# 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, 2015
or	
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OF	R 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from	m to
Commission file nu	ımber: <u>0-26330</u>
ASTEA INTERN	ATIONAL INC.
(Exact name of registrant as	
Delaware	23-2119058
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
240 Gibraltar Road, Horsham, Pennsylvania	19044
(Address of principal executive offices)	(Zip Code)
Registrant's telephone number, inclu	uding area code: (215) 682-2500
Securities registered pursuant	<u> </u>
<del>-</del>	
Title of Each Class: Common Stock, \$0.01 Par Value Per Share	Name of Each Exchange on which Registered:  The OTC Markets Group Inc.
	•
Securities registered pursuant to Section	
Indicate by check mark if the registrant is a well-known seasoned issuer, as d	efined in Rule 405 of the Securities Act. Yes □ No ☑
Indicate by check mark if the registrant is not required to file reports pursuan	t to Section 13 or Section 15(d) of the Act. Yes $\square$ No $\boxtimes$
Indicate by check mark whether the registrant (1) has filed all reports require 1934 during the preceding 12 months (or for such shorter period that the regifiling requirements for the past 90 days. Yes ☑ No □	
Indicate by check mark whether the registrant has submitted electronically ar required to be submitted and posted pursuant to Rule 405 of Regulation S-T registrant was required to submit and post such files). Yes ☑ No ☐	
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 the best of registrant's knowledge, in definitive proxy or information stateme amendment to this Form 10-K. $\Box$	
Indicate by check mark whether the registrant is a large accelerated filer, an a See definition of "large accelerated filer," "accelerated filer" and "smaller rep	
Large accelerated filer $\square$	Non-accelerated filer $\square$ Smaller reporting company $\boxtimes$
Indicate by checkmark whether the registrant is a shell company (as defined in	in Rule 12b-2 if the Exchange Act.) Yes □ No ☑
The aggregate market value of the common stock held by non-affiliates of the reported by the Capital Market of The NASDAQ Stock Market LLC as of surther registrant has defined affiliates of the registrant to include the executive or registrant's common stock on June 30, 2015.	ch date) was \$2,803,210. For purposes of determining this amount only,

As of March 25, 2016, 3,587,299 shares of the registrant's Common Stock were outstanding.

# DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive Proxy Statement for the 2016 Annual Meeting of Stockholders are incorporated by reference into Part III of this Annual Report on Form 10-K.

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### **PART I**

## FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K may contain, in addition to historical information, forward-looking statements. These forward-looking statements are based on the Company's current assumptions, expectations and projections about future events. Words like "believe," "anticipate," "intend," "estimate," "expect," "project," and similar expressions are used to identify forward-looking statements, although not all forward-looking statements contain these words. These forward-looking statements are estimates reflecting the best judgment of the Company's management and actual events or results may differ materially from the results anticipated in these forward-looking statements as a result of a variety of factors. While it is impossible to identify all such factors, factors that could cause actual results to differ materially from those estimated by us include:

- each of the factors discussed in Item 1A of this Annual Report on Form 10-K, Risk Factors, as well as risks discussed elsewhere in this report;
- our ability to recruit and retain key technical and management personnel;
- changes in existing laws;
- our ability to expand our customer base;
- infringement on the proprietary rights of our property and the rights of others;
- competitive pricing pressures in the service management industry and our responses to those pressures;
- our ability to develop new products on a timely basis that keep pace with new technological developments;
- our increased dependence on technology from third parties; and
- our ability to expand our products into international markets.

Many of these factors are beyond our ability to predict or control. In addition, as a result of these and other factors, our past financial performance should not be relied on as an indication of future performance. The cautionary statements referred to in this section also should be considered in connection with any subsequent written or oral forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. In light of these risks and uncertainties, the forward-looking events and circumstances discussed in this report might not occur. Furthermore, we cannot guarantee future results, events, levels of activity, performance, or achievements.

The Company is not under any obligation and does not intend to make publicly available any update or other revision to any forward-looking statements to reflect circumstances existing after the date of this Annual Report on Form 10-K or to reflect the occurrence of future events even if experience or future events make it clear that any expected results expressed or implied by these forward-looking statements will not be realized.

### Item 1. Business.

### General

Astea International Inc. and subsidiaries (collectively "we," "us," "Astea" or the "Company") develop, market and support service management software solutions, which are licensed to companies that sell and service equipment, and/or sell and deliver professional services. Companies invest in Astea's software and services to automate enterprise business processes for purposes of revenue enhancement, cost containment, operational efficiency improvement, and the expansion of their awareness of operational performance through analytical reporting. Customers' return on investment from implementing Astea's solutions is achieved through more efficient management of information, people, processes and cash flows, which we believe increases competitive advantage and customer satisfaction as well as top-line revenue and profitability.

