest Expense—Interest expense consists of interest accrued or paid on debt obligations.
- Foreign Currency Forward Contract Gains (Losses)—Foreign currency forward contract gains and losses pertain to the ineffective portion of derivative instruments designated as hedges that we have entered into primarily to manage our exposure to the variability in expected future expenses resulting from changes in foreign currency exchange rates. We do not use derivative financial instruments for speculative or trading purposes.
- Foreign Currency Exchange Gains (Losses)—Foreign currency exchange gains and losses relate to transactions denominated in currencies other than the U.S. Dollar.

Provision for Income Taxes

We operate in several income tax jurisdictions and are subject to income taxes in each country or jurisdiction in which we conduct business including the United States and Israel. Earnings from our non-U.S. activities are subject to local country income tax and may be subject to U.S. income tax if such earnings are distributed to the U.S. To date, we have incurred net losses and have recorded insignificant U.S. federal income tax expense. Our income tax expense to date relates primarily to foreign income taxes, mainly from our Israeli and United Kingdom activities, and to a lesser extent, state income taxes.

Results of Operations

The following table is a summary of our consolidated statements of operations in dollars and as a percentage of our total net revenue. We have derived the data for the years ended December 31, 2016, 2015 and 2014 from our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

| | Years Ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | 2014 | |
| | Amount | % of Net Revenue | Amount | % of Net Revenue | Amount | % of Net Revenue |
| | (dollars in thousands) | | | | | |
| Statement of Operations Data: | | | | | | |
| Net revenue: | | | | | | |
| Products and license | $86,798 | 32.8 | $107,563 | 46.0 | $74,299 | 45.3 |
| Services: | | | | | | |
| Maintenance and support | 80,007 | 30.3 | 66,380 | 28.3 | 54,795 | 33.4 |
| Professional services and training | 13,693 | 5.2 | 14,084 | 6.0 | 11,414 | 7.0 |
| Subscriptions | 83,957 | 31.7 | 46,271 | 19.7 | 23,502 | 14.3 |
| Total services | 177,657 | 67.2 | 126,735 | 54.0 | 89,711 | 54.7 |
| Total net revenue | 264,455 | 100.0 | 234,298 | 100.0 | 164,010 | 100.0 |
| Cost of revenue: | | | | | | |
| Products and license | 9,525 | 3.6 | 10,947 | 4.7 | 9,248 | 5.6 |
| Services | 44,307 | 16.8 | 36,633 | 15.6 | 27,335 | 16.7 |
| Total cost of revenue | 53,832 | 20.4 | 47,580 | 20.3 | 36,583 | 22.3 |
| Gross profit | 210,623 | 79.6 | 186,718 | 79.7 | 127,427 | 77.7 |
| Operating expenses: | | | | | | |
| Research and development | 62,402 | 23.6 | 53,376 | 22.8 | 43,052 | 26.2 |
| Sales and marketing | 156,465 | 59.2 | 136,292 | 58.2 | 106,382 | 64.9 |
| General and administrative | 51,260 | 19.4 | 43,440 | 18.5 | 34,499 | 21.0 |
| Restructuring charges | 8,118 | 3.1 | - | - | - | - |
| Amortization of purchased intangibles | 1,408 | 0.5 | 1,408 | 0.6 | 1,269 | 0.8 |
| Total operating expenses | 279,653 | 105.8 | 234,516 | 100.1 | 185,202 | 112.9 |
| Loss from operations | (69,030) | (26.2) | (47,798) | (20.4) | (57,775) | (35.2) |
| Other income (expense), net | (77) | - | (402) | (0.2) | (220) | (0.1) |
| Loss before provision for income taxes | (69,107) | (26.2) | (48,200) | (20.6) | (57,995) | (35.3) |
| Provision for income taxes | 1,172 | 0.4 | 682 | 0.3 | 1,181 | 0.7 |
| Net loss | (70,279) | (26.6) | (48,882) | (20.9) | (59,176) | (36.0) |
| Loss attributable to non - controlling interest | - | - | - | - | 213 | 0.1 |
| Net loss attributable to Imperva, Inc. stockholders | $(70,279) | (26.6) | $(48,882) | (20.9) | $(58,963) | (35.9) |

Comparison of the Years Ended December 31, 2016 and 2015

Net Revenue

| | Years ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | Change | |
| | Amount | % of Net Revenue | Amount | % of Net Revenue | Amount | % |
| | (dollars in thousands) | | | | | |
| Net revenue: | | | | | | |
| Products and license | $86,798 | 32.8 | $107,563 | 46.0 | $(20,765) | -19.3% |
| Services: | | | | | | |
| Maintenance and Support | 80,007 | 30.3 | 66,380 | 28.3 | 13,627 | 20.5 % |
| Professional Services and training | 13,693 | 5.2 | 14,084 | 6.0 | (391) | -2.8 % |
| Subscriptions | 83,957 | 31.7 | 46,271 | 19.7 | 37,686 | 81.4 % |
| Total Services | 177,657 | 67.2 | 126,735 | 54.0 | 50,922 | 40.2 % |
| Total net revenue | $264,455 | 100.0 | $234,298 | 100.0 | $30,157 | 12.9 % |
| United States | $143,607 | 54.3 | $141,225 | 60.3 | $2,382 | 1.7 % |
| EMEA | 50,838 | 19.2 | 47,429 | 20.2 | 3,409 | 7.2 % |
| APAC | 48,391 | 18.3 | 30,180 | 12.9 | 18,211 | 60.3 % |
| Other | 21,619 | 8.2 | 15,464 | 6.6 | 6,155 | 39.8 % |
| Total net revenue | $264,455 | 100.0 | $234,298 | 100.0 | $30,157 | 12.9 % |

Our net revenue increased by $30.2 million, or 12.9%, to $264.5 million during the year ended December 31, 2016 from $234.3 million during the year ended December 31, 2015 primarily due to growth in the subscription service line offset by our products and license revenue. This revenue growth reflects the increasing demand for our subscription service offerings reflected in the addition of 750 customers in 2016 as well as a broader installed base of product and licenses which generate higher maintenance and support revenues. We had 573 orders exceeding $100,000 during the year ended December 31, 2016, compared to 501 orders for year ended December 31, 2015.

The APAC region contributed the largest portion of this growth with an $18.2 million increase over the same period in 2015. The revenue growth in the United States and Other and EMEA regions was $8.5 million and $3.4 million, respectively, over the same period in 2015. The increase in all regions was principally due to increasing demand for our subscription service offerings, an increase in our international sales personnel and improved sales execution in the APAC region.

Products and license revenue decreased by $20.8 million, or 19.3%, to $86.8 million during the year ended December 31, 2016 from $107.6 million during the year ended December 31, 2015. The decrease in product and license revenue was primarily due to extended sales cycles predominantly relating to larger deals in the Americas region and to sales execution challenges in the United States and EMEA region.

Services revenue increased by $50.9 million, or 40.2%, to $177.6 million during the year ended December 31, 2016 from $126.7 million during the year ended December 31, 2015. During the year ended December 31, 2016, our services revenue was comprised of $80.0 million of maintenance and support, $13.7 million of professional services and training and $83.9 million of subscriptions. The change in services revenue in the year ended December 31, 2016 from the year ended December 31, 2015 was primarily due to an increase of $37.7 million in subscriptions revenue attributable to improved execution and strong traction of Incapsula, our cloud-based security services, which generated $13.6 million in maintenance and support revenue from our larger installed base as reflected in our product and license revenue. This was offset by a decrease in our professional services and training revenue by $0.4 million primarily due to timing of projects and a decrease in our product and licensing revenue.

Gross Profit

| | Years Ended December 31, 2016 | | 2015 | | |
|---|---|---|---|---|---|
| | Amount | Gross Margin | Amount | Gross Margin | % Change |
| | (dollars in thousands) | | | | |
| Products and license gross profit | $77,273 | 89.0 % | $96,616 | 89.8 % | (0.8 ) |
| Services gross profit | 133,350 | 75.1 % | 90,102 | 71.1 % | 4.0 |
| Total gross profit | $210,623 | 79.6 % | $186,718 | 79.7 % | (0.1 ) |

Total gross margin decreased by 0.1% to 79.6% during the year ended December 31, 2016 from 79.7% during the year ended December 31, 2015. Products and license gross margin decreased 0.8% to 89.0% for the year ended December 31, 2016 compared to 89.8% for the same period in 2015. The products and license gross margin decrease was primarily attributable to decreased sales of higher throughput appliances, which generally have higher gross margins. Services gross profit increased 4.0% to 75.1% for the year ended December 31, 2016 as compared to 71.1% for the same period in 2015. The services gross margin increase was primarily attributable to higher subscription, maintenance and support revenues and cost efficiencies driven by the higher volume of services.

Operating Expenses

| | Years Ended December 31, 2016 | | 2015 | | Change | |
|---|---|---|---|---|---|---|
| | Amount | % of Net Revenue | Amount | % of Net Revenue | Amount | % |
| | (dollars in thousands) | | | | | |
| Operating expenses: | | | | | | |
| Research and development | $62,402 | 23.6 | $53,376 | 22.8 | $9,026 | 16.9 % |
| Sales and marketing | 156,465 | 59.2 | 136,292 | 58.2 | 20,173 | 14.8 % |
| General and administrative | 51,260 | 19.4 | 43,440 | 18.5 | 7,820 | 18.0 % |
| Restructuring charges | 8,118 | 3.1 | - | - | 8,118 | 100.0% |
| Amortization of acquired intangible assets | 1,408 | 0.5 | 1,408 | 0.6 | - | 0.0 % |
| Total operating expenses | $279,653 | 105.8 | $234,516 | 100.1 | $45,137 | 19.2 % |

Results above include stock-based compensation expense of:

| | Years ended December 31, 2016 | 2015 | Change |
|---|---|---|---|

| | (dollars in thousands) | | |
|---|---|---|---|
| Research and development | $ 14,711 | $ 13,831 | $ 880 |
| Sales and marketing | 20,510 | 16,717 | 3,793 |
| General and administrative | 17,131 | 16,554 | 577 |
| Restructuring charges | 5,859 | - | 5,859 |

Research and development expenses increased by $9.0 million, or 16.9%, to $62.4 million during the year ended December 31, 2016 from $53.4 million during the year ended December 31, 2015. The change was primarily attributable to an increase of $7.5 million in personnel costs, including stock-based compensation, due to additional research and development personnel being hired to support our ongoing product development efforts. We also incurred increased rent expenses and travel costs totaling $1.5 million related to the increased headcount.

Sales and marketing expenses increased by $20.2 million, or 14.8%, to $156.5 million during the year ended December 31, 2016 from $136.3 million during the year ended December 31, 2015. The change was principally related to an increase of $13.3 million in personnel costs, including stock-based compensation and contractor costs, due to increased headcount in all regions in an effort to help drive our overall revenue growth and costs to settle a compensation-related claim with a key employee. We also incurred increases of $6.9 million in direct sales expenses, travel costs and rent expenses due to marketing event expenses, including increased expenses year over year for our annual sales kick-off event.

General and administrative expenses increased by $7.8 million, or 18.0%, to $51.2 million during the year ended December 31, 2016 from $43.4 million during the year ended December 31, 2015. The change was primarily due to an increase of $6.0 million in personnel costs, including stock-based compensation, to build out our corporate level functions to support global growth. We also incurred increased travel costs and rent expenses totaling $1.4 million related to the increased headcount.

We incurred restructuring charges of $8.1 million during the year ended December 31, 2016. We incurred no restructuring charges during the year ended December 31, 2015. The restructuring charges are termination-related costs, of which $5.8 million consist of stock-based compensation expense and $2.3 million are cash severance costs. The restructuring plan was initiated to reduce sales, marketing and general and administrative expenses through reductions in headcount and spending generally and to align personnel resources in our growth areas.

Amortization of purchased intangibles were consistent during the year ended December 31, 2016 compared to the same period in 2015.

Loss from Operations

| Years ended December 31, | | Change | |
|---|---|---|---|
| 2016 | 2015 | Amount | % |
| (dollars in thousands) | | | |
| $(69,030) | $(47,798) | $(21,232) | (44.4)% |

Our loss from operations increased by $21.2 million, or 44.4%, to $69.0 million during the year ended December 31, 2016 from $47.8 million during the year ended December 31, 2015. Our gross profit increased by $23.9 million during the year ended December 31, 2016 due to higher subscription, maintenance and support revenues. This improvement was offset by an increase in total operating expenses of $45.1 million for the year ended December 31, 2016 when compared to the prior year principally due to increases in personnel costs, including stock-based compensation expense, to support the increase in scope and global reach of our business and increased marketing costs. The increase in operating expenses was comprised of increased sales and marketing costs of $20.2 million to expand our global sales efforts, an increase of $9.0 million of research and development costs to support our ongoing product development efforts and an increase in general and administrative costs of $7.8 million related to increased headcount to support the growth and operations of our business and $8.1 million of restructuring costs.

Other Income (Expense), Net

| Years ended December 31, | | Change | |
|---|---|---|---|
| 2016 | 2015 | Amount | % |
| (dollars in thousands) | | | |
| $(77) | $(402) | $325 | 80.8% |

Other income (expense), net, changed by $0.3 million, or 80.8% during the year ended December 31, 2016 as compared to 2015. The change was primarily due to an increase in interest income with increased short-term investments.

Provision for Income Taxes

| | Years ended December 31 | | Change | |
|---|---|---|---|---|
| | 2016 | 2015 | Amount | % |
| | (dollars in thousands) | | | |
| Provision for income taxes | $1,172 | $682 | $490 | 71.8% |
| Effective tax rate | (1.7)% | (1.4)% | | |

The provision for income taxes for the years ended December 31, 2016 and 2015 was comprised primarily of foreign and state income taxes. The increase in the provision for income taxes in the year ended December 31, 2016 compared with the year ended December 31, 2015 was primarily attributable to an increase in foreign income tax.

Deferred Revenue

| | Years ended December 31, | | Change | |
|---|---|---|---|---|
| | 2016 | 2015 | Amount | % |
| | (dollars in thousands) | | | |
| Total deferred revenue | $130,471 | $106,657 | $23,814 | 22.3% |

Deferred revenue increased by $23.8 million, or 22.3%, to $130.5 million as of December 31, 2016 from $106.7 million as of December 31, 2015. The growth in our deferred revenue was primarily attributable to an increase in our installed base of products and licenses worldwide and resulting renewals of maintenance and support agreements, as well as new sales of maintenance and support, and subscription revenue.

Number of Customers

| | As of December 31, | | Change | |
|---|---|---|---|---|
| | 2016 | 2015 | Amount | % |
| Number of customers | 5,291 | 4,541 | 750 | 16.5% |

Our number of customers increased by 750, or 16.5%, to 5,291 as of December 31, 2016 from 4,541 as of December 31, 2015. Our growth in customer count was driven by increasing market acceptance of our subscription services as well as an increase in our global sales and services and support organizations to 408 as of December 31, 2016 from 397 people as of December 31, 2015. The growth in our sales and services and support organizations was consistent with our plans to continue expanding our global sales and support coverage, in particular for our channel partner sales and support teams. The increase in our services and support organization allowed us to target new customers while continuing to support our existing customers across all of our geographies.

Comparison of the Years Ended December 31, 2015 and 2014

Net Revenue

| | Years ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2015 | | 2014 | | Change | |
| | Amount | % of Net Revenue | Amount | % of Net Revenue | Amount | % |
| | (dollars in thousands) | | | | | |
| Net revenue: | | | | | | |
| Products and license | $107,563 | 46.0 | $74,299 | 45.3 | $33,264 | 44.8% |
| Services: | | | | | | |
| Maintenance and Support | 66,380 | 28.3 | 54,795 | 33.4 | 11,585 | 21.1% |

| | | | | | | |
|---|---|---|---|---|---|---|
| Professional Services and training | 14,084 | 6.0 | 11,414 | 7.0 | 2,670 | 23.4% |
| Subscriptions | 46,271 | 19.7 | 23,502 | 14.3 | 22,769 | 96.9% |
| Total Services | 126,735 | 54.0 | 89,711 | 54.7 | 37,024 | 41.3% |
| Total net revenue | $234,298 | 100.0 | $164,010 | 100.0 | $70,288 | 42.9% |
| United States | $141,225 | 60.3 | $87,155 | 53.1 | $54,070 | 62.0% |
| EMEA | 47,429 | 20.2 | 39,579 | 24.1 | 7,850 | 19.8% |
| APAC | 30,180 | 12.9 | 27,798 | 16.9 | 2,382 | 8.6 % |
| Other | 15,464 | 6.6 | 9,478 | 5.8 | 5,986 | 63.2% |
| Total net revenue | $234,298 | 100.0 | $164,010 | 100.0 | $70,288 | 42.9% |

Our net revenue increased by $70.3 million, or 42.9%, to $234.3 million during the year ended December 31, 2015 from $164.0 million during the year ended December 31, 2014 primarily due to growth in overall revenue, especially in the subscription service line. This revenue growth reflects the increasing demand for our subscription service offerings reflected in the addition of 756 customers in 2015 as well as a broader installed base of product and licenses which generate higher maintenance and support revenues. We had 501 orders exceeding $100,000 during the year ended December 31, 2015, from 404 orders for year ended December 31, 2014.

The Americas region contributed the largest portion of this increase in overall revenue with a $60.0 million increase, or approximately a 62.1% change over the same period in 2014. In addition, an increase in sales volume of our products, increase in our international sales personnel and improved sales execution contributed to increases in revenue in EMEA and in APAC of $7.8 million and $2.4 million, or approximately a 19.8% and 8.6% change, respectively, over the same period in 2014.

Products and license revenue increased by $33.3 million, or 44.8%, to $107.6 million during the year ended December 31, 2015 from $74.3 million during the year ended December 31, 2014.The increase was primarily due to increased sales volume of our products, increased headcount and improved sales execution.

Services revenue increased by $37.0 million, or 41.3%, to $126.7 million during the year ended December 31, 2015 from $89.7 million during the year ended December 31, 2014. During the year ended December 31, 2015, our services revenue was comprised of $66.4 million of maintenance and support, $14.0 million of professional services and training and $46.3 million of subscriptions. The change in services revenue in the year ended December 31, 2015 from the year ended December 31, 2014 was primarily due to an increase of $22.8 million in subscriptions revenue resulting from our cloud-based security services and ThreatRadar, $11.6 million in maintenance and support revenue from our larger installed base as reflected in our product and license revenue, and $2.7 million in professional services and training revenues related to increases in headcount which allowed for completion of additional service engagements.

Gross Profit

| | Years Ended December 31, | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2015 | | | 2014 | | | |
| | Amount | Gross Margin | | Amount | Gross Margin | | % Change |
| | (dollars in thousands) | | | | | | |
| Products and license gross profit | $96,616 | 89.8 | % | $65,051 | 87.6 | % | 2.2 |
| Services gross profit | 90,102 | 71.1 | % | 62,376 | 69.5 | % | 1.6 |
| Total gross profit | $186,718 | 79.7 | % | $127,427 | 77.7 | % | 2.0 |

Total gross margin increased from 77.7% during the year ended December 31, 2014 to 79.7% during the year ended December 31, 2015 primarily due to an increased proportion of products and license revenue to total revenues. Products and license gross margin increased 2.2% to 89.8% for the year ended December 31, 2015 compared to 87.6% for the same period in 2014. The products and license gross margin increase was primarily attributable to increased sales of higher throughput appliances, which generally have higher gross margins. Services gross profit improved 1.6% to 71.1% for the year ended December 31, 2015 as compared to 69.5% for the same period in 2014, mostly due to higher maintenance and subscriptions revenue which better leveraged the internal cost structure to support these services

Operating Expenses

| | Years Ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2015 | | 2014 | | Change | |
| | Amount | % of Net | Amount | % of Net | Amount | % |

| | Revenue | | Revenue | | | | | |
|---|---|---|---|---|---|---|---|---|
| | (dollars in thousands) | | | | | | | |
| Operating expenses: | | | | | | | | |
| Research and development | $53,376 | 22.8 | $43,052 | 26.2 | $10,324 | 24.0% |
| Sales and marketing | 136,292 | 58.2 | 106,382 | 64.9 | 29,910 | 28.1% |
| General and administrative | 43,440 | 18.5 | 34,499 | 21.0 | 8,941 | 25.9% |
| Amortization of acquired intangible assets | 1,408 | 0.6 | 1,269 | 0.8 | 139 | 11.0% |
| Total operating expenses | $234,516 | 100.1 | $185,202 | 112.9 | $49,314 | 26.6% |

Results above include stock-based compensation expense of:

| | Years ended December 31, | | |
|---|---|---|---|
| | 2015 | 2014 | Change |
| | (dollars in thousands) | | |
| Research and development | $13,831 | $8,799 | $5,032 |
| Sales and marketing | 16,717 | 13,558 | 3,159 |
| General and administrative | 16,554 | 12,858 | 3,696 |

Research and development expenses increased by $10.3 million, or 24.0%, to $53.4 million during the year ended December 31, 2015 from $43.1 million during the year ended December 31, 2014. The change was primarily attributable to an increase of $8.6 million in personnel costs, including stock-based compensation, due to additional research and development personnel being hired to support our ongoing product development efforts. In addition, facility and travel expenses increased by $1.4 million expenses due to increased headcount.