Astea's solutions are used in industries such as information technology, medical devices and diagnostic systems, industrial controls and instrumentation, retail/point-of-sale equipment, heating, ventilation, and air conditioning systems ("HVAC"), office equipment, imaging systems, fire and security, gaming/leisure equipment, facilities management, telecommunications and other related industries with equipment sales and service requirements. Astea's strong focus on enterprise solutions for organizations that sell and deliver services is a unique industry differentiator that draws upon the Company's extensive industry experience and core expertise.

Founded in 1979, Astea is known throughout the industry, largely from its proven success as a provider of software solutions for field service management. Astea has since expanded its product portfolio to also include integrated management

applications for sales, multi-channel customer contact centers, third party vendor management, workforce optimization, and professional services automation.

Astea offers all the cornerstones of service lifecycle management, including customer management; service management; asset management; complete forward and reverse logistics management; and mobile workforce management with enhanced scheduling optimization and actionable business intelligence. We believe this comprehensive approach provides unmatched expertise in service lifecycle workflow and integration needs throughout the service continuum. Astea's solutions empower companies by making more actionable data readily accessible, providing companies the agility needed to achieve sustainable value more quickly and to compete successfully in a global community.

Astea's software has been licensed to approximately 650 companies worldwide. Customers range from mid-size organizations to large, multinational corporations with geographically dispersed locations around the globe. The Company markets and supports its products through a worldwide network of direct and indirect sales and services offices with corporate headquarters in the United States and regional headquarters in the United Kingdom, Australia and Japan. Sales partners include distributors (value-added resellers, system integrators and sales agents) and original equipment manufacturing partners ("OEM partners"). See Note 13 to the Consolidated Financial Statements Geographic Segment Data for revenues, income (loss) from operations and long lived assets related to each of the Company's geographic operating regions for the past two years.

In addition to its own product development that is conducted at Company facilities in the United States and Israel, Astea participates in contractual relationships with complementary technology companies in order to reduce time-to-market with new product capabilities and continually increase its value proposition to customers. The Company's product strategies are developed from the collective feedback from customers, industry consultants, technology partners and sales partners, in addition to its internal product management, professional services, and development teams. Astea also works with its active user community who closely advises and participates in ongoing product development efforts.

Astea provides customers with an array of professional consulting, training and customer support services to implement its products and integrate them with other corporate systems such as back-office financial and enterprise resource planning (ERP) applications. Astea also maintains and supports its software over its installed life cycle. The Company's experience and domain expertise in service and sales management, distribution, logistics, finance, mobile technologies, internet applications and enterprise systems integration are made available to customers during their assessments of where and how their business processes can be improved.

The Company's sales and marketing efforts are primarily focused on new software licensing and support services for its latest generation of Astea Alliance and FieldCentrix products.

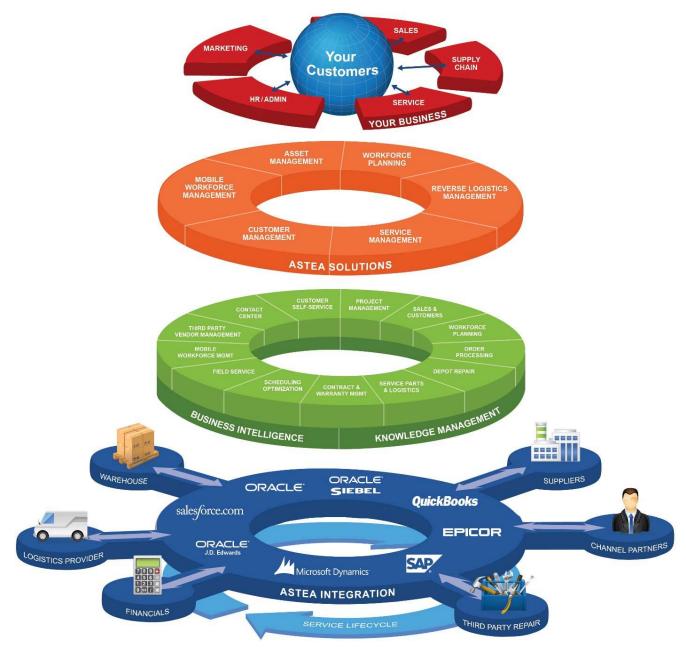
## **Industry Overview – Service Management**

Service management is generally defined as a technician performing repair, installation, or regularly scheduled/preventive maintenance work at a customer site. It involves the management of incoming service requests, dispatching of service technicians, managing parts, managing contracts, prioritizing service based on service level agreements and severity of problems, and the repair, refurbishment and retirement process for a piece of equipment. Field service organizations vary greatly in size, industries and supported technologies. Although every industry relies on field service to some degree, for certain industries field service is critical. Equipment, ranging from computers and peripherals to building systems, office equipment and medical equipment depends on field service. Sometimes, this equipment is the lifeblood of a company, and any downtime or service interruptions can significantly impair operations or even endanger human life and safety.

Managing today's service enterprise means planning and coordinating service on a global scale. It means delighting customers - and it calls for new technologies and business practices designed specifically to solve the service lifecycle management challenge. The benefits of implementing service management solutions are applicable in virtually every service organization, regardless of type, size, or geography served.