Sales and marketing expenses increased by $29.9 million, or 28.1%, to $136.3 million during the year ended December 31, 2015 from $106.4 million during the year ended December 31, 2014. The change was due to an increase of $25.6 million in personnel costs, including stock-based compensation due to increased headcount worldwide in an effort to help drive our overall revenue growth, a $3.1 million increase in trade show, corporate marketing and seminar costs and a $1.2 million increase in travel expenses due to increased headcount.

General and administrative expenses increased by $8.9 million, or 25.9%, to $43.4 million during the year ended December 31, 2015 from $34.5 million during the year ended December 31, 2014. The change was primarily due to an increase of $7.5 million in personnel costs, including stock-based compensation, primarily related to increased headcount to support the growth and operations of our business and a $1.8 million increase in travel expenses and recruitment fees.

Amortization of purchased intangibles increased by $0.1 million or 11%, to $1.4 million during the year ended December 31, 2015 from $1.3 million during the year ended December 31, 2014 due to the acquisitions of Skyfence and Tomium completed during the first quarter of 2014.

Loss from Operations

| Years ended December 31, | | Change | |
|---|---|---|---|
| 2015 | 2014 | Amount | % |
| (dollars in thousands) | | | |
| $(47,798) | $(57,775) | $9,977 | 17.3% |

Our loss from operations decreased by $10.0 million, or 17.3%, from $57.8 million during the year ended December 31, 2014 to $47.8 million during the year ended December 31, 2015. Our gross profit increased by $59.3 million during the year ended December 31, 2015 due to increased net revenues. This increase in gross profit is offset by an increase in operating expenses which increased by $49.3 million for the year ended December 31, 2015 when compared to the prior year principally due to increases in personnel costs, including stock-based compensation expense, to support the increased scope and global reach of our business. The increase in operating expenses was comprised of increased sales and marketing costs of $29.9 million to expand our global sales efforts, and increased general and administrative costs of $8.9 million primarily related to increased headcount to support the growth and operations of our business. In addition, we had increased research and development costs of $10.3 million primarily from hiring to support our ongoing product development efforts.

Other Income (Expense), Net

| Years ended December 31, | | Change | |
|---|---|---|---|
| 2015 | 2014 | Amount | % |
| (dollars in thousands) | | | |
| $(402) | $(220) | $(182) | (82.7)% |

Other income (expense), net, increased by $0.2 million, or 82.7% during the year ended December 31, 2015 as compared to 2014. The change was primarily due to an increase of $0.7 million primarily due to bank charges offset by an increase of $0.6 million in other income primarily due to higher interest income with increased cash and cash equivalents.

Provision for Income Taxes

| | Years ended December 31, | | Change | |
|---|---|---|---|---|
| | 2015 | 2014 | Amount | % |
| | (dollars in thousands) | | | |
| Provision for income taxes | $682 | $1,181 | $(499) | -42.3% |
| Effective tax rate | (1.4)% | (2.0)% | | |

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The provision for income taxes for the years ended December 31, 2015 and 2014 was comprised primarily of foreign and state income taxes. The decrease in the provision for income taxes in the year ended December 31, 2015 compared with the year ended December 31, 2014 was primarily attributable to a decrease in foreign income tax.

Deferred Revenue

| | Years ended December 31, | | Change | |
|---|---|---|---|---|
| | 2015 | 2014 | Amount | % |
| | (dollars in thousands) | | | |
| Total deferred revenue | $106,657 | $81,175 | $25,482 | 31.4% |

Deferred revenue increased by $25.5 million, or 31.4%, to $106.7 million as of December 31, 2015 from $81.2 million as of December 31, 2014. The growth in our deferred revenue was primarily attributable to an increase in our installed base of products and licenses worldwide and resulting renewals of maintenance and support agreements, as well as new sales of subscription and maintenance and support agreements.

Number of Customers

| | As of December 31, | | Change | |
|---|---|---|---|---|
| | 2015 | 2014 | Amount | % |
| Number of customers | 4,541 | 3,785 | 756 | 20.0% |

Our number of customers increased by 756, or 20.0%, to 4,541as of December 31, 2015 from 3,785 as of December 31, 2014. Our growth in customer count was driven by increasing market acceptance of our products as well as an increase in our global sales and services and support organizations from 330 people as of December 31, 2014 to 397 as of December 31, 2015. The growth in our sales and service and support organizations was consistent with our plans to continue expanding our global sales and support coverage, in particular our channel partner sales and support teams. The increases in our sales and support organizations allowed us to target new customers while continuing to support existing customers across all of our geographies.

Liquidity and Capital Resources

To date, we have satisfied our capital and liquidity needs through sales of our products and services, our initial and follow-on public offering of common stock, and private placements of convertible preferred stock. We have incurred significant losses as we continue to expand our business. Our cash flow from operating activities will continue to be affected principally by the extent to which our revenue exceeds or does not exceed any increase in spending on personnel to support the growth of our business. Our largest source of operating cash flow is cash collections from our customers.

Capital Resources

As of December 31, 2016, we had $261.1 million of cash, cash equivalents and short-term investments, $12.4 million of which is held outside of the United States and not presently available to fund domestic operations and obligations. If we were to repatriate cash held outside of the United States, we could be subject to U.S. income taxes on such amounts, less any previously paid foreign income taxes. Our cash, cash equivalents and short-term investments have increased from $17.7 million as of December 31, 2010 to $261.1 million as of December 31, 2016. This increase is primarily the result of our initial public offering of common stock in November 2011 in which we raised $86.2 million, after deducting underwriters' discounts and offering expenses and our follow-on public offering of common stock in March 2015 in which we raised $127.9 million after deducting underwriters' discounts and offering expenses. This amount was partially offset by our losses from operations as we continued to fund our investments in growth, including the development of future products and product enhancements, and expanded into new sales channels and geographies. In addition, we increased our use of cash through the acquisitions of Skyfence Networks, Ltd. and certain assets of Tomium and Camouflage which included cash consideration totaling approximately $24.8 million. We believe our existing cash, cash equivalents and short-term investments will be sufficient to meet our working capital and capital expenditure needs for at least the next 12 months. Our future capital requirements may vary materially from those currently planned and will depend on many factors, including, among other things, market acceptance of our products, the cost of our research and development activities, the acquisition of other businesses and overall economic conditions.

Cash Flows

The following summary of our cash flows for the periods indicated has been derived from our consolidated financial statements which are included elsewhere in this Annual Report on Form 10-K:

| | Years ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| | (dollars in thousands) | | |
| Net cash provided by operating activities | $22,494 | $23,867 | $4,126 |
| Net cash used in investing activities | $(78,447) | $(63,775) | $(21,591) |
| Net cash (used in) provided by financing activities | $(4,831) | $140,078 | $8,857 |

Cash Flows from Operating Activities

Our largest uses of cash from operating activities are for employee related expenditures. Our primary source of cash flow from operating activities is cash receipts from customers. Our cash flow from operations will continue to be affected principally by the extent to which we grow our revenues and increase our headcount, primarily in our sales and marketing and research and development functions, in order to grow our business.

Net cash provided by operating activities of $22.5 million for the year ended December 31, 2016 reflected a net loss of $70.3 million, adjusted for non-cash charges of $72.4 million primarily due to stock-based compensation expense, as well as a net change of $20.4 million in our net operating assets and liabilities. The net change in our operating assets and liabilities was primarily the result of a $23.7 million increase in our deferred revenue, which represents unearned amounts billed to our customers, resulting from our larger installed base combined with strong maintenance and support renewal rates from our existing customers, in addition to an increase of $2.2 million in accrued and other liabilities. This change was partially offset by a decrease in accrued compensation and benefits of $2.5 million, an increase in accounts receivable of $1.5 million and a decrease in accounts payable of $1.4 million.

Net cash provided by operating activities of $23.9 million for the year ended December 31, 2015 reflected a net loss of $48.9 million, adjusted for non-cash charges of $57.2 million primarily due to stock-based compensation expense, as well as a net change of $15.5 million in our net operating assets and liabilities. The net change in our operating assets and liabilities was primarily the result of a $25.5 million increase in our deferred revenue, which represents unearned amounts billed to our customers, resulting from our larger installed base combined with strong maintenance and support renewal rates from our existing customers, in addition to an increase of $7.8 million in accrued compensation and benefits and accrued and other liabilities. This change was partially offset by an increase in accounts receivable of $13.6 million and prepaid expenses and other assets of $4.2 million.

Cash Flows from Investing Activities

Our investing activities consist primarily of purchases and sales of short-term investments, expenditures to purchase property and equipment and cost of acquisitions.

During the year ended December 31, 2016, cash used in investing activities was $78.4 million, primarily as a result of $130.0 million in purchases of short-term investments, $16.8 million in net purchases of property and equipment and $3.9 million in acquisition of Camouflage offset by $72.5 million in proceeds from maturities of short-term investments.

During the year ended December 31, 2015, cash used in investing activities was $63.8 million, primarily as a result of $89.6 million in purchases of short-term investments, and $8.1 million in net purchases of property and equipment partially offset by $33.9 million in proceeds from maturities of short-term investments.

Cash Flows from Financing Activities

Net cash provided used in financing activities was $4.8 million for the year ended December 31, 2016 primarily as a result of settlement of holdback liability as part of the consideration in connection with the acquisition of SkyFence Networks Ltd of $7.1 million offset by net proceeds from issuance of common stock of $2.4 million.

Net cash provided by financing activities was $140.1 million for the year ended December 31, 2015 primarily as a result of net proceeds from our follow-on public offering of $127.9 million and proceeds from the issuance of common stock under equity incentive plans, net of repurchases of $12.1 million.

Critical Accounting Policies and Estimates

Our consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles (“GAAP”) and include our accounts and the accounts of our wholly-owned subsidiaries. The preparation of our consolidated financial statements requires our management to make estimates, assumptions and judgments 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 applicable periods. Management bases its estimates, assumptions and judgments on historical experience and on various other factors that they believe to be reasonable under the circumstances. Different assumptions and judgments would change the estimates used in the preparation of our consolidated financial statements, which, in turn, could change the results from those reported. Our management evaluates its estimates, assumptions and judgments on an ongoing basis.

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

Our management must make significant judgments and estimates to determine revenue to be recognized in any accounting period. Material differences may result in the amount and timing of our revenue for any period if our management makes different judgments or utilizes different estimates.

We derive revenue from two sources: (i) products and license revenue, which includes hardware and perpetual software license revenue and (ii) services revenue, which includes maintenance, professional services, training and subscription arrangements. Substantially all of product and license sales have been sold in combination with maintenance services. Revenue is recognized when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery or performance has occurred; the sales price is fixed or determinable; and collection is reasonably assured.

We define each of the four criteria above as follows:

- Persuasive evidence of an arrangement exists: Evidence of an arrangement consists of a purchase order or acknowledgment issued pursuant to the terms and conditions of a direct customer end user or distributor or value-added reseller (VAR) agreement and, in limited cases with both distributor/VAR and an end user agreement and/or purchase order.
- Delivery or performance has occurred: We use shipping and related documents, or written evidence of customer acceptance, when applicable, to verify delivery or performance. We recognize product revenue upon transfer of title and risk of loss, which primarily is upon shipment to value-added resellers, distributors or end users. In most instances, we do not have significant obligations for future performance, such as customer acceptance provisions, rights of return or pricing credits, associated with our sales. In instances where final acceptance of the product or service is specified by the customer, revenue is deferred until all acceptance criteria have been met.
- The sales price is fixed or determinable: We assess whether the sales price is fixed or determinable based on payment terms and whether the sales price is subject to refund or adjustment. Standard payment terms to customers range from 30 to 90 days. In the event payment terms are provided that differ from our standard business practices, the fees are deemed to not be fixed or determinable and revenue is recognized when the payments become due, provided the remaining criteria for revenue recognition have been met.
- Collection is reasonably assured: We assess probability of collection on a customer-by-customer basis. Our customers are subjected to a credit review process that evaluates their financial condition and ability to pay for products and services. If we conclude that collection is not reasonably assured based upon an initial review, we do not recognize revenue until payment is received.

Maintenance and subscription revenue includes arrangements for software maintenance and technical support for our products and subscription services revenue primarily related to our cloud-based services. The terms of our subscription service arrangements do not provide customers the right to take possession of the related software. Maintenance is offered under renewable, fee-based contracts, which include technical support, hardware repair and replacement parts, bug fixes, patches and unspecified upgrades on a when-and-if-available basis. Maintenance and subscription revenue is initially deferred and recognized ratably over the life of the contract, with the related expenses recognized as incurred. Maintenance and subscription contracts usually have a term of one to three years. Unearned maintenance and subscription revenue is included in deferred revenue.

Professional service revenue primarily consists of the fees we earn related to installation and consulting services. We recognize revenue from professional services upon delivery or completion of performance. Professional service arrangements are typically short term in nature and are largely completed within 90 days from the start of service.

Training services are recognized upon delivery of the training.

Multiple Element Arrangements

Most of our products are hardware appliances containing software components that function together to provide the essential functionality of the product. Therefore, our hardware appliances are considered non-software deliverables and are not subject to industry-specific software revenue recognition guidance.

Our product revenue also includes revenue from the sale of stand-alone software products. Stand-alone software may operate on our hardware appliance, but is not considered essential to the functionality of the hardware and is, therefore, subject to the industry-specific software revenue recognition guidance. Additionally, we provide unspecified software upgrades for our products, on a when-and-if available basis, and hardware replacements through maintenance and support contracts. These support arrangements when sold on a stand-alone basis are subject to the industry-specific software revenue recognition guidance.

Under the software revenue recognition guidance, we use the residual method to recognize revenue when a product agreement includes one or more elements to be delivered at a future date and Vendor Specific Objective Evidence (“VSOE”) of the fair value of all undelivered elements exists. In the majority of our contracts, the only element that remains undelivered at the time of delivery of the product is maintenance and support services and subscriptions. Under the residual method, the VSOE of fair value of the undelivered elements is deferred and the remaining portion of the contract fee is recognized as product revenue. If evidence of the VSOE of fair value of one or more undelivered elements does not exist, all revenue is generally deferred and recognized when delivery of those elements occurs or when fair value can be established.

For certain arrangements with multiple deliverables, we allocate the arrangement fee to the non-software element based upon the relative selling price of such element and, if software and software-related elements (e.g., maintenance and support for the software element) are also included in the arrangement, we allocate the arrangement fee to each of those software and software-related elements as a group. After such allocations are made, the amount of the arrangement fee allocated to the software and software-related elements is accounted for using the residual method. When applying the relative selling price method, we determine the selling price for each element using VSOE of selling price, if it exists, or if not, Third-Party Evidence (“TPE”) of selling price, if it exists. If neither VSOE nor TPE of selling price exist for an element, we use its Best Estimate of Selling Price (“BESP”) for that element. The revenue allocated to each element is then recognized when the basic revenue recognition criteria are met for that element. We limit the amount of revenue recognized for delivered elements to the amount that is not contingent on the future delivery of products or services, or subject to our future performance obligation.

VSOE of fair value for elements of an arrangement is based upon the normal pricing and discounting practices for those services when sold separately. In determining VSOE, we require that a substantial majority of the selling prices for a service fall within a reasonably narrow pricing range, evidenced by a substantial majority of such historical stand-alone transactions falling within a reasonably narrow range. In addition, we consider major service groups and geographies in determining VSOE.

We are not able to determine TPE for our products or services. TPE is determined based on competitor prices for similar deliverables when sold separately. Generally, our go-to-market strategy differs from that of our peers and our offerings contain a significant level of differentiation such that the comparable pricing of products with similar functionality cannot be obtained. Furthermore, we are unable to reliably determine what similar competitor products' selling prices are on a stand-alone basis.

When we are unable to establish the selling price of our non-software deliverables using VSOE or TPE, we use BESP in our allocation of arrangement consideration. The objective of BESP is to determine the price at which we would transact a sale if the product or service were sold on a stand-alone basis. We determine BESP for the purposes of allocating the arrangement by reviewing external and internal market factors including, but not limited to, pricing practices including discounting, the geographies in which we offer our products and services, the type of customer (i.e., distributor, value added reseller or direct end user) and competition. Additionally, we consider historical transactions, including transactions whereby the deliverable was sold on a stand-alone basis. The determination of BESP is made through consultation with and approval by our management. Selling prices are analyzed on a quarterly basis to identify if we have experienced significant changes in our selling prices.

For our non-software deliverables we allocate the arrangement consideration based on the relative selling price of the deliverables. For our hardware appliances we use BESP as our selling price. For our maintenance and support services, subscriptions and professional services and training, we primarily use VSOE as the selling price and when we are unable to establish a selling price using VSOE, we use BESP.

Stock-Based Compensation

We recognize compensation costs related to stock option, employee stock purchase plan, restricted stock unit, or RSU, and shares of restricted stock grants to employees based on the estimated fair value of the awards on the date of grant, net of estimated forfeitures. For stock option and employee stock purchase plan grants, we estimate the grant date fair value, and the resulting stock-based compensation expense, using the Black-Scholes option-pricing model. The fair value of RSUs is determined using the closing price of our stock on the date of grant. The grant date fair value of the stock-based awards is generally recognized on a straight-line basis over the requisite service period, which is generally the vesting period of the respective awards.

For performance based RSUs granted to employees which have multiple performance and a market condition we used a Monte Carlo simulation model to determine fair value of such awards. The key inputs used to determine the fair value of the awards were our stock price on the date of grant, the expected volatility, the risk free interest rate and revenues achieved. We update the estimated expense, net of forfeitures, at the end of each reporting period. The expense is recognized on an accelerated basis over the requisite service period, generally the vesting period of the respective awards.

For performance based RSUs granted to employees which only have performance conditions, we recognized expense based on our best estimate of number of awards which are expected to vest upon achievement of performance conditions. We revisit this estimate periodically

The fair value of the options and employee stock purchase plan awards during 2016, 2015 and 2014 were calculated using the Black-Scholes option pricing model with the following weighted-average assumptions:

| | Years ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Option grants: | | | |
| Expected dividend rate | 0 % | 0 % | 0 % |
| Risk-free interest rate | 1.4 % | 1.8 % | 1.8 % |
| Expected term (in years) | 6.0 | 6.1 | 6.1 |
| Expected volatility | 58 % | 49 % | 46 % |
| ESPP grants: | | | |
| Dividend rate | 0 % | 0 % | 0 % |
| Risk-free interest rate | 0.5 % | 0.4 % | 0.1 % |
| Expected term (in years) | 0.5 | 0.5 | 0.5 |
| Expected volatility | 58 % | 65 % | 45 % |

The Black-Scholes options pricing model requires the use of highly subjective and complex assumptions which determine the fair value of share-based awards, including the grant’s expected term and the price volatility of the underlying stock. These assumptions include:

Expected Term. The expected term represents the period over which the stock-based awards are expected to be outstanding. For option grants that are considered to be “plain vanilla,” we used the simplified method to determine the expected term as set forth in the guidance provided by the U.S. Securities and Exchange Commission. The simplified method calculates the expected term as the average of the time-to-vesting and the contractual life of the options. For option grants that are not considered “plain vanilla,” the expected term is based on historical option exercise behavior and post-vesting cancellations of options by employees. For ESPP grants, the expected term is based on the length of the offering period, which is six months.

Risk-Free Interest Rate. The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of grant for zero coupon U.S. Treasury notes with maturities approximately equal to each award’s expected term.

Expected Volatility. The expected volatility was based on our historical volatilities. The volatility is over a period equal to the expected terms of the stock option grants and the offering period for employee stock purchase plan.

Expected Dividend. The expected dividend was assumed to be zero as we have never paid dividends and have no current plans to do so.

In addition to assumptions used in the Black-Scholes option pricing model, we must also estimate a forfeiture rate to calculate the stock-based compensation for expense related to our awards. Our forfeiture rate is based on an analysis of our actual forfeitures. We will continue to evaluate the appropriateness of the forfeiture rate based on actual forfeiture experience, analysis of employee turnover and other factors. Quarterly changes in the estimated forfeiture rate can have a significant impact on our stock-based compensation expense as the cumulative effect of adjusting the rate is recognized in the period the forfeiture estimate is changed. If a revised forfeiture rate is higher than the previously estimated forfeiture rate, an adjustment is made that will result in a decrease to the stock-based compensation expense recognized in the financial statements. If a revised forfeiture rate is lower than the previously estimated forfeiture rate, an adjustment is made that will result in an increase to the stock-based compensation expense recognized in the financial statements.

We will continue to use judgment in evaluating the expected term, expected volatility and forfeiture rate related to our own stock-based compensation on a prospective basis. As we continue to accumulate additional data related to our common stock, we may have refinements to the estimates of our expected volatility, expected terms and forfeiture rates, which could materially impact our future stock-based compensation expense.

Business Combinations

We account for our business acquisitions in accordance with Accounting Standards Codification (ASC) No. 805, Business Combinations. We use our best estimates and assumptions as part of the purchase price allocation process to value assets acquired and liabilities assumed at the business combination date. However, our estimates and assumptions are subject to refinement. We record adjustments to assets acquired or liabilities assumed subsequent to the purchase price allocation period in our operating results in the period in which the adjustments were determined.

The total purchase consideration allocated to the tangible assets acquired is assigned based on the fair values as of the date of the acquisition. The identifiable intangible assets are subject to amortization on a straight-line basis as this best approximates the benefit period related to these assets.

Property and Equipment

Property and equipment, including leasehold improvements, are stated at cost less accumulated depreciation and amortization. Depreciation is computed using the straight-line method over the estimated useful lives of the related assets, generally two to seven years.

Leasehold improvements are amortized using the straight-line method over the shorter of the remaining lease term or the estimated useful lives of the assets. Upon the retirement or disposition of property and equipment, the related costs and accumulated depreciation is removed and any related gain or loss is recorded in the consolidated statements of operations. Repairs and maintenance that do not extend the life or improve an asset are expensed in the periods incurred.

Goodwill and Acquired Intangibles

Goodwill is not amortized and is reviewed at least annually or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. The Company operates its business in one operating segment and one reporting unit, which is the development, marketing, sales, service and support of cyber-security solutions that protect business-critical data and applications whether in the cloud or on premises. In reviewing goodwill, we bypass the qualitative assessment and proceeds directly to performing the quantitative two step impairment test to test the reporting unit’s goodwill for impairment. The first step of the impairment test involves comparing the fair value of the reporting unit to its net book value, including goodwill and is used as a screening process for identifying a potential goodwill impairment loss. 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 the implied fair value of our goodwill to our net book value. In calculating the implied fair value of our goodwill, the fair value 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.

We complete our annual impairment test during the fourth quarter of each fiscal year. There was no impairment of goodwill recorded for the fiscal year ended December 31, 2016.

Intangible assets consist of purchased technology, customer relationships, trade names and domain names which are amortized over the period of estimated benefit using the straight-line method, as the consumption pattern of the asset is not apparent, and estimated useful lives ranging from seven to ten years. No significant residual value is estimated for intangible assets.

Impairment of Long-Lived Assets

We evaluate our long-lived assets, which consist of property and equipment and acquired intangible assets, for indicators of possible impairment when events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Impairment exists if the carrying amounts of such assets exceed the estimates of future net undiscounted cash flows expected to be generated by such assets. Should impairment exist, the impairment loss would be measured based on the excess carrying value of the asset over the asset's estimated fair value. As of December 31, 2016 and 2015, we have not incurred impairment losses on our long-lived assets.

Income Taxes

We make certain estimates and judgments in determining income tax expense for financial statement purposes. These estimates and judgments occur in the calculation of tax credits, tax benefits and deductions and in the calculation of certain tax assets and liabilities, which arise from differences in the timing of recognition of revenue and expense for tax and financial statement purposes. Significant changes to these estimates may result in an increase or decrease to our tax provision in the subsequent period when such a change in estimate occurs.

We use the liability method for accounting of deferred income taxes, which requires recognition of deferred income tax assets and liabilities for the expected future tax consequences of events that have been recognized in our financial statements, but have not been reflected in our taxable income. Estimates and judgments occur in the calculation of certain tax liabilities and in the determination of the recoverability of certain deferred income tax assets, which arise from temporary differences and carry-forwards. Deferred income tax assets and liabilities are measured using the currently enacted tax rates that apply to taxable income in effect for the years in which those tax assets are expected to be realized or settled. We regularly assess the likelihood that our deferred income tax assets will be realized. To the extent that we believe any amounts are not more likely than not to be realized, we record a valuation allowance to reduce our deferred income tax assets. In the event we determine that all or part of the net deferred tax assets are not realizable in the future, an adjustment to the valuation allowance would be charged to earnings in the period such determination is made. Similarly, if we subsequently realize deferred income tax assets that were previously determined to be unrealizable, the respective valuation allowance would be reversed, resulting in an adjustment to earnings in the period such determination is made. In addition, the calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax regulations. We recognize and measure potential liabilities based upon a more likely than not criteria. Based upon these criteria, we estimate whether, and the extent to which, additional taxes will be due. If payment of these amounts ultimately proves to be unnecessary, the reversal of the liabilities may result in tax benefits being recognized in the period when we determine the liabilities are no longer necessary. If our estimate of tax liabilities is less than the amount ultimately assessed, a further charge to expense would result.

Significant judgment is required in determining any valuation allowance recorded against deferred income tax assets. In assessing the need for a valuation allowance, we consider all available evidence, including past operating results, estimates of future taxable income, and the feasibility of tax planning strategies. In the event that we change our determination as to the amount of deferred income tax assets that could be realized, we will adjust our valuation allowance with a corresponding effect to the provision for income taxes in the period in which such determination is made.

Significant judgment is also required in evaluating our uncertain tax positions and determining our provision for income taxes. Although we believe our reserves for uncertain tax positions 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 from the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made. The provision for income taxes includes the effect of reserves for uncertain tax positions and any changes to the reserves that are considered appropriate, as well as the related net interest and penalties, if applicable.

Contractual Obligations

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

| | Payments Due by Period | | | | | |
|---|---|---|---|---|---|---|
| Contractual Obligations: | 2017 | 2018 | 2019 | 2020 | 2021 | Total |
| | (in thousands) | | | | | |
| Operating lease obligations[1] | $7,598 | $8,054 | $4,650 | $4,243 | $106 | $24,651 |
| Severance Pay Fund[2] | — | — | — | — | — | 5,696 |
| Purchase commitments[3] | 3,850 | — | — | — | — | $3,850 |
| Total | $11,448 | $8,054 | $4,650 | $4,243 | $106 | $34,197 |

1 Operating lease agreements represent our obligations to make payments under our non-cancelable lease agreements for our facilities. During the year ended December 31, 2016, we made regular lease payments of $6.2 million under the operating lease agreements.

2 Our consolidated balance sheet as of December 31, 2016 includes $5.7 million of non-current liabilities for our Israeli severance pay fund. The specific timing of any cash payments relating to this obligation cannot be projected with reasonable certainty and, therefore, no amounts for this obligation are included in the annual columns of the table set forth above.

3 Purchase commitments are contractual obligations to purchase hardware appliances and related component parts from our vendors in advance of anticipated sales.

Off-Balance Sheet Arrangements

Through December 31, 2016, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Recent Accounting Pronouncements

See "Note 1 - The Company and Summary of Significant Accounting Policies" to the consolidated financial statements included in this report, regarding the impact of certain recent accounting pronouncements on our consolidated financial statements.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risks in the ordinary course of our business. Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of fluctuations in interest rates and foreign currency exchange rates. We do not hold or issue financial instruments for trading purposes.

Interest Rate Sensitivity

Our exposure to market risk for changes in interest rates relates primarily to our investment portfolio. Our cash, cash equivalents and short-term investment accounts as of December 31, 2016 and 2015 totaled $261.1 million and $264.8 million, respectively, and consist primarily of cash, cash equivalents and short-term investments with maturities of less than two years from the date of purchase. Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of the interest rates in the United States. However, because of the short-term nature of the instruments in our portfolio, a sudden change in market interest rates would not be expected to have a material impact on our financial condition or our results of operation.

As of December 31, 2016, we have no indebtedness for borrowed money. To the extent in the future we enter into long-term debt arrangements, we would be subject to fluctuations in interest rates which could have a material impact on our future financial condition and results of operation.

Foreign Currency Exchange Risk

Our consolidated results of operations and cash flow are subject to fluctuations due to changes in foreign currency exchange rates. Substantially all of our revenue is generated in U.S. dollars. Our expenses are generally denominated in the currencies in which our operations are located, which is primarily in the U.S. and Israel and to a lesser extent in EMEA and APAC. Our consolidated results of operations and cash flow are, therefore, subject to fluctuations due to changes in foreign currency exchange rates and may be adversely affected in the future due to changes in foreign exchange rates. The effect of a hypothetical 10% change in foreign currency exchanges rates applicable to our business would not have a material impact on our historical consolidated financial statements.

To date, we have used derivative financial instruments, specifically foreign currency forward contracts, to manage exposure to foreign currency risks, by hedging a portion of our forecasted expenses denominated in Israeli shekels, the British Pound and Euros expected to occur within a year. The effect of exchange rate changes on foreign currency forward contracts is expected to offset the effect of exchange rate changes on the underlying hedged item. We do not use derivative financial instruments for speculative or trading purposes.

Item 8. Financial Statements and Supplementary Data

Quarterly Results of Operations

The following table sets forth unaudited quarterly consolidated statements of operations data for each of the years in the two-year period ended December 31, 2016 (in thousands, except per share data). We derived this information from our unaudited consolidated financial statements, which we prepared on the same basis as our audited consolidated financial statements contained in this Annual Report on Form 10-K. In our opinion, these unaudited statements include all adjustments, consisting only of normal recurring adjustments that we consider necessary for a fair statement of that information when read in conjunction with the consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. The operating results for any quarter should not be considered indicative of results for any future period.

| | Three Months Ended | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Dec. 31, 2016 | Sept.30, 2016 | June 30, 2016 | March 31, 2016 | Dec. 31, 2015 | Sept.30, 2015 | June 30, 2015 | March 31, 2015 |
| Net revenue: | | | | | | | | |
| Products and license | $28,641 | $22,486 | $14,830 | $20,841 | $36,113 | $30,451 | $23,895 | $17,104 |
| Services: | | | | | | | | |
| Maintenance and support | 21,018 | 20,326 | 19,802 | 18,861 | 18,217 | 17,110 | 16,005 | 15,048 |
| Professional services and training | 3,374 | 3,228 | 3,656 | 3,435 | 3,476 | 3,500 | 3,176 | 3,932 |
| Subscriptions | 25,369 | 22,367 | 19,585 | 16,636 | 14,908 | 12,288 | 10,402 | 8,673 |
| Total services | 49,761 | 45,921 | 43,043 | 38,932 | 36,601 | 32,898 | 29,583 | 27,653 |
| Total net revenue | 78,402 | 68,407 | 57,873 | 59,773 | 72,714 | 63,349 | 53,478 | 44,757 |
| Cost of revenue: | | | | | | | | |
| Products and license | 3,133 | 2,394 | 1,814 | 2,184 | 3,412 | 2,741 | 2,796 | 1,998 |
| Services | 11,466 | 11,354 | 10,703 | 10,784 | 10,383 | 9,148 | 8,770 | 8,332 |
| Total cost of revenue | 14,599 | 13,748 | 12,517 | 12,968 | 13,795 | 11,889 | 11,566 | 10,330 |
| Gross profit | 63,803 | 54,659 | 45,356 | 46,805 | 58,919 | 51,460 | 41,912 | 34,427 |
| Operating expenses: | | | | | | | | |
| Research and development | 15,518 | 15,289 | 15,576 | 16,019 | 14,403 | 13,183 | 13,112 | 12,678 |
| Sales and marketing | 36,620 | 38,128 | 40,977 | 40,740 | 39,162 | 31,806 | 34,071 | 31,253 |
| General and administrative | 12,460 | 12,669 | 12,245 | 13,886 | 10,659 | 11,401 | 11,637 | 9,743 |
| Restructuring charges | 8,118 | - | - | - | - | - | - | - |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Amortization of acquired intangible assets | 352 | 352 | 352 | 352 | 352 | 352 | 352 | 352 |
| Total operating expenses | 73,068 | 66,438 | 69,150 | 70,997 | 64,576 | 56,742 | 59,172 | 54,026 |
| Loss from operations | (9,265) | (11,779) | (23,794) | (24,192) | (5,657) | (5,282) | (17,260) | (19,599) |
| Other income (expense), net | (26) | 107 | (241) | 83 | (189) | 91 | (224) | (80) |
| Loss before provision for income taxes | (9,291) | (11,672) | (24,035) | (24,109) | (5,846) | (5,191) | (17,484) | (19,679) |
| Provision (benefit) for income taxes | 527 | 66 | 681 | (102) | (65) | 556 | (160) | 351 |
| Net loss | $(9,818) | $(11,738) | $(24,716) | $(24,007) | $(5,781) | $(5,747) | $(17,324) | $(20,030) |
| Net loss per share stockholders, basic and diluted | $(0.30) | $(0.36) | $(0.77) | $(0.75) | $(0.18) | $(0.19) | $(0.57) | $(0.74) |
| Weighted-average shares used to compute net loss per share, basic and diluted | 32,744 | 32,445 | 32,163 | 31,843 | 31,393 | 30,797 | 30,287 | 26,973 |

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INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

IMPERVA, INC. AND SUBSIDIARIES

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of

Imperva, Inc.

We have audited Imperva, Inc.'s internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework) (the COSO criteria). Imperva, Inc.'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 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 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 its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that 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, Imperva, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Imperva, Inc. and subsidiaries 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 and our report dated February 24, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

San Jose, California

February 24, 2017

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of

Imperva, Inc.

We have audited the accompanying consolidated balance sheets of Imperva, Inc. and subsidiaries 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. These financial statements 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, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Imperva, Inc. and subsidiaries at December 31, 2016 and 2015, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles.

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

/s/ Ernst & Young LLP

San Jose, California

February 24, 2017

IMPERVA, INC. AND SUBSIDIARIES

Consolidated Balance Sheets

(In thousands, except share and per share data)

| | December 31, 2016 | December 31, 2015 |
|---|---|---|
| ASSETS | | |
| CURRENT ASSETS: | | |
| Cash and cash equivalents | $107,343 | $168,252 |
| Short-term investments | 153,749 | 96,555 |
| Restricted cash | 68 | 79 |
| Accounts receivable, net of allowance of $1,784 and $ 1,438 as of December 31, 2016 and 2015, respectively | 62,571 | 61,051 |
| Inventory | 590 | 815 |
| Prepaid expenses and other current assets | 7,922 | 7,965 |
| Total current assets | 332,243 | 334,717 |
| Property and equipment, net | 21,496 | 12,164 |
| Goodwill | 37,448 | 34,972 |
| Acquired intangible assets, net | 8,393 | 7,991 |
| Severance pay fund | 5,070 | 4,530 |
| Restricted cash | 1,884 | 1,665 |
| Deferred tax assets | 1,220 | 588 |
| Other assets | 1,065 | 1,042 |
| TOTAL ASSETS | $408,819 | $397,669 |
| LIABILITIES AND STOCKHOLDERS' EQUITY | | |
| CURRENT LIABILITIES: | | |
| Accounts payable | $5,529 | $6,870 |
| Accrued compensation and benefits | 20,840 | 20,259 |
| Accrued and other current liabilities | 7,683 | 14,283 |
| Deferred revenue | 104,042 | 79,132 |
| Total current liabilities | 138,094 | 120,544 |
| Other liabilities | 6,637 | 4,515 |
| Deferred revenue | 26,429 | 27,525 |
| Accrued severance pay | 5,696 | 4,884 |
| TOTAL LIABILITIES | 176,856 | 157,468 |
| Commitments and Contingencies (Note 11) | | |
| STOCKHOLDERS' EQUITY: | | |
| Preferred stock, $0.0001 par value - 5,000,000 shares authorized, no shares issued and outstanding as of December 31, 2016 and 2015, respectively | — | — |
| Common stock, $0.0001 par value - 145,000,000 shares authorized, 33,088,990 and 31,837,144 shares issued and outstanding as of December 31, 2016 and | 3 | 3 |

| | | |
|---|---|---|
| 2015, respectively | | |
| Additional paid-in capital | 510,257 | 448,069 |
| Accumulated deficit | (276,819) | (206,540) |
| Accumulated other comprehensive loss | (1,478) | (1,331) |
| TOTAL STOCKHOLDERS' EQUITY | 231,963 | 240,201 |
| TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY | $408,819 | $397,669 |

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

IMPERVA, INC. AND SUBSIDIARIES

Consolidated Statements of Operations

(In thousands, except per share data)

| | Years ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Net revenue: | | | |
| Products and license | $86,798 | $107,563 | $74,299 |
| Services | 177,657 | 126,735 | 89,711 |
| Total net revenue | 264,455 | 234,298 | 164,010 |
| | | | |
| Cost of revenue: | | | |
| Products and license | 9,525 | 10,947 | 9,248 |
| Services | 44,307 | 36,633 | 27,335 |
| Total cost of revenue | 53,832 | 47,580 | 36,583 |
| Gross profit | 210,623 | 186,718 | 127,427 |
| Operating expenses: | | | |
| Research and development | 62,402 | 53,376 | 43,052 |
| Sales and marketing | 156,465 | 136,292 | 106,382 |
| General and administrative | 51,260 | 43,440 | 34,499 |
| Restructuring charges | 8,118 | — | - |
| Amortization of acquired intangible assets | 1,408 | 1,408 | 1,269 |
| Total operating expenses | 279,653 | 234,516 | 185,202 |
| Loss from operations | (69,030 ) | (47,798 ) | (57,775 ) |
| Other income (expense), net | (77 ) | (402 ) | (220 ) |
| Loss before provision for income taxes | (69,107 ) | (48,200 ) | (57,995 ) |
| Provision for income taxes | 1,172 | 682 | 1,181 |
| Net loss | (70,279 ) | (48,882 ) | (59,176 ) |
| Loss attributable to non - controlling interest | — | — | 213 |
| Net loss attributable to Imperva, Inc. stockholders | $(70,279 ) | $(48,882 ) | $(58,963 ) |
| Net loss per share of common stock attributable to Imperva, Inc. stockholders, basic and diluted | $(2.18 ) | $(1.64 ) | $(2.28 ) |
| Shares used in computing net loss per share of common stock, basic and diluted | 32,284 | 29,849 | 25,806 |

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

IMPERVA, INC. AND SUBSIDIARIES

Consolidated Statements of Comprehensive Loss

(In thousands)

| | Years ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Net loss | $(70,279) | $(48,882) | $(59,176) |
| Other comprehensive loss (net of tax): | | | |
| Net change in net unrealized loss on investments | (103) | (249) | (59) |
| Net change in unrealized gain (loss) on hedging instruments | (44) | 407 | (1,002) |
| | (147) | 158 | (1,061) |
| Comprehensive loss | (70,426) | (48,724) | (60,237) |
| Comprehensive loss attributable to non - controlling interest | — | — | 213 |
| Comprehensive loss attributable to Imperva, Inc. stockholders | $(70,426) | $(48,724) | $(60,024) |

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

IMPERVA, INC. AND SUBSIDIARIES

Consolidated Statements of Stockholders' Equity

(In thousands except share data)

| | Common Stock Shares | Amount | Additional Paid-in Capital | Accumulated Deficit | Accumulated Other Comprehensive Income (Loss) | Non - controlling Interest | Total Shareholders' Equity |
|---|---|---|---|---|---|---|---|
| Balance as at December 31, 2013 | 25,206,498 | 2 | 187,957 | (98,695) | (428) | (2,614) | 86,222 |
| Issuance of common stock related to acquisitions | 738,479 | — | 24,163 | | | | 24,163 |
| Issuance of common stock, net of repurchases | 672,832 | — | 7,371 | — | — | — | 7,371 |
| Vesting of restricted stock | — | — | 454 | — | — | — | 454 |
| Stock-based compensation | — | — | 37,273 | — | — | — | 37,273 |
| Issuance of common stock in connection with employee stock purchase plan | 188,068 | — | 3,332 | — | — | — | 3,332 |
| Income tax benefit from employee stock option exercises | — | — | 385 | — | — | — | 385 |
| Shares withheld for tax withholding on vesting of restricted stock units | — | — | (2,074) | | | | (2,074) |
| Pre-combination service relating to acquired Skyfence option plan | — | — | 354 | — | — | — | 354 |
| Purchase of additional ownership interest in Incapsula, Inc. | 89,603 | — | (2,827) | — | — | 2,827 | - |
| Components of other comprehensive income (loss), net of tax | | | | | | | |
| Change in unrealized loss on investments | — | — | — | — | (59) | — | (59) |
| Change in unrealized loss on derivatives | — | — | — | — | (1,002) | — | (1,002) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Net loss | — | — | — | (58,963 ) | — | (213 ) | (59,176 ) |
| Comprehensive loss | | | | | | | (60,237 ) |
| Balance as at December 31, 2014 | 26,895,480 | 2 | 256,388 | (157,658 ) | (1,489 ) | — | 97,243 |
| Proceeds from follow-on public offering, net of offering costs | 3,450,000 | 1 | 127,740 | — | — | — | 127,741 |
| Issuance of common stock, net of repurchases | 670,844 | — | 18,724 | — | — | — | 18,724 |
| Vesting of restricted stock | 706,121 | — | 767 | — | — | — | 767 |
| Stock-based compensation | — | — | 50,964 | — | — | — | 50,964 |
| Issuance of common stock in connection with employee stock purchase plan | 114,699 | — | 4,785 | — | — | — | 4,785 |
| Income tax benefit from employee stock option exercises | — | — | 165 | — | — | — | 165 |
| Shares withheld for tax withholding on vesting of restricted stock units | — | — | (11,464 ) | | | | (11,464 ) |
| Components of other comprehensive income (loss), net of tax | | | | | | | |
| Change in unrealized loss on investments | — | — | — | — | (249 ) | — | (249 ) |
| Change in unrealized loss on derivatives | — | — | — | — | 407 | — | 407 |
| Net loss | — | — | — | (48,882 ) | — | — | (48,882 ) |
| Comprehensive loss | — | — | — | | | | (48,724 ) |
| Balance as at December 31, 2015 | 31,837,144 | 3 | 448,069 | (206,540 ) | (1,331 ) | — | 240,201 |
| Issuance of common stock, net of repurchases | 843,724 | | $ 5,402 | | | | 5,402 |
| Issuance of holdback shares in connection with acquisitions | 206,499 | — | — | — | — | — | — |
| Stock-based compensation | — | — | $ 59,750 | — | — | — | 59,750 |
| Issuance of common stock in connection with employee stock purchase plan | 201,623 | | $ 5,831 | — | — | — | 5,831 |
| Income tax benefit from employee stock option exercises | — | — | $ 36 | — | — | — | 36 |
| | — | — | $ (8,831 ) | — | — | — | (8,831 ) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Shares withheld for tax withholding on vesting of restricted stock units | | | | | | | |
| Components of other comprehensive income (loss), net of tax | | | | | | | |
| Change in unrealized loss on investments | — | — | — | — | (103) | — | (103) |
| Change in unrealized loss on derivatives | — | — | — | — | (44) | | (44) |
| Net loss | — | — | — | (70,279) | — | — | (70,279) |
| Comprehensive loss | — | — | — | — | | — | (70,426) |
| Balance as at December 31, 2016 | 33,088,990 | $ 3 | $ 510,257 | $ (276,819) | $ (1,478) | $ — | $ 231,963 |

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

IMPERVA, INC. AND SUBSIDIARIES

Consolidated Statements of Cash Flows

(In thousands)

| | Years ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| CASH FLOWS FROM OPERATING ACTIVITIES: | | | |
| Net loss | $(70,279) | $(48,882) | $(59,176) |
| Adjustments to reconcile net loss to net cash provided by operating activities: | | | |
| Depreciation and amortization | 7,488 | 4,551 | 3,578 |
| Stock-based compensation | 62,875 | 50,964 | 37,273 |
| Amortization of acquired intangibles | 1,408 | 1,408 | 1,269 |
| Amortization of premiums/accretion of discounts on short-term investments | 238 | 496 | 416 |
| Loss on disposal of equipment | 267 | - | - |
| Excess tax benefits from share-based compensation | (36) | (165) | (385) |
| Other | 125 | - | - |
| Changes in operating assets and liabilities: | | | |
| Accounts receivable, net | (1,520) | (13,605) | (3,000) |
| Inventory | (16) | (1,056) | 253 |
| Prepaid expenses and other assets | 383 | (4,220) | 409 |
| Accounts payable | (1,398) | 977 | 1,150 |
| Accrued compensation and benefits | (2,543) | 4,510 | 2,630 |
| Accrued and other liabilities | 2,178 | 3,242 | 1,847 |
| Severance pay, net | 272 | 16 | 93 |
| Deferred revenue | 23,684 | 25,482 | 18,123 |
| Deferred tax assets | (632) | 149 | (354) |
| Net cash provided by operating activities | 22,494 | 23,867 | 4,126 |
| CASH FLOWS FROM INVESTING ACTIVITIES: | | | |
| Purchase of short-term investments | (129,989) | (89,626) | (33,267) |
| Proceeds from sales/maturities of short-term investments | 72,453 | 33,948 | 29,821 |
| Acquisitions, net of cash acquired | (3,914) | - | (12,083) |
| Net purchases of property and equipment | (16,789) | (8,080) | (5,621) |
| Change in restricted cash | (208) | (17) | (441) |
| Net cash used in investing activities | (78,447) | (63,775) | (21,591) |
| CASH FLOWS FROM FINANCING ACTIVITIES: | | | |
| Proceeds from follow-on public offering, net of offering costs | - | 127,853 | - |
| Settlement of holdback liability | (7,157) | - | - |
| Proceeds from issuance of common stock, net of repurchases | 11,233 | 23,524 | 10,546 |
| Shares withheld for tax withholding on vesting of restricted stock units | (8,831) | (11,464) | (2,074) |
| Offering costs relating to follow-on public offering | (112) | - | - |
| Excess tax benefits from share-based compensation | 36 | 165 | 385 |
| Net cash (used in) provided by financing activities | (4,831) | 140,078 | 8,857 |
| Effect of exchange rate changes on cash and cash equivalents | (125) | (14) | — |

| | | | |
|---|---|---|---|
| NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS | (60,909) | 100,156 | (8,608) |
| CASH AND CASH EQUIVALENTS - Beginning of period | 168,252 | 68,096 | 76,704 |
| CASH AND CASH EQUIVALENTS - End of period | $107,343 | $168,252 | $68,096 |
| SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION: | | | |
| Cash paid for income taxes | $1,480 | $652 | $287 |
| NONCASH INVESTING AND FINANCING ACTIVITIES: | | | |
| Common stock issued related to acquisitions of businesses | $- | $- | $24,163 |
| Property and equipment incurred but not yet paid | $574 | $517 | $820 |
| Vesting of restricted and early exercised stock options | $- | $767 | $454 |

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

IMPERVA, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 1. The Company and Summary of Significant Accounting Policies

### Business

Imperva, Inc. (together with its subsidiaries, the "Company") was incorporated in April 2002 in Delaware. The Company is headquartered in Redwood Shores, California and has subsidiaries located throughout the world including Israel, Asia and Europe. The Company is engaged in the development, marketing, sales, service and support of cyber-security solutions that protect business-critical data and applications, whether in the cloud or on premises.

On February 23, 2017, we completed the sale of our Skyfence cloud access security broker business to Forcepoint LLC for $40 million subject to potential working capital and other adjustments. See Note 18 for further discussion of the sale of the Skyfence business.

### Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") and include all adjustments necessary for the fair presentation of the Company's consolidated financial position, results of operations and cash flows for the periods presented. The consolidated financial statements include the accounts of Imperva Inc., and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

### Non-controlling Interest

On March 20, 2014, the Company acquired the remaining interest it did not previously own in its majority-owned subsidiary, Incapsula, Inc. ("Incapsula") (Refer to Note 2). The Company separately presented the non-controlling interest on its Consolidated Balance Sheets in Total Stockholders' Equity, Consolidated Statements of Operations, Consolidated Statements of Comprehensive Loss and Consolidated Statements of Stockholders' Equity for periods prior to such date. The Company had recorded a non - controlling interest in these consolidated financial statements for the 19% ownership interest of the minority owners of Incapsula as of December 31, 2013. Changes to the ownership interest in Incapsula held by the minority owners were accounted for as equity transactions in the consolidated statements of stockholders' equity as the Company obtained control of Incapsula on November 5, 2009.

### Segment Information

Operating segments are components of an enterprise for which separate financial information is available and is evaluated regularly by the Company's chief operating decision maker in deciding how to allocate resources and in assessing performance. The Company's chief operating decision maker is the Chief Executive Officer.

The Company has one operating segment, which is the development, marketing, sales, service and support of cyber-security solutions that protect business-critical data and applications, whether in the cloud or on premises.

Use of Estimates

The preparation of the accompanying consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Such management estimates include the fair value of accounts receivable, inventory, intangible assets and goodwill, useful lives of intangible assets and property and equipment, and assumptions used in the calculation of revenue, income taxes and stock-based compensation, among others. These estimates and assumptions are based on management's best estimates and judgment. Management evaluates its estimates and assumptions on an ongoing basis using historical experience and other factors and adjusts such estimates and assumptions when facts and circumstances dictate. As future events and their effects cannot be determined with precision, actual results could differ significantly from these estimates.

Concentration of Supply Risk

The Company relies on a single third party to manufacture its hardware appliances, and purchases its hardware appliances through such third party's value-added resellers. Quality or performance failures of the Company's products or changes in the Company's suppliers' financial or business condition could disrupt the Company's ability to supply quality products to its customers and thereby have a material adverse effect on its business and consolidated financial statements.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to a concentration of credit risk consist primarily of cash, cash equivalents, short-term investments, restricted cash and derivative financial instruments. The Company's cash, cash equivalents, short-term investments and restricted cash are invested in high-quality instruments with banks and financial institutions located in the United States and Israel. Such deposits may be in excess of insured limits provided on such deposits.

The Company uses derivative financial instruments to manage exposures to foreign currency risks. The Company's derivatives expose it to credit risk to the extent that the counterparty may be unable to meet the terms of the agreement. The Company seeks to mitigate such risk by limiting its counterparties to those with high or investment-grade credit ratings. The Company does not require collateral under these agreements and has not historically experienced any losses due to credit risk or lack of performance by counterparties.

Derivative Financial Instruments

The Company uses forward foreign currency exchange contracts to reduce its exposure to foreign currency rate changes for operating expenses that are forecasted to be incurred in currencies other than U.S. dollars. The Company records all of its derivative instruments at their gross fair value on the consolidated balance sheets. The Company classifies its cash flows from derivative financial instruments as operating activities.

The accounting for changes in the fair value of a derivative instrument depends on whether the instrument has been designated and qualifies as a cash flow hedge for accounting purposes. For forward foreign currency exchange contracts that are designated and qualify as cash flow hedges, the effective portion of the gain or loss resulting from changes in the fair value of the derivative instruments is accounted for in accumulated other comprehensive income (loss) ("AOCI") in the consolidated statements of stockholders' equity and reclassified into operating expenses in the consolidated statements of operations in the period or periods during which the hedged transaction affects earnings. As of December 31, 2016, the Company estimated that $0.6 million of net derivative loss included in accumulated other comprehensive income (loss) will be reclassified into earnings within the next 12 months. The ineffective portion of the gain or loss resulting from the change in fair value is recognized in other income (expense), net in the consolidated statements of operations.

Cash, Cash Equivalents and Short-Term Investments

The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. Cash and cash equivalents consist of cash on hand, highly liquid investments in money market funds and various deposit accounts.

The Company considers all high quality investments purchased with original maturities at the date of purchase greater than three months to be short-term investments. Investments are available to be used in current operations and are, therefore, classified as current assets even though maturities may extend beyond one year. Cash equivalents and short-term investments are classified as available-for-sale and are, therefore, recorded at fair value on the consolidated balance sheets, with any unrealized gains and losses reported in the consolidated statements of stockholders' equity as a component of accumulated other comprehensive income (loss) until realized. The Company uses the specific-identification method to compute gains and losses on the investments. The amortized cost of securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization and accretion is included as a component of other income (expense), net in the consolidated statements of operations.

Restricted Cash

The Company has restricted cash pledged as collateral representing a security deposit required for facility leases. As of December 31, 2016 and 2015, the Company has classified $1.9 million and $1.7 million, respectively, of security deposit as non-current assets relating to its facility lease arrangements.

Inventory

Inventory consists of finished goods hardware appliances and related component parts and is stated at the lower of cost or market value where the cost is determined as the lower of an average cost basis or last invoice. Inventory that is obsolete or in excess of forecasted demand is written down to its estimated realizable value. Inventory write-downs, once established, are not reversed as they establish a new cost basis for the inventory. For the years ended December 31, 2016, 2015 and 2014, the amount of inventory write-downs incurred by the Company were insignificant.

Business Combination

The Company accounts for its business acquisitions in accordance with Accounting Standards Codification (ASC) No. 805, Business Combinations. The Company uses its best estimates and assumptions as part of the purchase price allocation process to value assets acquired and liabilities assumed at the business combination date. However, the Company's estimates and assumptions are subject to refinement. The Company records adjustments to assets acquired or liabilities assumed subsequent to the purchase price allocation period in our operating results in the period in which the adjustments were determined.

The total purchase price allocated to the tangible assets acquired is assigned based on the fair values as of the date of the acquisition. The identifiable intangible assets are subject to amortization on a straight-line basis as this best approximates the benefit period related to these assets

Property and Equipment

Property and equipment, including leasehold improvements, are stated at cost less accumulated depreciation and amortization. Depreciation is computed using the straight-line method over the estimated useful lives of the related assets, generally two to seven years.

Leasehold improvements are amortized using the straight-line method over the shorter of the remaining lease term or the estimated useful lives of the assets. Upon the retirement or disposition of property and equipment, the related costs and accumulated depreciation is removed and any related gain or loss is recorded in the consolidated statements of operations. Repairs and maintenance that do not extend the life or improve an asset are expensed in the periods incurred.

Goodwill and Acquired Intangibles

Goodwill is not amortized and is reviewed at least annually or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. The Company operates its business in one operating segment and one reporting unit, which is the development, marketing, sales, service and support of cyber-security solutions that protect business-critical data and applications whether in the cloud or on premises. In reviewing goodwill, the Company bypasses the qualitative assessment and proceeds directly to performing the quantitative two step impairment test to test the reporting unit's goodwill for impairment. The first step of the impairment test involves comparing the fair value of the reporting unit to its net book value, including goodwill and is used as a screening process for identifying a potential goodwill impairment loss. 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 goodwill 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.

The Company completes its annual impairment test during the fourth quarter of each fiscal year. There was no impairment of goodwill recorded for the fiscal year ended December 31, 2016.

Intangible assets consist of purchased technology, customer relationships, trade names and domain names which are amortized over the period of estimated benefit using the straight-line method, as the consumption pattern of the asset is not apparent, and estimated useful lives ranging from seven to ten years as of December 31, 2016. No significant residual value is estimated for intangible assets.

Impairment of Long-Lived Assets

The Company evaluates its long-lived assets, which consist of property and equipment and acquired intangible assets, for indicators of possible impairment when events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Impairment exists if the carrying amounts of such assets exceed the estimates of future net undiscounted cash flows expected to be generated by such assets. Should impairment exist, the impairment loss would be measured based on the excess carrying value of the asset over the asset's estimated fair value. As of December 31, 2016 and 2015, the Company has not written down any of its long-lived assets as a result of impairment.

Revenue Recognition

The Company derives revenue from two sources: (i) products and license revenue, which includes hardware and perpetual software license revenue and (ii) services revenue, which includes maintenance and support, professional services, training and subscription arrangements. Substantially all of product and license sales have been sold in combination with maintenance and support services. Revenue is recognized when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery or performance has occurred; the sales price is fixed or determinable; and collection is reasonably assured.

The Company defines each of the four criteria above as follows:

- Persuasive evidence of an arrangement exists: Evidence of an arrangement consists of a purchase order or acknowledgment issued pursuant to the terms and conditions of a direct customer end user or distributor or value-added reseller (VAR) agreement and, in limited cases with both distributor/VAR and an end user agreement and/or purchase order
- Delivery or performance has occurred: The Company uses shipping and related documents, or written evidence of customer acceptance, when applicable, to verify delivery or performance. The Company recognizes product revenue upon transfer of title and risk of loss, which primarily is upon shipment to value-added resellers, distributors or end users. In most instances, the Company does not have significant obligations for future performance, such as customer acceptance provisions, rights of return or pricing credits, associated with the Company’s sales. In instances where final acceptance of the product or service is specified by the customer, revenue is deferred until all acceptance criteria have been met.
- The sales price is fixed or determinable: The Company assesses whether the sales price is fixed or determinable based on payment terms and whether the sales price is subject to refund or adjustment. Standard payment terms to customers range from 30 to 90 days. In the event payment terms are provided that differ from the Company’s standard business practices, the fees are deemed to not be fixed or determinable and revenue is recognized when the payments become due, provided the remaining criteria for revenue recognition have been met.
- Collection is reasonably assured: The Company assesses probability of collection on a customer-by-customer basis. The Company’s customers are subjected to a credit review process that evaluates their financial condition and ability to pay for products and services. If the Company concludes that collection is not reasonably assured based upon an initial review, the Company does not recognize revenue until payment is received.

Maintenance and support and subscription revenue includes arrangements for software maintenance and technical support for the Company’s products and subscription services revenue primarily related to the Company’s cloud-based services. The terms of the Company’s subscription service arrangements do not provide customers the right to take possession of the related software. Maintenance and support is offered under renewable, fee-based contracts, which include technical support, hardware repair and replacement parts, bug fixes, patches and unspecified upgrades on a when-and-if-available basis. Maintenance and support and subscription revenue is initially deferred and recognized ratably over the life of the contract, with the related expenses recognized as incurred. Maintenance and support and subscription contracts usually have a term of one to three years. Unearned maintenance and support and subscription revenue is included in deferred revenue.

Professional service revenue primarily consists of the fees the Company earns related to installation and consulting services. The Company recognizes revenue from professional services upon delivery or completion of performance. Professional service arrangements are typically short term in nature and are largely completed within 90 days from the start of service.

Training services are recognized upon delivery of the training.

Multiple Element Arrangements

Most of the Company’s products are hardware appliances containing software components that function together to provide the essential functionality of the product. Therefore, the Company’s hardware appliances are considered non-software deliverables and are not subject to industry-specific software revenue recognition guidance.

The Company’s product revenue also includes revenue from the sale of stand-alone software products. Stand-alone software may operate on the Company’s hardware appliance, but is not considered essential to the functionality of the hardware and is, therefore, subject to the industry-specific software revenue recognition guidance. Additionally, the Company provides unspecified software upgrades for our products, on a when-and-if available basis, and hardware replacements through maintenance and support contracts. These support arrangements when sold on a stand-alone basis are subject to the industry-specific software revenue recognition guidance.

Under the software revenue recognition guidance, the Company uses the residual method to recognize revenue when a product agreement includes one or more elements to be delivered at a future date and Vendor Specific Objective Evidence ("VSOE") of the fair value of all undelivered elements exists. In the majority of the Company's contracts, the only element that remains undelivered at the time of delivery of the product is maintenance and support services and subscriptions. Under the residual method, the VSOE of fair value of the undelivered elements is deferred and the remaining portion of the contract fee is recognized as product revenue. If evidence of the VSOE of fair value of one or more undelivered elements does not exist, all revenue is generally deferred and recognized when delivery of those elements occurs or when fair value can be established.

For certain arrangements with multiple deliverables, the Company allocates the arrangement fee to the non-software element based upon the relative selling price of such element and, if software and software-related elements (e.g., maintenance and support for the software element) are also included in the arrangement, the Company allocates the arrangement fee to each of those software and software-related elements as a group. After such allocations are made, the amount of the arrangement fee allocated to the software and software-related elements is accounted for using the residual method. When applying the relative selling price method, the Company determines the selling price for each element using VSOE of selling price, if it exists, or if not, Third-Party Evidence ("TPE") of selling price, if it exists. If neither VSOE nor TPE of selling price exist for an element, the Company uses its Best Estimate of Selling Price ("BESP") for that element. The revenue allocated to each element is then recognized when the basic revenue recognition criteria are met for that element. The Company limits the amount of revenue recognized for delivered elements to the amount that is not contingent on the future delivery of products or services, or subject to the Company's future performance obligation.

VSOE of fair value for elements of an arrangement is based upon the normal pricing and discounting practices for those services when sold separately. In determining VSOE, the Company requires that a substantial majority of the selling prices for a service fall within a reasonably narrow pricing range, evidenced by a substantial majority of such historical stand-alone transactions falling within a reasonably narrow range. In addition, the Company considers major service groups and geographies in determining VSOE.

The Company is not able to determine TPE for its products or services. TPE is determined based on competitor prices for similar deliverables when sold separately. Generally, the Company's go-to-market strategy differs from that of its peers and its offerings contain a significant level of differentiation such that the comparable pricing of products with similar functionality cannot be obtained. Furthermore, the Company is unable to reliably determine what similar competitor products' selling prices are on a stand-alone basis.

When the Company is unable to establish the selling price of its non-software deliverables using VSOE or TPE, the Company uses BESP in its allocation of arrangement consideration. The objective of BESP is to determine the price at which the Company would transact a sale if the product or service were sold on a stand-alone basis. The Company determines BESP for the purposes of allocating the arrangement by reviewing external and internal market factors including, but not limited to, pricing practices including discounting, the geographies in which the Company offers its products and services, the type of customer (i.e., distributor, value added reseller or direct end user) and competition. Additionally, the Company considers historical transactions, including transactions whereby the deliverable was sold on a stand-alone basis. The determination of BESP is made through consultation with and approval by the Company's management. Selling prices are analyzed on a quarterly basis to identify if the Company has experienced significant changes in its selling prices.

For its non-software deliverables the Company allocates the arrangement consideration based on the relative selling price of the deliverables. For its hardware appliances the Company uses BESP as its selling price. For its maintenance and support services, subscriptions and professional services and training, the Company primarily uses VSOE as the selling price and when the Company is unable to establish a selling price using VSOE, it uses BESP.

Deferred Revenue

Deferred revenue represents amounts invoiced to customers for which the related revenue has not been recognized because one or more of the revenue recognition criteria have not been met. The current portion of the deferred revenues represents the amount that is expected to be recognized as revenue within one year of the consolidated balance sheet date.

Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable are recorded at invoiced amounts, net of allowances for doubtful accounts if applicable, and do not bear interest.

The Company generally does not require collateral from its customers; however, in certain circumstances, may require letters of credit, other collateral, additional guarantees or advance payments. The allowance for doubtful accounts is based on the Company's assessment of the collectability of its customer accounts. The Company regularly reviews its accounts receivable that remain outstanding past their applicable payment terms and establishes allowance and potential write-offs by considering certain factors such as historical experience, industry data, credit quality, age of balances and current economic conditions that may affect a customers' ability to pay.

Concentration of Revenue and Accounts Receivable

Significant customers are those which represent 10% or more of the Company's total revenue or gross accounts receivable balance at each respective balance sheet date. For the year ended December 31, 2016 and 2015, we had one customer that represented 13% and 18% of our total revenue, respectively. For the year ended December 31, 2014, the Company did not have any customers that represented 10% or more of the Company's total revenue. The same customer represented 18% and 21% of gross accounts receivable as of December 31, 2016 and 2015 respectively.

Shipping and Handling Costs

Costs related to shipping and handling are included in cost of revenue.

Research and Development Costs

Research and development costs, including direct and allocated expenses, are expensed as incurred.

Software Development Costs

The costs to develop software for sale have not been capitalized as the Company believes that the technological feasibility of the related software is not established until substantially all product development is complete.

Warranty Costs

The Company generally provides a 60-day warranty on hardware appliance products and software from the date of shipment to customers. To date, cost to repair or replace items sold to customers has been insignificant.

Advertising Costs

The Company expenses advertising costs as incurred. Advertising expense is included within sales and marketing expense in the consolidated statements of operations. For the years ended December 31, 2016, 2015 and 2014, advertising expenses were not material.

Retirement Savings Plan

The Company maintains a defined contribution 401(k) retirement savings plan for its U.S. employees. Each participant in the 401(k) retirement savings plan may elect to contribute a percentage of his or her annual compensation up to a specified maximum amount allowed under U.S. Internal Revenue Service regulations. There were no employer contributions to the 401(k) retirement savings plan for the years ended December 31, 2016, 2015 and 2014.

Severance Pay Asset and Liability

The Company has recorded a severance pay asset and liability on its consolidated balance sheets related to its employees located in Israel. The Company’s liability for severance pay is calculated pursuant to Israeli severance pay law based on the most recent salary for the employees multiplied by the number of years of employment, as of the respective balance sheet date. Employees are entitled to one month salary for each year of employment or a portion thereof. The Company’s liability at each respective balance sheet date for all of its Israeli employees is fully accrued in the accompanying consolidated financial statements and is mainly funded through monthly deposits to the employee’s pension and management insurance policies. The carrying value of these policies is recorded as a severance fund asset in the Company’s consolidated balance sheets.

The deposited funds may be withdrawn only upon the fulfillment of the obligation pursuant to Israeli severance pay law. The carrying value of the deposited funds is based on the cash surrender value of these policies and includes profits accumulated through the respective balance sheet date. The Company recognized severance expense related to the Israeli severance pay law during the years ended December 31, 2016, 2015 and 2014 of $1.6 million, $1.3 million, and $1.4 million, respectively.

Income Taxes

The Company accounts for income taxes in accordance with the Financial Accounting Standards Board ("FASB") Accounting Standards Codification No. 740 ("ASC 740"), Accounting for Income Taxes. The Company makes certain estimates and judgments in determining income tax expense for financial statement purposes. These estimates and judgments occur in the calculation of tax credits, tax benefits and deductions and in the calculation of certain tax assets and liabilities, which arise from differences in the timing of recognition of revenue and expense for tax and financial statement purposes. Significant changes to these estimates may result in an increase or decrease to the Company's tax provision in the subsequent period when such a change in estimate occurs.

The Company uses the liability method for accounting for deferred income taxes, which requires recognition of deferred income tax assets and liabilities for the expected future tax consequences of events that have been recognized in its financial statements, but have not been reflected in its taxable income. Estimates and judgments occur in the calculation of certain tax liabilities and in the determination of the recoverability of certain deferred income tax assets, which arise from temporary differences and carryforwards. Deferred income tax assets and liabilities are measured using the currently enacted tax rates that apply to taxable income in effect for the years in which those tax assets and liabilities are expected to be realized or settled. The Company regularly assesses the likelihood that its deferred income tax assets will be realized from recoverable income taxes or recovered from future taxable income based on the realization criteria set forth in ASC 740. To the extent that the Company believes any amounts are more likely not to be realized, the Company records a valuation allowance to reduce the deferred income tax assets. In the event the Company determines that all or part of the net deferred tax assets are not realizable in the future, an adjustment to the valuation allowance would be charged to earnings in the period such determination is made. Similarly, if the Company subsequently realizes deferred income tax assets that were previously determined to be unrealizable, the respective valuation allowance would be reversed, resulting in an adjustment to earnings in the period such determination is made.

In addition, the calculation of the Company's tax liabilities involves addressing uncertainties in the application of complex tax regulations. The Company recognizes and measures potential liabilities based upon criteria set forth in ASC 740. Based upon these criteria, the Company estimates whether, and the extent to which, additional taxes will be due. If payment of these amounts ultimately proves to be unnecessary, the reversal of the liabilities may result in tax benefits being recognized in the period when the Company determines the liabilities are no longer necessary. If the Company's estimate of tax liabilities is less than the amount ultimately assessed, a further charge to expense would result.

Significant judgment is required in determining any valuation allowance recorded against deferred income tax assets. In assessing the need for a valuation allowance, the Company considers all available evidence, including past operating results, estimates of future taxable income, and the feasibility of tax planning strategies. In the event that the Company changes its determination as to the amount of deferred income tax assets that could be realized, it will adjust its valuation allowance with a corresponding effect to the provision for income taxes in the period in which such determination is made.

Significant judgment is also required in evaluating the Company's uncertain tax positions under ASC 740 and determining its provision for income taxes. Although the Company believes its reserves for uncertain tax positions 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 the Company's historical income tax provisions and accruals. The Company adjusts 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 from the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made. The provision for income taxes includes the effect of reserves for uncertain tax positions and any changes to the reserves that are considered appropriate, as well as the related net interest and penalties, if applicable.

Stock-Based Compensation

Compensation costs related to employee stock option grants are based on the fair value of the options on the date of grant, net of estimated forfeitures. The Company determines the grant date fair value of the options using the Black-Scholes option-pricing model and the related stock-based compensation expense is generally recognized on a straight-line basis over the period in which an employee is required to provide service in exchange for the options, or the vesting period of the respective options.

For performance based RSUs granted to employees which have multiple performance conditions and a market condition the Company used a Monte Carlo simulation model to determine the fair value of such awards. The key inputs used were the Company's stock price on the date of grant, the expected volatility, the risk free interest rate and revenues achieved. The Company updates the estimated expense, net of forfeitures, at the end of each reporting period. The expense is recognized on an accelerated basis over the requisite service period, which is generally the vesting period of the respective awards.

For performance based RSUs granted to employees which only have performance conditions, we recognized expense based on our best estimate of number of awards which are expected to vest upon achievement of performance conditions. We revisit this estimate periodically.

Foreign Currency

The functional currency of the Company's foreign subsidiaries is the U.S. dollar. Transactions denominated in currencies other than the functional currency are remeasured to the functional currency at the average exchange rate in effect during the period. At the end of each reporting period, monetary assets and liabilities are re-measured to the functional currency using exchange rates in effect at the balance sheet date. Non-monetary assets and liabilities are re-measured at historical exchange rates. Gains and losses related to remeasurement are recorded in other income (expense) in the consolidated statements of operations.

Fair Value of Financial Instruments

The Company measures and reports its cash equivalents, short-term investments, derivative instruments, and the Israeli severance pay fund assets at fair value. Fair value is defined as the exchange price that would be received for an asset or an exit price paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The fair value hierarchy defines a three-level valuation hierarchy for disclosure of fair value measurements as follows:

Level I—Unadjusted quoted prices in active markets for identical assets or liabilities;

Level II—Inputs other than quoted prices included within Level I that are observable, unadjusted quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and

Level III—Unobservable inputs that are supported by little or no market activity for the related assets or liabilities.

The categorization of a financial instrument within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

The Company's financial instruments consist of Level I and Level II assets. Level I securities include highly liquid money market funds and mutual funds. Level II instruments include deposits maintained with financial institutions and derivative instruments.

Net Loss per Share of Common Stock

The Company's basic net loss per share of common stock 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 weighted-average number of shares of common stock used to calculate the Company's basic net loss per share of common stock excludes those shares subject to repurchase as these shares are not deemed to be issued for accounting purposes until they vest. The diluted net loss per share of common stock is computed by giving effect to all potential common stock equivalents outstanding for the period determined using the treasury-stock method. For purposes of this calculation, stock options to purchase common stock, common stock subject to repurchase, and warrants to purchase common stock are considered to be common stock equivalents. Basic and diluted net loss per share of common stock was the same for each period presented as the inclusion of all potential common shares outstanding was anti-dilutive.

Reclassifications

From time to time the Company reclassifies certain prior period balances to conform to the current year presentation. Starting first quarter 2015, we present tax withholdings on vesting of restricted stock units separately from proceeds from issuance of common stock in connection with employee stock purchase plan, in the Consolidated Statements of Stockholders' Equity and Consolidated Statements of Cash Flows. The change was made to better reflect nature of the transactions, and prior period balances were reclassified accordingly. These reclassifications have no material impact on previously reported total assets, total liabilities, stockholders' equity, results of operations or cash flows.

Recent Accounting Pronouncements

In January 2017, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2017-01, Business Combinations (Topic 805): Clarifying the Definition of a Business. The new standard provides a screen to determine when a set of activities and assets, or "set," is not a business. The screen requires that when substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or a group of similar identifiable assets, the set is not a business. This screen reduces the number of transactions that need to be further evaluated.

If the screen is not met, the amendments in this Update:

(1) require that to be considered a business, a set must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output and

(2) remove the evaluation of whether a market participant could replace missing elements. The amendments provide a framework to assist entities in evaluating whether both an input and a substantive process are present. The framework includes two sets of criteria to consider that depend on whether a set has outputs. Although outputs are not required for a set to be a business, outputs generally, are a key element of a business; therefore, the Board has developed more stringent criteria for sets without outputs.

Lastly, the amendments in this Update narrow the definition of the term output so that the term is consistent with how outputs are described in Topic 606.

The standard will be effective for the Company beginning January 1, 2018, with early application permitted. The standard will require adoption on a prospective basis. The Company is evaluating the impact of adopting this new accounting guidance on its consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash. The new standard requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The standard will be effective for the Company beginning January 1, 2018, with early application permitted. The standard will require adoption on a retrospective basis. The new accounting pronouncements will not have a significant impact on the Company's consolidated financial statements.

In August 2016, FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments. The new standard will make eight targeted changes to how cash receipts and cash payments are presented and classified in the statement of cash flows. The standard will be effective for the Company beginning January 1, 2018, with early application permitted. The standard will require adoption on a retrospective basis unless it is impracticable to apply, in which case we would be required to apply the amendments prospectively as of the earliest date practicable. The Company is evaluating the impact of adopting this new accounting guidance on its consolidated financial statements.

In June 2016, the FASB Issued ASU No. 2016-13, Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. The new standard requires financial assets measured at amortized cost be presented at the net amount expected to be collected, through an allowance for credit losses that is deducted from the amortized cost basis. The standard will be effective for the Company beginning January 1, 2020, with early application permitted. The Company is evaluating the impact of adopting this new accounting guidance on its consolidated financial statements.

In March 2016, the FASB Issued ASU No. 2016-09, Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. The updated guidance changes how companies account for certain aspects of share-based payment awards to employees, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. The Company will adopt the updated guidance on January 1, 2017 and will recognize excess tax benefits or deficiencies in net income, as well as the related cash flows in operating activities, on a prospective basis. The earnings impact of the adoption will depend on the excess tax benefits or deficiencies realized on vesting or settlement of awards resulting from the difference between the market value of awards at vesting or settlement and the grant date fair value. As required in the updated guidance, the Company will present cash flows related to employee withholding taxes as operating activities as opposed to financing activities, on a retrospective basis. The Company is in the process of evaluating the other potential effects this guidance will have on its consolidated financial statements.

In February 2016, the FASB issued Accounting Standards Update No. 2016-02 regarding ASC Topic 842 "Leases." The amendments in this guidance require balance sheet recognition of lease assets and lease liabilities by lessees for leases classified as operating leases, with an optional policy election to not recognize lease assets and lease liabilities for leases with a term of 12 months or less. The amendments also require new disclosures, including qualitative and quantitative requirements, providing additional information about the amounts recorded in the financial statements. The standard will be effective for the Company beginning January 1, 2019. The amendments require a modified retrospective approach with optional practical expedients. The Company is evaluating the impact of adopting this new accounting guidance on its consolidated financial statements.

In January 2016, the FASB issued ASU 2016-01, Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities. This guidance relates accounting for equity investments, financial liabilities under the fair value option, and the presentation and disclosure requirements for financial instruments. In addition, the FASB clarified guidance related to the valuation allowance assessment when recognizing deferred tax assets resulting from unrealized losses on available-for-sale debt securities. This guidance will be effective for the Company beginning January 1, 2018, early adoption is permitted only for certain provisions. Adoption of the guidance is retrospective with a cumulative adjustment to retained earnings or accumulated deficit as of the adoption date. The Company is evaluating the impact of adopting this new accounting standard on its consolidated financial statements.

In May 2014, the FASB issued ASU 2014-09—Revenue (Topic 606): Revenue from Contracts with Customers. The standard will replace most existing U.S. GAAP guidance on this topic. The standard provides a unified model to determine when and how revenue is recognized. The core principle is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration for which the entity expects to be entitled in exchange for those goods or services. The standard defines a five-step process to achieve this core principle and, in doing so, it is possible more judgment and estimates may be required within the revenue recognition process than are required under existing GAAP, including identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation, among others. The standard also provides guidance on the recognition of costs related to obtaining customer contracts.

The standard will be effective for the Company beginning January 1, 2018 using either of two methods: (1) retrospective application of the standard to each prior reporting period presented with the option to elect certain practical expedients as defined within the standard, or (2) retrospective application of the standard with the cumulative effect of initially applying the standard recognized at the date of initial application and providing certain additional disclosures as defined per the standard. Adoption as of the original effective date of January 1, 2017 is permitted. The Company is considering adopting the standard under the full retrospective method effective January 1, 2018; however, a final decision regarding the adoption method has not been finalized at this time. The Company’s ability to adopt using the full retrospective method is dependent on several factors such as the significance of the impact of the new standard on the Company’s financial results, system readiness, and the completion of the review and analysis of information necessary to restate prior-period financial statements.

The Company is in the initial stages of its evaluation of the impact of the new standard on its accounting policies, processes, and system requirements. The Company has assigned internal resources in addition to the engagement of a third party service provider to assist in the evaluation. Furthermore, the Company has made and will continue to make investments in systems to enable timely and accurate reporting under the new standard.

As part of its preliminary evaluation, the Company has considered the impact of the standard’s requirements with respect to capitalization and amortization of incremental costs of obtaining a contract, primarily sales commissions. Under the Company’s current accounting policy, contract origination costs are expensed as incurred. The new standard requires the capitalization of all incremental costs that the Company incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained, provided the Company expects to recover the costs.

While the Company continues to assess the potential impacts of the new standard, the Company does not know or cannot reasonably estimate quantitative information related to the impact of the new standard on the financial statements at this time.

2. Incapsula

On November 5, 2009, the Company entered into a license agreement for Incapsula to use certain developed technology of the Company. In lieu of any other fee or royalty under the license agreement, Incapsula issued to the Company 5,000,000 shares of its Series A Convertible Preferred Stock representing a 58% ownership interest at the date of issuance. The transaction was accounted for as a business combination.

In March 2010, the Company entered into a Series A and Series A-1 Purchase Agreement whereby Incapsula issued 6,666,666 shares of its Series A Convertible Preferred Stock to the Company in exchange for cash consideration of $3.0 million. As a result of this transaction, the Company increased its ownership interest in Incapsula to 76% at the date of issuance. The purchase of the additional ownership interest in Incapsula was treated as an equity transaction.

In July 2011, the Company purchased 4,375,000 shares of Incapsula's Series A-1 Preferred Stock for $3.5 million thereby increasing its ownership interest to 82%. In January 2012, the Company purchased the remaining 4,375,000 shares of Incapsula's Series A-1 Preferred Stock for $3.5 million thereby increasing its ownership interest in Incapsula to 85%.

Under the terms of the agreements between the Company and Incapsula, the Company had the right, but not the obligation, to purchase the remaining ownership interest in Incapsula commencing on November 5, 2013 and ending on November 5, 2018 (the "Purchase Right"). In March 2014, the Company acquired the remaining outstanding capital stock in exchange for approximately 124,088 shares of Company common stock with an aggregate fair value of $7.7 million, of which 34,420 shares were subject to a one-year holdback and were issued in 2015.

As of the date of the acquisition, the remaining non-controlling interest on the Company's balance sheet of $2.8 million was reclassified to additional paid-in capital given the Company's complete ownership of Incapsula.

3. Acquisition

On December 15, 2016, the Company acquired certain assets and liabilities of Camouflage Software Inc. ("Camouflage"), a private company based in Newfoundland, Canada. Camouflage is a provider of data management, security and data masking solutions. The Company acquired Camouflage for cash consideration of $4.5 million. Approximately $0.6 million of the consideration is a holdback payment commitment due 24 months from the date the acquisition closes. Imperva acquired certain tangible assets and also assumed liabilities of Camouflage. Substantially all of the consideration was allocated to goodwill and intangible assets, such as developed technology, customer relationships and trade name.

The acquisition was accounted for in accordance with Accounting Standards Codification (ASC) No. 805, Business Combinations, and the results of operations of the acquisition have been included in the Company's consolidated results of operations from the date of the acquisition. The acquisition was not material to the Company's results of operations in the period of acquisition.

While management uses its best estimates and assumptions as part of the purchase price allocation process to value assets acquired and liabilities assumed at the business combination date, its estimates and assumptions are subject to refinement. As a result, during the preliminary purchase price allocation period, which may be up to one year from the business combination date, the Company may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. The Company records adjustments to assets acquired or liabilities assumed subsequent to the purchase price allocation period in its operating results in the period in which the adjustments were determined.

The purchase consideration allocated to the tangible assets acquired is assigned based on the fair values as of the date of the acquisition. The Company believes that these identified intangible assets will have no residual value after their estimated economic useful lives. The identifiable intangible assets are subject to amortization on a straight-line basis over a seven-year estimated useful life as this best approximates the benefit period related to these assets.

The excess of the purchase consideration over the identified tangible and intangible assets, less liabilities assumed, is recorded as goodwill and primarily reflects the value of the synergies expected to be generated from combining the Company’s and the acquired entities’ technology and operations.

The following table summarizes the preliminary allocation of the consideration to the fair value of the tangible and intangible assets acquired and liabilities assumed as of the acquisition date based on information available at the business combination date (in thousands):

| | |
|---|---|
| Acquired Technology | $1,050 |
| Customer relationships | 480 |
| Trade name and other | 280 |
| Goodwill | 2,476 |
| Total intangible assets acquired | 4,286 |
| Other acquired tangible assets | 363 |
| Liability assumed | (130 ) |
| Fair value of assets acquired | $4,519 |

The total purchase consideration was allocated using the information available at the business combination date. Goodwill recorded in connection with the acquisition is deductible for U.S. income tax purposes.

The Company expensed the related acquisition costs, consisting primarily of legal costs in the amount of $0.1 million in general and administrative expenses. The Company's management believes that the goodwill represents the synergies expected from combining the acquired technology and operations with those of Imperva.

The results of operations related to the Camouflage assets and liabilities have been included in the Company's consolidated statements of operations from the acquisition date. Pro forma results of operations have not been presented because the acquisition was not material to the Company's results of operations.

4. Cash, Cash Equivalents and Short-Term Investments

Cash, cash equivalents and short-term investments consist of the following (in thousands):

| | As of December 31, 2016 | | | |
|---|---|---|---|---|
| | Amortized Cost | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value |
| Cash and cash equivalents: | | | | |
| Cash | $63,642 | $ — | $ — | $63,642 |
| Commercial paper | 6,995 | — | 2 | 6,993 |
| Money market funds | 36,708 | — | — | 36,708 |
| Total | $107,345 | $ — | $ 2 | $107,343 |
| Short-term investments: | | | | |
| Commercial paper | $14,245 | $ — | $ 8 | $14,237 |
| Corporate debt obligations | 110,062 | — | 347 | 109,715 |

| | | | | | | |
|---|---|---|---|---|---|---|
| US government agencies | 18,998 | | 2 | | 50 | 18,950 |
| Bank deposits | 10,846 | | 1 | | — | 10,847 |
| Total | $154,151 | $ | 3 | $ | 405 | $153,749 |

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| | As of December 31, 2015 | | | |
|---|---|---|---|---|
| | Amortized Cost | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value |
| Cash and cash equivalents: | | | | |
| Cash | $57,906 | $ — | $ — | $57,906 |
| Bank deposits | 10,253 | — | — | 10,253 |
| Commercial paper | 13,896 | — | 3 | 13,893 |
| Money market funds | 86,200 | — | — | 86,200 |
| Total | $168,255 | $ — | $ 3 | $168,252 |
| Short-term investments: | | | | |
| Corporate debt obligations | $86,590 | $ 2 | $ 300 | 86,292 |
| Bank deposits | 10,263 | — | — | 10,263 |
| Total | $96,853 | $ 2 | $ 300 | $96,555 |

The following table sets forth the cost and estimated fair value of short-term investments based on stated effective maturities as of December 31, 2016 (in thousands):

| | As of December 31, 2016 | |
|---|---|---|
| | Amortized Cost | Estimated Fair Value |
| Short-term investments: | | |
| Due in 2017 | $84,406 | $84,315 |
| Due in 2018 | 69,745 | 69,434 |
| Total | $154,151 | $153,749 |

The Company reviews its short-term investments on a regular basis to evaluate whether or not any security has experienced an other-than-temporary decline in fair value. The Company considers factors such as the length of time and extent to which the market value has been less than the cost, the financial condition and near-term prospects of the issuer and its intent to sell, or whether it is more likely than not the Company will be required to sell, the investment before recovery of the investment's amortized cost basis. If the Company believes that an other-than-temporary decline exists in one of these securities, the Company writes down these investments to fair value. For debt securities, the portion of the write-down related to credit loss would be recorded to other income (expense), net, in the Company's condensed consolidated statements of operations. Any portion not related to credit loss would be recorded to accumulated other comprehensive income (loss), which is reflected as a separate component of stockholders' equity in the Company's condensed consolidated balance sheets. During the years ended December 31, 2016 and 2015, the Company did not consider any of its investments to be other-than-temporarily impaired.

The following tables show the short-term investments in an unrealized loss position and the related gross unrealized losses and fair value and length of time that the short-term investments have been in a continuous unrealized loss position (in thousands):

| | As of December 31, 2016 | | | | | |
|---|---|---|---|---|---|---|
| | Less than 12 Months | | 12 Months or Greater | | Total | |
| | Fair Value | Unrealized Losses | Fair Value | Unrealized Losses | Fair Value | Unrealized Losses |
| Commercial paper | $14,237 | $ 8 | | | $14,237 | $ 8 |
| Corporate debt obligations | 78,821 | 323 | 29,689 | 24 | 108,510 | 347 |
| US government agencies | 11,451 | 46 | 3,496 | 4 | 14,947 | 50 |
| | $104,509 | $ 377 | $33,185 | $ 28 | $137,694 | $ 405 |

| | As of December 31, 2015 | | | | | |
|---|---|---|---|---|---|---|
| | Less than 12 Months | | 12 Months or Greater | | Total | |
| | Fair Value | Unrealized Losses | Fair Value | Unrealized Losses | Fair Value | Unrealized Losses |
| Corporate debt obligations | $73,673 | $ 286 | $10,609 | $ 14 | $84,282 | $ 300 |
| | $73,673 | $ 286 | $10,609 | $ 14 | $84,282 | $ 300 |

5. Fair Value of Financial Instruments

The Company evaluates assets and liabilities subject to fair value measurements on a recurring basis to determine the appropriate level in which to classify them for each reporting period. The following table sets forth the Company's assets and liabilities that were measured at fair value as of December 31, 2016 and 2015, by level within the fair value hierarchy (in thousands):

| | As of December 31, 2016 | | | |
|---|---|---|---|---|
| | Level I | Level II | Level III | Fair Value |
| Financial Assets: | | | | |
| Cash equivalents: | | | | |
| Commercial paper | — | 6,993 | — | 6,993 |
| Money market funds | 36,708 | — | — | 36,708 |
| Short-term investments: | | | | |
| Commercial paper | — | 14,237 | — | 14,237 |
| Corporate debt obligations | — | 109,715 | — | 109,715 |
| US government agencies | — | 18,950 | — | 18,950 |
| Bank deposits | — | 10,847 | — | 10,847 |
| Total financial assets | $36,708 | $160,742 | $ — | $197,450 |
| Financial Liability: | | | | |
| Accrued and other current liabilities - Forward foreign exchange contracts | $— | $639 | $ — | $639 |

| | As of December 31, 2015 | | | |
|---|---|---|---|---|
| | Level I | Level II | Level III | Fair Value |
| Financial Assets: | | | | |
| Cash equivalents: | | | | |
| Bank deposits | $— | $10,253 | $ — | $10,253 |
| Commercial paper | — | 13,893 | — | 13,893 |
| Money market funds | 86,200 | — | — | 86,200 |
| Short-term investments: | | | | |
| Corporate debt obligations | — | 86,292 | — | 86,292 |
| Bank deposits | — | 10,263 | — | 10,263 |
| Total financial assets | $86,200 | $120,701 | $ — | $206,901 |
| Financial Liability: | | | | |
| Accrued and other current liabilities - Forward foreign exchange contracts | $— | $595 | $ — | $595 |

In addition to the amounts disclosed in the above table, the fair value of the Company's Israeli severance pay assets, which were comprised of Level II assets, was $5.1 million and $4.5 million as of December 31, 2016 and 2015, respectively.

The Company's cash equivalents and short-term investments are classified within Level 1 or Level 2 of the fair value hierarchy because they are valued using quoted market prices, broker or dealer quotations, or alternative pricing sources with reasonable levels of price transparency. The types of instruments valued based on quoted market prices in active markets include mutual funds and money market securities. Such instruments are generally classified within Level 1 of the fair value hierarchy. The types of instruments valued based on quoted prices in less active markets, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the asset or liability, include U.S. agency securities, investment-grade corporate bonds, term deposits and commercial paper. Such instruments are generally classified within Level 2 of the fair value hierarchy. There were no transfers between Level 1, Level 2 and Level 3 during the years ended December 31, 2016 and 2015.

## 6. Derivative Instruments

The Company's primary objective for holding derivative instruments is to reduce its exposure to foreign currency rate changes. The Company reduces its exposure by entering into forward foreign exchange contracts with respect to operating expenses that are forecast to be incurred in currencies other than U.S. dollars. Substantially all of the Company's revenue and capital purchasing activities and a majority of its operating expenditures are transacted in U.S. dollars. However, certain operating expenditures are incurred in or exposed to other currencies, primarily the Israeli shekel, the British Pound and the Euro.

The Company has established forecasted transaction currency risk management programs to protect against fluctuations in fair value and the volatility of future cash flows caused by changes in exchange rates. The Company's currency risk management program includes forward foreign exchange contracts designated as cash flow hedges. These forward foreign exchange contracts generally mature within 12 months. The Company does not enter into derivative financial instruments for trading purposes.

Derivative instruments measured at fair value and their classification on the consolidated balance sheets are presented in the following tables (in thousands):

| | Liability as of December 31, | | | |
|---|---|---|---|---|
| | 2016 | | 2015 | |
| | Notional Amount | Fair Value | Notional Amount | Fair Value |
| Foreign exchange forward contract derivatives in cash flow hedging relationships - included in accrued and other current liabilities | $60,756 | $ 639 | $47,231 | $ 595 |

Gains (losses) on derivative instruments accounted for as hedges and their classification on the consolidated statement of operations, are presented in the following tables (in thousands):

| | Years ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Foreign Exchange Forward Contract Derivatives in cash flow hedging relationships: | | | |
| Gains recognized in OCI (a) | $1,775 | $834 | $191 |
| Losses recognized in OCI (a) | $(1,909) | $(1,399) | $(1,846) |
| Gains recognized from accumulated OCI into net loss (b) | $257 | $— | $55 |
| Losses recognized from accumulated OCI into net loss (b) | $(347) | $(972) | $(708) |

(a) Net change in the fair value of the effective portion classified in other comprehensive income (loss) ("OCI").

(b) Effective portion of cash flow hedges reclassified from accumulated other income (loss), into net loss, of which $(8), $(107) and $(72) were recognized within cost of sales for the years ended December 31, 2016, 2015 and 2014, respectively, and $(82), $(865), and $(581) were recognized within operating expenses for the year ended December 31, 2016, 2015 and 2014, respectively. All amounts are reflected with the respective consolidated statement of operations.

7. Consolidated Balance Sheet Components

Allowance for Doubtful Accounts

The allowance for doubtful accounts is comprised of the following activity (in thousands):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Allowance for doubtful accounts and sales returns reserve, beginning balance | $1,438 | $215 | $410 |
| Allowance for doubtful accounts, beginning balance | $1,115 | $215 | $410 |
| Charged to costs and expenses, net of recoveries | 315 | 1,044 | 418 |
| Deductions (write-offs) | (477) | (144) | (613) |
| Allowance for doubtful accounts, ending balance | 953 | 1,115 | 215 |
| Sales returns reserve, beginning balance | 323 | | |
| Charged to revenue | 1,560 | 677 | - |
| Deductions (write-offs) | (1,052) | (354) | - |
| Sales returns reserve, ending balance | 831 | 323 | - |
| Total allowance for doubtful accounts and sales returns reserve, ending balance | $1,784 | $1,438 | $215 |

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following (in thousands):

| | As of December 31, | |
|---|---|---|
| | 2016 | 2015 |
| Prepaid expenses | 4,980 | 5,111 |
| Prepaid income taxes | 1,559 | 585 |
| Interest receivable | 758 | 467 |
| Other | 625 | 1,802 |
| Total prepaid expenses and other current assets | $7,922 | $7,965 |

Property and Equipment, net

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

| | As of December 31, | |
|---|---|---|
| | 2016 | 2015 |
| Computers and related equipment | $25,285 | $15,953 |
| Office furniture and equipment | 3,228 | 1,632 |
| Leasehold improvements | 11,947 | 7,791 |
| Total property and equipment | 40,460 | 25,376 |
| Less: accumulated depreciation and amortization | (18,964) | (13,212) |
| Total property and equipment, net | $21,496 | $12,164 |

Depreciation and amortization expense totaled $7.5 million, $4.5 million and $3.6 million, for the years ended December 31, 2016, 2015 and 2014, respectively.

Accrued Compensation and Benefits

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

| | As of December 31, | |
|---|---|---|
| | 2016 | 2015 |
| Salary and related benefits | $9,588 | $7,215 |
| Accrued vacation | 4,178 | 3,774 |
| Accrued incentive payments | 5,942 | 9,270 |
| Accrued restructuring | 1,132 | - |
| Total accrued compensation and benefits | $20,840 | $20,259 |

Accrued and Other Current Liabilities

Accrued and other current liabilities consist of the following (in thousands):

| | As of December 31, | |
|---|---|---|
| | 2016 | 2015 |
| Accrued expenses | $4,616 | $4,633 |
| Derivative liability | 639 | 595 |
| Income tax payable | 435 | 323 |
| Short-term deferred rent | 461 | 283 |
| Skyfence holdback liability | - | 7,556 |
| Sales Taxes Payable | 849 | 411 |
| Other | 683 | 482 |
| Total accrued and other current liabilities | $7,683 | $14,283 |

Other Liabilities

Other long-term liabilities consist of the following (in thousands):

| | As of December 31, 2016 | 2015 |
|---|---|---|
| Long-term deferred rent | $2,111 | $1,926 |
| Deferred tax liability | 1,265 | 1,145 |
| Uncertain Tax Positions | 2,446 | 1,236 |
| Other | 815 | 208 |
| Total other liabilities | $6,637 | $4,515 |

8. Goodwill and Acquired Intangible Assets

In December 2016, the Company completed the acquisition of Camouflage Software Inc., which $2.5 million was allocated to goodwill and $1.8 million to acquired intangible assets. The Company did not have any goodwill impairments during 2016, 2015 or 2014.

The changes in the carrying amount of goodwill for the years ended December 31, 2016 and 2015 were as follows (in thousands):

| | |
|---|---|
| Balance as of December 31, 2015 | $34,972 |
| Goodwill acquired | 2,476 |
| Balance as of December 31, 2016 | $37,448 |

Acquired intangible assets subject to amortization as of December 31, 2016 and 2015 were as follows (in thousands):

| | As of December 31, 2016 Gross Carrying Amount | Accumulated Amortization | Net Book Value |
|---|---|---|---|
| Acquired Technology | $11,718 | $ (4,085 ) | $7,633 |
| Customer relationships | 480 | - | 480 |
| Trade name and other | 280 | - | 280 |
| Total | $12,478 | $ (4,085 ) | $8,393 |

| | As of December 31, 2015 Gross | Accumulated | Net |
|---|---|---|---|

| | Carrying Amount | Amortization | Book Value |
|---|---|---|---|
| Acquired Technology | $10,668 | $ (2,677 ) | $7,991 |
| Total | $10,668 | $ (2,677 ) | $7,991 |

Amortization expense related to acquired intangible assets was $1.4 million for the year ended December 31, 2016. Acquired intangible assets are amortized over their estimated useful lives of 7 to 10 years. Acquired technology, customer relationships, and trade names and other have weighted-average useful lives from the date of purchase of 5.2 years, 7.0 years, and 7.0 years, respectively. As of December 31, 2016, the Company expects amortization expense in future periods to be as follows (in thousands):

| Fiscal Year | Acquired Intangibles |
|---|---|
| 2017 | $ 1,666 |
| 2018 | 1,666 |
| 2019 | 1,666 |
| 2020 | 1,666 |
| Thereafter | 1,729 |
| Total expected amortization expense | $ 8,393 |

9. Other Income (Expense), net

Other income (expense), net is comprised of the following (in thousands):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Other Income: | | | |
| Interest income | $1,369 | $701 | $163 |
| Foreign currency forward contract gains, net | 9 | - | - |
| Foreign currency exchange gains, net | 209 | 5 | 8 |
| Total other income | 1,587 | 706 | 171 |
| Other Expense: | | | |
| Skyfence holdback liability accretion | (6) | (212) | (186) |
| Foreign currency exchange losses, net | (708) | (322) | - |
| Bank charges and Other expenses | (950) | (574) | (205) |
| Total other expense | (1,664) | (1,108) | (391) |
| Total other income (expense), net | $(77) | $(402) | $(220) |

10. Revolving Credit Facility

In September 2010, the Company entered into a revolving credit facility with a financial institution. The agreement, provided for maximum borrowing capacity of up to $7.5 million. In November 2016, we terminated the credit facility. As of December 31, 2016 and 2015, there was no balance outstanding on the credit facility.

11. Commitments and Contingencies

(a) Operating Leases

The Company rents its facilities under operating leases with lease periods expiring from 2017 through 2021. Future minimum payments under these facility operating leases are as follows as of December 31, 2016 (in thousands):

| | Operating Leases | Estimated Sublease Income |
|---|---|---|
| Year Ending December 31: | | |

| | | |
|---|---|---|
| 2017 | $ 7,598 | $ 611 |
| 2018 | 8,054 | 399 |
| 2019 | 4,650 | - |
| 2020 | 4,243 | - |
| 2021 | 106 | - |
| Total | $ 24,651 | $ 1,010 |

Rent expense for the Company's operating leases is recognized on a straight-line basis over the lease term. Rent expense for the years ended December 31, 2016, 2015 and 2014 was $6.1 million, $4.6 million, and $3.9 million, respectively.

In connection with leases for office space, the Company received tenant improvement allowances of $0.7 million, $0.3 million and $0.6 million during the years ended December 31, 2016, 2012 and 2010, respectively. The Company has recorded the tenant improvement allowances as a leasehold improvement within property and equipment, net and as deferred rent within other liabilities on the consolidated balance sheets. The deferred rent liability is amortized to rent expense over the term of the lease on a straight-line basis. The leasehold improvements are being amortized to expense over the period from when the improvements were placed into service until the end of their useful life, which is the end of the respective lease term.

In addition, certain of the Company's operating lease agreements for office space also include rent holidays and scheduled rent escalations during the initial lease term. The Company has recorded the rent holidays as a deferred rent within other liabilities on the consolidated balance sheets. The Company recognizes the deferred rent liability and scheduled rent increase on a straight-line basis into rent expense over the lease term commencing on the date the Company takes possession of the lease space.

As of December 31, 2016 and 2015 the Company has $1.9 million and $1.7 million, respectively, in restricted deposits to secure bank guarantees provided to the lessor.

(b) Cancelable Lease Agreement

The Company leases motor vehicles under a cancelable operating lease agreement. The Company has an option to cancel the lease agreement, which may result in penalties in a maximum amount of $0.1 million as of December 31, 2016. Motor vehicle lease expenses for the years ended December 31, 2016, 2015 and 2014 were $2.7 million, $2.4 million and $2.6 million, respectively.

(c) Purchase Commitments

As of both December 31, 2016 and 2015, the Company had purchase commitments of $3.8 million and $5.8 million, respectively, to purchase inventory, trial units, and research and development equipment from its vendors. The purchase commitments result from the Company’s contractual obligation to order or build inventory in advance of anticipated sales. According to the Company’s agreements with its vendors, the Company committed to purchase inventory within six months from the date the inventory arrived at the vendor’s warehouse.

(d) Litigation

From time to time, the Company may be subject to other legal proceedings and claims in the ordinary course of business.

On April 11, 2014, a purported shareholder class action lawsuit was filed in the United States District Court for the Northern District of California against the Company and certain of its current and former officers. On August 7, 2014, the Court entered an order appointing lead plaintiff and counsel for the purported class. The lead plaintiff filed an amended complaint on October 10, 2014. The lawsuit named the Company and certain of its current and former officers and purported to bring suit on behalf of those investors who purchased the Company’s publicly traded securities between May 2, 2013 and April 9, 2014. The plaintiff alleged that defendants made false and misleading statements about the Company’s operations and business and financial results and purported to assert claims for violations of the federal securities laws. The amended complaint sought unspecified compensatory damages, interest thereon, costs incurred in the action and equitable/injunctive or other relief. On January 6, 2015, defendants filed a motion to dismiss the amended complaint. On September 17, 2015, the Court granted defendants’ motion to dismiss with leave to amend. The lead plaintiff filed an amended complaint on January 13, 2016, again naming the same current and former officers, alleging false and misleading statements about the Company’s operations and business and financial results, and seeking the same relief. On February 10, 2016, defendants filed a motion to dismiss the amended complaint. On May 16, 2016, the Court granted the motion in part and denied the motion in part. On September 7, 2016, defendants filed their operative answer to the amended complaint. On October 19, 2016, plaintiff filed a motion for class certification.

In addition, the Company has received, and may in the future continue to receive, claims from third parties asserting, among other things, infringement of their intellectual property rights. Future litigation may be necessary to defend the Company, its channel partners and its customers by determining the scope, enforceability and validity of third-party proprietary rights or to establish its proprietary rights.

In the opinion of management, liabilities associated with these claims, while possible, are not probable at this time, and therefore the Company has not recorded any accrual for them as of December 31, 2016 and 2015. Further, any possible range of loss cannot be reasonably estimated at this time. The ultimate outcome of any litigation is uncertain and, regardless of outcome, litigation can have an adverse impact on the Company because of defense costs, potential negative publicity, diversion of management resources and other factors. Accordingly, there can be no assurance that existing or future legal proceedings arising in the ordinary course of business or otherwise will not have a material adverse effect on the Company’s business, consolidated financial position, results of operations or cash flows.

(e) Indemnification

Under the indemnification provisions of its standard sales contracts, the Company agrees to defend its channel partners and end 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 and settlements entered on such claims. The Company’s exposure under these indemnifications provisions is generally limited to the total amount paid under the agreement. However, certain agreements included indemnification provisions that could potentially expose the Company to losses in excess of the amount received under the agreement. To date, there have been no claims under such indemnification provisions. Accordingly, the Company has not recorded a liability on its consolidated balance sheets for these indemnification provisions.

In addition to the foregoing, the Company maintains director and officer insurance, which may cover certain liabilities arising from its obligation to indemnify its directors and officers.

12. Capital Stock

Common Stock Reserved for Issuance

The Company had reserved shares of common stock, on an as if converted basis, for issuance as follows:

| | As of December 31, | |
|---|---|---|
| | 2016 | 2015 |
| Issuance in connection with outstanding stock options | 1,570,765 | 1,949,089 |
| Issuance in connection with restricted stock units outstanding | 1,994,790 | 1,898,025 |
| Reserved for future stock option and restricted stock unit grants | 2,464,181 | 1,726,346 |
| Reserved for future issuance under the employee stock purchase plan | 1,161,396 | 1,049,524 |
| | 7,191,132 | 6,622,984 |

Preferred Stock

Our board of directors is authorized, subject to any limitations prescribed by law, without stockholder approval, to issue from time to time up to an aggregate of 5,000,000 shares of preferred stock, in one or more series, each series to have such rights and preferences, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences as the Company's board of directors determines. The rights of the holders of common stock will be subject to, and may be adversely affected by, the rights of holders of any preferred stock that may be issued in the future. The Company currently has no shares of preferred stock outstanding and the Company has no present plans to issue any shares of preferred stock.

Stock Plans

(a) 2003 Stock Plan

During 2003, the Board of Directors adopted the 2003 Stock Plan (the "2003 Plan"), which allows for the granting of both incentive stock options and non-qualified stock options and the direct award or sale of shares of the Company's common stock (including restricted common stock) to officers, employees, directors, consultants and other key persons. In connection with the Company's initial public offering, which was completed in November 2011, the Board of Directors determined not to grant any further awards under the 2003 Plan upon completion of the public offering. The 2011 Stock Option and Incentive Plan (the "2011 Plan") replaced the 2003 Plan in November 2011. Under the 2003 Plan, incentive stock options could have been granted to employees with exercise prices of no less than the fair value of the common stock on the grant date, and non-qualified options could have been granted to employees, directors, or consultants at exercise prices of no less than 85% of the fair value of the common stock on the grant date, as determined by the Board of Directors. If, at the time the Company granted an option, the optionee directly or by attribution owned stock possessing more than 10% of the total combined voting power of all classes of stock of the Company, the option price had to have been at least 110% of the fair value. Options granted under the 2003 Plan generally expire no later than ten years from the date of grant and, in general, vest four years from the date of grant.

(b) 2011 Stock Option and Incentive Plan

In September 2011, the Board of Directors adopted the 2011 Stock Option and Incentive Plan (the "2011 Plan") which was subsequently approved by the Company's stockholders. The 2011 Plan replaced the 2003 Plan and the Company no longer grants awards under the 2003 Plan. The Company initially reserved 1,000,000 shares of common stock for issuance under the 2011 Plan. In addition, 955,568 reserved but unissued shares under the 2003 Stock Plan were added to the number of shares reserved for issuance under the 2011 Plan. The 2011 Plan also provided that the number of shares reserved and available for issuance under the plan would automatically increase each January 1, beginning in 2012 and ending in 2015, by 4% of the outstanding number of shares of common stock on the immediately preceding December 31. The last automatic increase occurred on January 1, 2015. In May 2016, the Company's stockholders approved of an increase to the share reserve under the 2011 Stock Plan and Incentive Plan by 1,300,000 shares.

The 2011 Plan permits the granting of incentive stock options, non-qualified stock options, restricted stock units (RSUs), stock appreciation rights, restricted shares of common stock and performance share awards. The exercise price of stock options may not be less than 100% of the fair market value of the common stock on the date of grant. Options granted pursuant to the 2011 Plan generally expire no later than ten years from the date of grant. The Company also grants RSUs, which generally vest over either a four-year period with 25% vesting at the end of one year and the remainder vesting quarterly thereafter or they completely vest at the end of a three-year period. Additionally, the Company grants performance-based RSUs to its executives on an annual basis.

(c) 2011 Employee Stock Purchase Plan

In September 2011, the Board of Directors adopted the 2011 Employee Stock Purchase Plan (the "ESPP") which was subsequently approved by the Company's stockholders. The ESPP took effect on the effective date of the registration statement for the Company's IPO. The ESPP permits eligible employees to acquire shares of the Company's common stock by accumulating funds through periodic payroll deductions of up to 15% of base salary. Each offering period may run for no more than 24 months and consist of no more than five purchase periods. The purchase price for shares of the Company's common stock purchased under the ESPP will be 85% of the lesser of the fair market value of the Company's common stock on the first day of the offering period or the last trading day of the applicable purchase period within that offering period.

The Company has initially reserved a total of 500,000 shares of common stock for future issuance under the ESPP. The number of shares reserved for issuance under the ESPP will increase automatically on January 1 of each of the first eight years commencing in 2012 by the number of shares equal to 1% of the Company's total outstanding shares as of the immediately preceding December 31. The Board of Directors or compensation committee may reduce the amount of the increase in any particular year. No more than 20,000,000 shares of common stock may be issued under the ESPP and no other shares may be added to the ESPP without the approval of the Company's stockholders. On January 1, 2016, the share reserve under the 2011 Employee Stock Purchase Plan was automatically increased by 318,371 shares.

(d) Inducement Stock Option Plans and Agreement and Inducement Restricted Stock Unit Plans and Agreement

In August 2014 and August 2015, the Compensation Committee of the Board of Directors adopted Inducement Stock Option Plan and Agreement (the "Inducement Option Plan") and Inducement Restricted Stock Unit Plan and Agreement (the "Inducement RSU Plan"), in each case created as employment inducement awards. In accordance with the terms of the Inducement Option Plans, the Company issued options to purchase up to 290,000 shares of the Company's common stock at an exercise price equal to the fair market value of a share of the Company's common stock on the dates of grant of the options. The options, which have a ten-year term, vest at the rate of 25% of the shares on each of the first anniversary of the vesting commencement date with an additional 6.25% of the shares subject to the option vesting each quarter thereafter so long as the participant has not been terminated. In accordance with the terms of the Inducement RSU Plans, the Company issued RSUs representing a total of 290,000 shares of the Company's common stock. The RSUs, which expire following settlement, vest at the rate of 25% of the shares on each of the first anniversary of the vesting commencement date with an additional 6.25% of the shares subject to the RSU vesting each quarter thereafter so long as the participant has not been terminated.

(e) 2015 Equity Inducement Plan

In October 2015, the Board of Directors adopted the 2015 Equity Inducement Plan, a non-stockholder approved plan that provides for the granting of stock options and RSUs as employment inducement awards and in connection with acquisitions, subject to compliance with applicable securities laws and stock exchange requirements for such plans.  The Company has reserved 100,000 shares of common stock for issuance under the 2015 Equity Inducement

Plan.  No awards have been made under the 2015 Equity Inducement Plan and the entire reserve remains available for grant.  Under the terms of the 2015 Equity Inducement Plan, the exercise price of stock options may not be less than 100% of the fair market value of common stock on the date of grant and generally expire no later than ten years from the date of grant.

(f) Incapsula 2010 Share Incentive Plan

In March 2010, Incapsula's board of directors adopted the Incapsula 2010 Share Incentive Plan (the "Incapsula Plan"), pursuant to which Incapsula was able to grant to its employees and service providers options to purchase shares of its common stock, restricted shares, or RSUs. As of November 2013, the total number of shares of common stock that could have been granted under the Incapsula Plan was not to exceed 10,263,211 shares in the aggregate, subject to certain adjustments.

In November 2013, the board of directors of Incapsula approved the grant of RSUs for 7,095,461 shares of Incapsula's common stock ("Incapsula RSUs"). As part of the Incapsula acquisition, the Incapsula RSUs were assumed and replaced by performance-based RSUs for Company Common Stock to be issued to continuing employees of Incapsula. The Incapsula RSUs were earned upon Incapsula's achievement of revenue targets for Incapsula and Incapsula-related products and services for fiscal year 2014 and were converted into approximately 198,825 shares of Company Common Stock at the same exchange ratio applicable to the shares of Incapsula common stock acquired in the acquisition. In addition to performance conditions, the awards were dependent on the market price of Imperva's common stock during February 2014, which was deemed a market condition under ASC 718.

The outstanding options and RSUs under the Incapsula 2010 Stock Incentive Plan were assumed as part of the Incapsula acquisition and are equivalent to 247,184 shares of Company common stock on an as-converted basis. The Company does not intend to grant any additional shares under the Incapsula 2010 Stock Incentive Plan.

(g) Option Activity

The following table summarizes option activity under the Plans and related information:

| | Options Outstanding | | Weighted-Average Remaining | |
|---|---|---|---|---|
| | Number of Shares | Weighted Average Exercise Price | Contractual Term (in years) | Aggregate Intrinsic Value (in thousands) (1) |
| Outstanding - December 31, 2013 | 1,675,506 | $ 23.78 | 8.01 | $ 40,813 |
| Granted | 1,256,559 | $ 41.39 | | |
| Options assumed in acquisitions | 72,607 | $ 13.30 | | |
| Exercised or released | (496,297 ) | $ 14.85 | | |
| Cancelled or forfeited | (264,012 ) | $ 35.85 | | |
| Outstanding - December 31, 2014 | 2,244,363 | $ 33.83 | 8.27 | $ 38,457 |
| Granted | 696,971 | $ 49.20 | | |
| Exercised or released | (636,424 ) | $ 29.44 | | |
| Cancelled or forfeited | (355,821 ) | $ 42.00 | | |
| Balances - December 31, 2015 | 1,949,089 | $ 39.27 | 8.09 | $ 47,480 |
| Granted | 48,260 | $ 53.59 | | |
| Exercised or released | (184,737 ) | $ 29.24 | | |
| Cancelled or forfeited | (241,847 ) | $ 47.35 | | |
| Balances - December 31, 2016 | 1,570,765 | $ 39.64 | 6.90 | $ 9,226 |
| Vested and expected to vest - December 31, 2016 | 1,463,772 | $ 39.03 | 6.82 | $ 9,061 |
| Exercisable - December 31, 2016 | 967,186 | $ 36.66 | 6.31 | $ 7,339 |

(1) The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying awards and the closing stock price of $38.40 of the Company's common stock on December 31, 2016

Additional information regarding the Company's stock options outstanding and exercisable as of December 31, 2016 is summarized below:

| | Options Outstanding | | | Options Exercisable | |
|---|---|---|---|---|---|
| Exercise Prices | Number of Stock Options Outstanding | Weighted Average Remaining Contractual Life (Years) | Weighted Average Exercise Price per Share | Shares Subject to Stock Options | Weighted Average Exercise Price per Share |
| $0.02 to $10.70 | 134,548 | 4.02 | $ 7.01 | 130,579 | $ 7.22 |
| $10.71 to $29.10 | 168,845 | 6.66 | $ 25.73 | 121,118 | $ 25.37 |
| $29.11 to $32.54 | 236,906 | 7.51 | $ 29.40 | 116,285 | $ 29.53 |
| $32.55 to $34.55 | 149,082 | 5.09 | $ 33.78 | 133,559 | $ 33.76 |
| $34.56 to $54.48 | 464,660 | 7.68 | $ 43.41 | 240,153 | $ 43.04 |
| $54.49 to $61.50 | 248,776 | 7.21 | $ 55.16 | 149,677 | $ 54.92 |
| $61.51 to $69.19 | 143,729 | 7.42 | $ 65.04 | 68,611 | $ 64.52 |
| $69.20 to $77.00 | 24,219 | 8.50 | $ 71.73 | 7,204 | $ 71.74 |
| | 1,570,765 | 6.90 | $ 39.64 | 967,186 | $ 36.66 |

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(h) RSU Activity

A summary of RSU activity for the year ended December 31, 2016, is as follows:

| | Number of Restricted Stock Units Outstanding | Weighted-Average Grant Date Fair Value |
|---|---|---|
| Unvested - December 31, 2014 | 2,279,081 | $ 39.07 |
| Granted | 911,734 | $ 53.02 |
| Granted, performance RSUs | 249,220 | $ 42.58 |
| Released | (898,205 ) | $ 34.97 |
| Cancelled or expired | (643,805 ) | $ 35.09 |
| Unvested - December 31, 2015 | 1,898,025 | $ 49.53 |
| Granted | 1,160,062 | $ 47.42 |
| Granted, performance RSUs | 273,900 | $ 51.55 |
| Released | (884,349 ) | $ 43.04 |
| Cancelled or forfeited | (452,848 ) | $ 49.86 |
| Unvested - December 31, 2016 | 1,994,790 | $ 51.42 |

(i) Stock-Based Compensation Expense

The Company recognized stock-based compensation expense under the 2011 Stock Option and Incentive Plan, 2003 Stock Plan, Inducement Plans, 2011 Employee Stock Purchase Plan, and the Incapsula 2010 Share Incentive Plan in the consolidated statements of operations as follows (in thousands):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Cost of revenue | $4,664 | $3,862 | $2,058 |
| Research and development | 14,711 | 13,831 | 8,799 |
| Sales and marketing | 20,510 | 16,717 | 13,558 |
| General and administrative | 17,131 | 16,554 | 12,858 |
| Restructuring charges | 5,859 | - | - |
| Total stock-based compensation expense | $62,875 | $50,964 | $37,273 |

Included in the total above is $3.1 million related to a liability award which is expected to settle in 2017

(j) Determining the Fair Value of RSUs, Performance RSUs, Stock Options, and ESPP

The fair value of RSUs is determined using the closing price of the Company's stock on the date of grant. Compensation is recognized on a straight-line basis over the requisite service period of each grant adjusted for estimated forfeitures.

The fair value of RSUs granted to employees which have multiple performance conditions is determined by the Company using a Monte Carlo simulation model. The key inputs used were the Company's stock price on the date of grant, the expected volatility, the risk free interest rate and a revenue forecast. The Company updates the estimated expense, net of forfeitures, at the end of each reporting period. The expense is recognized on an accelerated basis over the requisite service period, which is generally the vesting period of the respective awards.

The fair value of each stock option and ESPP grant to employees was determined by the Company and its board of directors using the Black-Scholes option-pricing model and assumptions discussed below. Each of these inputs is subjective and generally requires significant judgment to determine.

Expected Term— The expected term represents the period that the Company's stock-based awards are expected to be outstanding. For option grants that are considered to be "plain vanilla," the Company used the simplified method to determine the expected term as provided by the Securities and Exchange Commission. The simplified method is calculated as the average of the time-to-vesting and the contractual life of the options. For option grants that are not considered "plain vanilla", the expected term is derived from historical data on employee exercises and post-vesting employment termination behavior taking into account the contractual life of the award. For ESPP grants, the expected term is based on the length of the offering period, which is six months.

Expected Volatility—The expected volatility was based on our historical volatilities. The volatility is over a period equal to the expected terms of the stock option grants and the offering period for employee stock purchase plan.

Risk-Free Interest Rate—The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant for zero coupon U.S. Treasury notes with maturities approximately equal to the grant's expected term.

Expected Dividend— The Company has never paid dividends and does not expect to pay dividends.

Forfeiture Rate—The Company estimates its forfeiture rate based on an analysis of its actual forfeitures and will continue to evaluate the adequacy of the forfeiture rate based on actual forfeiture experience, analysis of employee turnover behavior, and other factors. The impact from a forfeiture rate adjustment will be recognized in full in the period of adjustment, and if the actual number of future forfeitures differs from that estimated by the Company, the Company may be required to record adjustments to stock-based compensation expense in future periods.

A summary of the weighted-average assumptions is as follows:

| | Years Ended December 31 | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Stock option grants: | | | |
| Dividend rate | 0 % | 0 % | 0 % |
| Risk-free interest rate | 1.4% | 1.8 % | 1.8 % |
| Expected term (in years) | 6.0 | 6.1 | 6.1 |
| Expected volatility | 58 % | 49 % | 46 % |
| ESPP grants: | | | |
| Dividend rate | 0 % | 0 % | 0 % |
| Risk-free interest rate | 0.5% | 0.4 % | 0.1 % |
| Expected term (in years) | 0.5 | 0.5 | 0.5 |
| Expected volatility | 58 % | 65 % | 45 % |

The weighted-average grant date fair value of the Company's stock options granted during the years ended December 31, 2016, 2015 and 2014 was $29.23, $23.75, and $19.36 per share, respectively. The aggregate grant date fair value of the Company's stock options granted to employees during the years ended December 31, 2016, 2015 and 2014 was $1.4 million, $16.6 million, and $24.3 million, respectively. The aggregate grant date fair value of the Company's stock options vested during the years ended December 31, 2016, 2015, and 2014 was $11.9 million, $11.7 million, and $7.2 million, respectively. The fair value of the Company's RSUs vested during the year ended December 31, 2016, 2015 and 2014 was $38.1 million, $31.4 million and $8.3 million, respectively.

The aggregate intrinsic value of options exercised under the Plans was $2.5 million, $21.6 million, and $14.7 million for the years ended December 31, 2016, 2015 and 2014, respectively. The aggregate intrinsic value of options exercised is calculated as the difference between the fair market value of the Company's common stock on the date of the exercise and the exercise price of each option.

As of December 31, 2016, total compensation cost related to unvested stock-based awards granted to employees under the Plans, but not yet recognized, was $69.5 million, net of estimated forfeitures. As of December 31, 2016, this cost will be amortized to expense over a weighted-average remaining period of 2.5 years, and will be adjusted for subsequent changes in estimated forfeitures. Future option grants will increase the amount of compensation expense to be recorded in these periods.

Net cash proceeds from the exercise of stock options and the issuance of common stock in connection with the employee stock purchase plan were $2.4 million, $12.1 million, and $8.5 million for the years ended December 31, 2016, 2015 and 2014, respectively. There was no capitalized stock-based compensation cost during the years ended December 31, 2016, 2015 and 2014. Recognized stock-based compensation tax benefits during the year ended December 31, 2016, 2015 and 2014 was $0.1 million $0.2 million and $0.4 million, respectively.

(k) Common Stock Subject to Repurchase

In connection with the acquisition of Skyfence in the first quarter of 2014, the Company issued 532,262 shares of the Company's common stock with a fair value per share of $59.08 which are subject to forfeiture based upon time-based vesting and continuing employment over the term of the corresponding four-year service period. 421,365 and 236,537 shares were fully vested as of December 31, 2016 and 2015 respectively.

(l) Follow-On Public Offering

In March 2015, the Company completed a follow-on public offering whereby the Company sold 3,450,000 shares of common stock at a price of $39.00 per share, for aggregate net proceeds of $127.9 million, after deducting underwriting discounts, commissions and other offering costs of approximately $6.7 million.

13. Accumulated Other Comprehensive Income (Loss)

The changes in the balances of accumulated other comprehensive income (loss) by component are as follows (in thousands):

| | Years ended December 31, 2016 | | | 2015 | | | 2014 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Unrealized gain (loss) on cash flow hedges | Unrealized gain (loss) on investments | Total | Unrealized gain (loss) on cash flow hedges | Unrealized gain (loss) on investments | Total | Unrealized gain (loss) on cash flow hedges | Unrealized gain (loss) on investments | Total |
| Balance at January 1 | $(1,021) | $ (310) | $(1,331) | $(1,428) | $ (61) | $(1,489) | $(426) | $ (2) | $(428) |
| Other comprehensive income (loss) before reclassifications | (134) | (103) | (237) | (565) | (249) | (814) | (1,655) | (59) | (1,714) |
| Amounts reclassified to net loss | 90 | — | 90 | 972 | — | 972 | 653 | — | 653 |
| Change in other comprehensive income (loss) | (44) | (103) | (147) | 407 | (249) | 158 | (1,002) | (59) | (1,061) |
| Balance at December 31 | $(1,065) | $ (413) | $(1,478) | $(1,021) | $ (310) | $(1,331) | $(1,428) | $ (61) | $(1,489) |

The following is a summary of reclassifications out of accumulated other comprehensive income (loss) for the years 2016, 2015, and 2014 (in thousands):

| Year ended December 31, 2016 | 2015 | 2014 |
|---|---|---|

| | Pre-Tax Amount | Tax Expense (Benefit) | After-Tax Amount | Pre-Tax Amount | Tax Expense (Benefit) | After-Tax Amount | Pre-Tax Amount | Tax Expense (Benefit) | After-Tax Amount |
|---|---|---|---|---|---|---|---|---|---|
| Unrealized gains (losses) on cash flow hedges: | | | | | | | | | |
| Current period unrealized gain (loss) | $(134) | - | $ (134 ) | $(565) | $ — | $ (565 ) | $(1,655) | $ — | $ (1,655 ) |
| Reclassification adjustments [1] | 90 | - | 90 | 972 | — | 972 | 653 | — | $ 653 |
| Unrealized gains (losses) on cash flow hedges, net | (44 ) | - | (44 ) | 407 | - | 407 | (1,002) | — | (1,002 ) |
| Unrealized gains (losses) on investments: | | | | | | | | | |
| Current period unrealized gain (loss) | $(103) | - | (103 ) | $(249) | - | (249 ) | (59 ) | — | (59 ) |
| Reclassification adjustments [2] | — | - | — | — | - | — | — | — | - |
| Unrealized gains (losses) on investments: | (103) | — | (103 ) | (249) | — | (249 ) | (59 ) | — | (59 ) |
| Other comprehensive income (loss) | $(147) | $ — | $ (147 ) | $158 | $ — | $ 158 | $(1,061) | $ — | $ (1,061 ) |

[1] Refer to Note 6 for the affected line items in the consolidated statement of operations
[2] Amount included in other income (expense), net, in the consolidated statement of operations

## 14. Income Taxes

The Company’s geographical breakdown of its loss before provision for income taxes is as follows (in thousands):

| | Years Ended December 31, 2016 | 2015 | 2014 |
|---|---|---|---|
| Domestic | $(72,139) | $(50,892) | $(55,330) |
| Foreign | 3,032 | 2,692 | (2,665 ) |
| Loss before provision for taxes | $(69,107) | $(48,200) | $(57,995) |

The components of the provision for income taxes are as follows (in thousands):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Current | | | |
| Federal | $— | $— | $— |
| State | 62 | 34 | 66 |
| Foreign | 1,654 | 857 | 1,523 |
| Total current provision | 1,716 | 891 | 1,589 |
| Deferred | | | |
| Federal | 130 | 63 | 109 |
| State | 6 | (1) | 6 |
| Foreign | (680) | (271) | (523) |
| Total deferred provision | (544) | (209) | (408) |
| Total | $1,172 | $682 | $1,181 |

Reconciliation of the provision for income taxes at the statutory rate to the Company's provision for income tax is as follows (in thousands):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Tax benefit at federal statutory tax rate | $(23,496) | $(16,388) | $(19,718) |
| Tax benefit at state statutory tax rate | (1,008) | (499) | (1,169) |
| Foreign tax rate differential | 57 | (826) | (526) |
| Unbenefitted loss of consolidated investment | - | - | 2,366 |
| Change in valuation allowance | 17,701 | 9,738 | 12,407 |
| Meals and entertainment | 222 | 44 | 34 |
| Stock compensation | 7,857 | 8,492 | 7,160 |
| Nondeductible expenses and other | (161) | 121 | 627 |
| Provision for income taxes | $1,172 | $682 | $1,181 |

Significant components of the Company's deferred tax assets and liabilities are as follows (in thousands):

| | As of December 31, | |
|---|---|---|
| | 2016 | 2015 |
| Deferred tax assets: | | |
| Reserves and accruals | $2,817 | $2,662 |
| Deferred revenue | 10,379 | 8,724 |
| Stock-based compensation | 7,361 | 4,772 |
| Net operating loss carryforwards | 47,452 | 37,793 |

| | | |
|---|---|---|
| Loss on OCI | 370 | 374 |
| Other | 67 | 32 |
| Gross deferred tax assets | 68,446 | 54,357 |
| Valuation allowance | (68,227) | (53,468) |
| Total deferred tax assets | 219 | 889 |
| Deferred tax liabilities: | | |
| Stock-based compensation | (21) | (21) |
| Depreciation and amortization | (243) | (1,425) |
| Total deferred tax liabilities | (264) | (1,446) |
| Net deferred tax liability | $(45) | $(557) |

Recognition of deferred tax assets is appropriate when realization of these assets is more likely than not. Based upon the weight of available evidence, which includes the Company's historical operating performance and the recorded cumulative net losses in all prior fiscal periods, the Company has provided a full valuation allowance against its U.S. deferred tax assets and Imperva Israel net operating loss generated. The Company's valuation allowance increased by $14.8 million, $13.0 million, and $7.8 million in the years ended December 31, 2016, 2015 and 2014, respectively.

As of December 31, 2016, the Company had U.S. federal and state net operating loss carryforwards of approximately $180.4 million and $85.2 million, respectively. The U.S. federal net operating loss carryforwards will expire at various dates beginning in 2022 through 2036 if not utilized. Most state net operating loss carryforwards will expire at various dates beginning in 2017 through 2036.

The Company uses the “with-and-without” approach to determine the recognition and measurement of excess tax benefits. Accordingly, the Company has elected to recognize excess income tax benefits from stock option exercises in additional paid in capital only if an incremental income tax benefit would be realized after considering all other tax attributes presently available to the Company. As of December 31, 2016, the amount of such excess tax benefits from stock options included in deferred tax assets for federal and state net operating losses were $49.9 million and $29.5 million, respectively. In addition, the Company has elected to account for the indirect effects of stock-based awards on other tax attributes, such as the research and alternative minimum tax credits, through the statement of operations.

Net operating loss carryforwards reflected above may be subject to limitations due to ownership changes as provided in the Internal Revenue Code and similar state provisions.

The Company has not provided U.S. income tax on certain foreign earnings that are deemed to be indefinitely invested outside the U.S. For fiscal years 2016, 2015, and 2014 the amount of accumulated unremitted earnings from the Company’s foreign subsidiaries is approximately $9.7 million, $13.6 million and $12.9 million, respectively. Determination of the amount of unrecognized deferred U.S. income tax liability is not practical due to the complexities associated with the hypothetical calculation.

As of December 31, 2016 and 2015, the Company had gross unrecognized tax benefits of approximately $2.3 million and $1.2 million, respectively, all of which would impact the effective tax rate if recognized. While it is often difficult to predict the final outcome of any particular uncertain tax position, the Company does not believe that the amount of unrecognized tax benefits will change significantly in the next twelve months.

The Company recognizes interest accrued and penalties related to unrecognized tax benefits in its income tax provision. For the years ended December 31, 2016 and 2015, the Company accrued interest of $0.2 million and $0.1 million in income tax expense, respectively.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (in thousands):

| | 2016 | 2015 | 2014 |
|---|---|---|---|
| Balance at January 1 | $1,154 | $672 | $353 |
| Additions based on tax positions taken during the current period | 761 | 401 | 222 |
| Reductions based on tax positions taken during the prior period | (42) | (50) | (47) |
| Additions based on tax positions taken during a prior period | 409 | 131 | 144 |
| Balance at December 31 | $2,282 | $1,154 | $672 |

The Company’s material income tax jurisdictions are the United States (federal), California and Israel. As a result of net operating loss carryforwards, the Company is subject to audit for tax years 2004 and forward for federal purposes and 2006 and forward for California purposes. The Company’s tax years 2011 and forward are subject to audit in Israel. The Company’s 2011 and 2012 tax years are currently under examination by Israeli Tax Authorities. The Company does not expect a material impact on its consolidated financial statements as a result of this examination. There are tax years which remain subject to examination in various other jurisdictions that are not material to the

Company’s financial statements.

The Company's Israeli subsidiaries ("Israeli subsidiaries") research and development intercompany services activity ("R&D activity") have a "Beneficiary Enterprise" status for a separate investment program that was elected by the Israel subsidiaries starting 2012 under the Law for Encouragement of Capital Investments, 1959 (the "Investments Law), amended from time to time. The entitlement to the above benefits is conditional upon the Israeli subsidiaries fulfilling the conditions stipulated by the Investments Law and regulations published there under.

15. Segment Information

The Company operates its business in one operating segment, which is the development, marketing, sales, service and support of cyber-security solutions that protect business-critical data and applications whether in the cloud or on premises. Operating segments are defined as components of an enterprise that engage in business activities for which separate financial information is available and evaluated by the chief operating decision maker in deciding how to allocate resources and assessing performance. The chief operating decision maker is the Company's Chief Executive Officer.

The Company's services revenue was comprised of the following (in thousands):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Maintenance and support | $80,007 | $66,380 | $54,795 |
| Professional services and training | 13,693 | 14,084 | 11,414 |
| Subscriptions | 83,957 | 46,271 | 23,502 |
| Total net services revenue | $177,657 | $126,735 | $89,711 |

The Company's revenue by geographic region, based on the customer's location, is summarized as follows (in thousands):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| United States | $143,607 | $141,225 | $87,155 |
| EMEA | 50,838 | 47,429 | 39,579 |
| APAC | 48,391 | 30,180 | 27,798 |
| Other | 21,619 | 15,464 | 9,478 |
| Total net revenue | $264,455 | $234,298 | $164,010 |

The following table presents long-lived assets by location (in thousands):

| | As of December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| United States | $20,525 | $9,913 | $6,761 |
| Israel | 9,344 | 10,224 | 10,221 |
| Other | 20 | 18 | 35 |
| Total long-lived assets | $29,889 | $20,155 | $17,017 |

16. Restructuring Charges

In November 2016, we implemented a restructuring plan and cost reduction initiatives to reduce expenses, streamline the organization, and reallocate resources to align more closely with future business needs. The restructuring charge during the year ended December 31, 2016 of $8.1 million includes a non-cash charge of $5.8 million related to stock-based compensation and $2.3 million of cash charges related to involuntary employee termination benefits. Of the $2.3 million of cash charges, $1.2 million was paid in 2016 and $1.1 million of the restructuring charges will be paid in the first quarter of 2017, and was recorded as a current liability within accrued compensation and benefits on the consolidated balance sheet as of December 31, 2016. The restructuring activity was substantially complete during the year ended December 31, 2016 and we do not expect material costs associated with the activity in future periods.

17. Net Loss per Share

The following table sets forth the computation of the Company's basic and diluted net loss per share of common stock (in thousands, except per share amounts):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Net loss attributable to Imperva, Inc. stockholders | $(70,279) | $(48,882) | $(58,963) |
| Shares used in computing net loss per share of common stock, basic and diluted | 32,284 | 29,849 | 25,806 |
| Net loss per share of common stock, basic and diluted | $(2.18) | $(1.64) | $(2.28) |

The following outstanding shares of common stock equivalents were excluded from the computation of diluted net loss per share of common stock for the periods presented because including them would have been antidilutive:

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Stock options to purchase common stock | 1,570,765 | 1,949,089 | 2,244,363 |
| Restricted stock units for common stock | 1,994,790 | 1,898,025 | 2,279,081 |
| Restricted shares of common stock subject to repurchase | - | - | 217,621 |
| Restricted stock issued in connection with Skyfence acquisition | 110,897 | 118,961 | 355,499 |

18. Subsequent Event

On February 8, 2017, the Company and its wholly-owned subsidiary, Skyfence Networks Ltd., entered into an Asset Purchase Agreement with Forcepoint LLC, to sell the assets used in the Skyfence cloud access security broker business for total purchase price of approximately $40 million in cash, subject to potential working capital and other adjustments as are set forth in the Asset Purchase Agreement. The sale was completed on February 23, 2017.

We are in the process of finalizing the impact of the transaction on our financial statements, including evaluating the resulting gain that will be recognized, based on all the terms of the agreement. The following table presents our best estimate of the aggregate carrying amounts of the major classes of assets and liabilities related to the Skyfence business to be disposed of as of December 31, 2016:

| | (dollars in thousands) | |
|---|---|---|
| Assets | | |
| Accounts receivables | $ | 463 |
| Prepaid and other current assets | | 15 |
| Property and equipment, net | | 234 |
| Goodwill | | 1,179 |
| Acquired intangible assets, net | | 4,668 |
| Total assets | $ | 6,559 |
| Liabilities: | | |
| Accounts payable | $ | 163 |
| Accrued and other current liabilities | | 76 |
| Deferred revenue | | 1,334 |
| Total liabilities | $ | 1,573 |

## Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

## Item 9A. Controls and Procedures

### Evaluation of Disclosure Controls and Procedures

Our management, with the participation and supervision of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15 under the Exchange Act. In designing and evaluating the 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.

Based on the aforementioned evaluation, our chief executive officer and chief financial officer have concluded that as of December 31, 2016, our disclosure controls and procedures are designed at a reasonable assurance level and are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2016 based on the guidelines established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework) (COSO). Based on the results of this evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2016 to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with accounting principles generally accepted in the United States. We reviewed the results of management's assessment with the Audit Committee of our Board of Directors. The effectiveness of our internal control over financial reporting as of December 31, 2016 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which is included in Part II, Item 8 of this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

Regulations under the Exchange Act require public companies, including our company, to evaluate any change in our "internal control over financial reporting" as such term is defined in Rule 13a-15(f) and Rule 15d-15(f) of the Exchange Act. In connection with their evaluation of our disclosure controls and procedures as of the end of the period covered by this Annual Report on Form 10-K, our chief executive officer and chief financial officer did not identify any changes in our internal control over financial reporting during our fourth quarter ended December 31, 2016 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

# PART III

## Item 10. Directors, Executive Officers and Corporate Governance

Except as set forth below, 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.

We maintain a Code of Business Conduct and Ethics that incorporates our code of ethics applicable to all employees, including all officers. Our Code of Business Conduct and Ethics is published on the Investor Relations section of our website at www.imperva.com. We intend to disclose future amendments to certain provisions of our Code of Business Conduct and Ethics, or waivers of such provisions granted to the principal executive officer, principal financial officer, principal accounting officer or controller or persons performing similar functions on this website within four business days following the date of such amendment or waiver.

## 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 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 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 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 year ended December 31, 2016.

# PART IV

## Item 15. Exhibits and Financial Statement Schedules

(a)(1) Financial Statements: The financial statements filed as part of this Annual Report on Form 10-K are listed on the index to financial statements on page 57.

(2) No Financial Statement Schedules were required to be filed as part of this report because the required information is not present or is not present in amounts sufficient to require submission of the schedules or because the information required is included in the Consolidated Financial Statements or Notes thereto.

(b) Exhibits. The exhibits listed on the Exhibit Index (following the Signatures section of this report) are included, or incorporated by reference, in this Annual Report on Form 10-K.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, on February 24, 2017, the Registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

IMPERVA, INC.

| | |
|---|---|
| By: /s/ Anthony Bettencourt | By: /s/ Terrence Schmid |
| Anthony Bettencourt | Terrence Schmid |
| President and Chief Executive Officer | Chief Financial Officer |

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Anthony Bettencourt and Terrence J. Schmid as his or her attorneys-in-fact, with the power of substitution, for him or her in any and all capacities, to sign any 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 attorney-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 in the capacities and on the dates indicated.

| Signature | Title | Date |
|---|---|---|
| /s/ Anthony Bettencourt<br>Anthony Bettencourt | President, Chief Executive Officer and Chairman of the Board<br>(Principal Executive Officer) | February 24, 2017 |
| /s/ Terrence Schmid<br>Terrence Schmid | Chief Financial Officer<br>(Principal Accounting and Financial Officer) | February 24, 2017 |
| /s/ Geraldine Elliott<br>Geraldine Elliott | Director | February 24, 2017 |
| /s/ Charles Giancarlo<br>Charles Giancarlo | Director | February 24, 2017 |
| /s/ Albert Pimentel<br>Albert Pimentel | Director | February 24, 2017 |
| /s/ Roger Sippl<br>Roger Sippl | Director | February 24, 2017 |
| /s/ Randall Spratt<br>Randall Spratt | Director | February 24, 2017 |
| /s/ Allan Tessler<br>Allan Tessler | Director | February 24, 2017 |
| /s/ James Tolonen<br>James Tolonen | Director | February 24, 2017 |

EXHIBIT INDEX

| Exhibit Number | Exhibit Description | Incorporated by Reference Form | File No. | Exhibit | Filing Date | Provided Herewith |
|---|---|---|---|---|---|---|
| 3.1 | Restated Certificate of Incorporation of Imperva, Inc., as currently in effect. | S-1/A | 333-175008 | 3.3 | 10/28/11 | |
| 3.2 | Amended and Restated Bylaws of Imperva, Inc., as currently in effect. | 8-K | 001-35338 | 3.1 | 2/8/17 | |
| 4.1 | Specimen Certificate Evidencing Shares of Imperva, Inc. common stock. | S-1/A | 333-175008 | 4.1 | 10/28/11 | |
| 10.1# | 2003 Stock Plan, as amended, including addendums and sub-plans. | S-1 | 333-175008 | 10.1 | 6/17/11 | |
| 10.2# | Forms of agreements under the 2003 Stock Plan, as amended. | S-1 | 333-175008 | 10.2 | 6/17/11 | |
| 10.3# | 2011 Stock Option and Incentive Plan and subplan and form agreements thereunder. | 10-Q | 001-35338 | 10.2 | 5/9/16 | |
| 10.4# | 2011 Employee Stock Purchase Plan. | S-1/A | 333-175008 | 10.19 | 10/28/11 | |
| 10.5# | Incapsula, Inc. 2010 Stock Incentive Plan and form agreements thereunder. | S-8 | 333-194955 | 99.1 | 4/1/14 | |
| 10.6# | Form of Imperva, Inc. Stock Option Assumption Agreement for Incapsula, Inc. 2010 Stock Incentive Plan. | S-8 | 333-194955 | 99.2 | 4/1/14 | |
| 10.7# | 2015 Equity Inducement Plan and forms of agreements thereunder. | S-8 | 222-207825 | 99.1 | 11/5/15 | |
| 10.8# | Form of Inducement Stock Option Plan and Agreement between Imperva, Inc. and Anthony Bettencourt. | 8-K | 001-35338 | 10.5 | 8/18/14 | |
| 10.9# | Form of Inducement Restricted Stock Unit Plan and Agreement between Imperva, Inc. and Anthony J. Bettencourt. | 8-K | 001-35338 | 10.6 | 8/18/14 | |
| 10.10# | Form of Amended and Restated Indemnification Agreement. | S-1/A | 333-175008 | 10.4 | 10/28/11 | |
| 10.11# | | S-1/A | 333-175008 | 10.6 | 9/6/11 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Offer Letter, dated September 29, 2010, between Imperva, Inc. and Terrence J. Schmid. | | | | | |
| 10.12# | Offer letter, dated September 30, 2014, between Imperva, Inc. and Michael Mooney | 10-Q | 001-35338 | 10.1 | 5/11/15 | |
| 10.13# | Offer Letter, dated May 5, 2004, between Imperva, Inc. and Mark Kraynak. | 10-Q | 001-35338 | 10.01 | 5/9/13 | |
| 10.14# | Offer Letter, dated August 13, 2014, between Imperva, Inc. and Anthony Bettencourt. | 8-K | 001-35338 | 10.1 | 8/18/14 | |
| 10.15# | Offer Letter, dated June 10, 2011, between Imperva, Inc. and Trâm Phi | 10-Q | 001-35338 | 10.01 | 5/11/12 | |
| 10.16# | Imperva, Inc. Change in Control Plan and Form Notice of Participation. | 10-K | 001-35338 | 10.26 | 3/28/12 | |
| 10.17# | Imperva, Inc. 2017 Senior Management Bonus Plan. | | | | | X |

| | | | | | | |
|---|---|---|---|---|---|---|
| 10.18† | OEM Agreement, dated September 9, 2009, between Imperva, Inc., Imperva, Ltd. and American Portwell Technology Inc. | S-1 | 333-175008 | 10.11 | 6/17/11 | |
| 10.19† | First Amendment to OEM Agreement dated as of June 14, 2012 among Imperva, Inc., Imperva, Ltd. and American Portwell Technology. | 10-Q | 001-35338 | 10.1 | 8/13/12 | |
| 10.20† | Second Amendment to OEM Agreement dated as of January 23, 2013 among Imperva, Inc., Imperva, Ltd. and American Portwell Technology. | 10-K | 001-35338 | 10.17 | 3/15/13 | |
| 10.21† | Third Amendment to OEM Agreement dated as of May 22, 2014 among Imperva, Inc., Imperva, Ltd. and American Portwell Technology. | 10-Q | 001-35338 | 10.1 | 8/8/14 | |
| 10.22 | Lease Agreement, dated February 6, 2008, between Westport Office Park, LLC and Imperva, Inc. | S-1 | 333-175008 | 10.13 | 6/17/11 | |
| 10.23 | First Amendment to Lease (Relocation), dated February 12, 2010, between Westport Office Park, LLC and Imperva, Inc. | S-1 | 333-175008 | 10.14 | 6/17/11 | |
| 10.24 | Second Amendment to Lease (Expansion) effective as of May 16, 2012 between Westport Office Park, LLC and Imperva, Inc. | 8-K | 001-35338 | 10.2 | 5/30/12 | |
| 10.25 | Third Amendment to Lease effective as of August 22, 2012 between Westport Office Park, LLC and Imperva, Inc. | 10-Q | 001-35338 | 10.1 | 11/13/12 | |
| 10.26 | Fourth Amendment to Lease (Expansion) effective as of May 6, 2015 between Westport Office Park, LLC and Imperva, Inc. | 8-K | 001-35338 | 10.1 | 5/12/15 | |
| 10.27 | Fifth Amendment to Lease (Expansion) effective as of October 28, 2015 between Westport Office Park, LLC and Imperva, Inc. | 8-K | 001-35338 | 10.1 | 10/29/15 | |
| 10.28 | Sixth Amendment to Lease effective as of October 28, 2015 between Westport Office Park, LLC and Imperva. Inc. | 8-K | 001-35338 | 10.1 | 10/29/15 | |
| 10.29 | Seventh Amendment to Lease effective as of March 9, 2016 between Westport Office Park, LLC and Imperva. Inc. | 10-Q | 001-35338 | 10.1 | 5/9/16 | |
| 21.1 | Subsidiaries of Imperva, Inc. | | | | | X |
| 23.1 | Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm. | | | | | X |
| 24.1 | Power of Attorney (included on the signature page). | | | | | |
| 31.1 | Certification of Principal Executive Officer Pursuant to Securities Exchange Act Rule 13a-14(a). | | | | | X |

| | | |
|---|---|---|
| 31.2 | Certification of Principal Financial Officer Pursuant to Securities Exchange Act Rule 13a-14(a). | X |
| 32.1* | Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350 and Securities Exchange Act Rule 13a-14(b). | X |
| 32.2* | Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350 and Securities Exchange Act Rule 13a-14(b). | X |
| 101.INS | XBRL Instance Document | X |
| 101.SCH | XBRL Taxonomy Extension Schema Document | X |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase Document | X |
| 101.CAL | XBRL Taxonomy Calculation Linkbase Document | X |
| 101.LAB | XBRL Taxonomy Label Linkbase Document | X |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase Document | X |

† Certain portions of this exhibit have been omitted and filed separately with the SEC pursuant to an order granting confidential treatment under Rule 406 of the Securities Act and Rule 24b-2 of the Securities Exchange Act.
# Indicates management contract or compensatory plan or arrangement.
* This certification is not deemed “filed” for purposes of Section 18 of the Securities Exchange Act, or otherwise subject to the liability of that section. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent that Imperva, Inc. specifically incorporates it by reference.