# **Current Product Offerings**

Astea Alliance



Astea Alliance is a service management offering consisting of software applications and services. The software product consists of a series of applications. The offering has been developed as a global solution from the ground up with multi-lingual and multi-currency capabilities.

Astea Alliance has been designed to address the complete service lifecycle, from lead generation and project quotation to service and billing through asset retirement. It integrates and optimizes critical business processes for Campaigns, Call Center, Depot Repair, Field Service, Logistics, Projects and Sales and Order Processing applications. Astea extends its application suite with mobile workforce management, dynamic scheduling optimization, third party vendor and customer self-service portals, and business intelligence. In order to ensure customer satisfaction and quick return on investment, Astea also offers infrastructure tools and services.

In 2015, Astea issued two product releases, Astea Alliance 12.0 and 12.5, which deliver a number of noteworthy advancements that will help companies accelerate response times, improve the overall customer experience, and gain instant access to actionable intelligence. A summary of features released with Astea Alliance 12.0 and 12.5 are highlighted below. They include:

- Visualization & Collaboration Tools –Astea's cutting-edge HTML5 mobile solution has been leveraged by global organizations to increase engineer productivity, reduce costs and improve customer satisfaction. Astea remains relentless in the pursuit of providing powerful capabilities to the mobile user without adding complexity to the user experience. These releases continue to build on that philosophy with optimized user navigation; the ability for a mobile user to work from multiple devices with complete synchronizations between devices; visualization tools to easily support self-dispatch; live chat connecting the field engineer with the back office; centralized parts order status view; and full bi-directional Microsoft Outlook synchronization. Astea's mobile solution provides the level of flexibility necessary that makes it easy for organizations to modify and adapt the solution, for different user profiles or businesses, without requiring development skillsets or adding additional costs.
- Your Service Platform, Your Way Astea knows that even with the deepest level of functionality in their platform, organizations will always want to have the flexibility to make modifications to adapt to their business dynamics. A couple of years ago, Astea introduced an innovative customization tool that gives organizations the control they need, without requiring coding, while still being able to take advantage of the latest and greatest Astea Alliance feature updates. Additionally, there are added capabilities to give non-technical users even more "do it yourself" tools, while Astea's framework actively governs these customizations making it easy to see what is custom and what is standard. Organizations can build new modules, as well as import and export customizations to different environments, when needed. All customizations work with the latest Astea Alliance product updates.
- Drive Proactive Support and Continuous Process Improvement For years, Astea has been providing tools and reporting capabilities that provide proactive service insight and intelligence at every level. Astea continues to further enhance its decision making visualization tools, to easily and quickly leverage insightful information for optimal process improvements, productivity and customer satisfaction.
- Easily Manage and Support a Company's Entire Service Ecosystem When it comes to optimizing a company's service ecosystem, visibility and control become mission critical requirements to manage and track all of the people, internal and external to the organization, and processes that have an impact on the overall service experience for the customer. Astea has added a new customer satisfaction tracking capability to make it easy to collect as well review customer feedback at any time. Astea also introduced a new, vibrant Customer Self-Service module which optimizes workflow and further enriches the end user experience. Additionally, Astea's new Service Manager Analytics App, makes relevant performance metrics instantly available to service managers and executives to quickly and easily monitor for optimal service outcomes. Astea continues to add enhancements to its scheduling optimization solution, leveraging the latest Microsoft technologies, to ensure optimal operational performance. Further enhancements have also been made in the area of Astea's Third Party Vendor Management, Contracts, Logistics, and Professional Services Automation (Projects).

ServiceAlliance and SalesAlliance, the earliest versions of Astea Alliance solutions, were the Company's initial technology offerings following a long and highly successful history with its DISPATCH-1 legacy system solutions. Astea Alliance solutions have been licensed to over 300 customers worldwide. Market acceptance of Astea Alliance by global and regional companies has continually increased since 2002 and the Company has aggressively pursued opportunities for larger system implementations with mid-size to large enterprises on a worldwide basis.

The current Astea Alliance offering consists of:

- Core Applications;
- Mobile Applications;
- Extended Portals;
- Reporting and Business Intelligence; and
- Tools.

### **Astea Alliance Core Applications:**

Alliance Contact Center Alliance Depot Repair Alliance Field Service Alliance Logistics
Alliance Order Processing
Alliance Professional Services
Alliance Sales
Alliance Dynamic Scheduling Engine
Alliance Workforce Planning

## **Astea Alliance Mobile Applications:**

Alliance Mobile – Laptop/ Smartphones/Tablets Alliance Third Party Vendor Mobile Alliance 2-way Paging

### **Astea Alliance Extended Portals:**

Alliance Customer Self-Service Alliance Vendor & Third Party Management

# Astea Alliance Reporting and Business Intelligence:

Alliance Reporting
Alliance Business Intelligence

### **Astea Alliance Tools:**

Alliance Link Alliance Knowledge Base

## **Astea Alliance Core Applications**

The Alliance Contact Center application supports call centers, information desks, service hotlines, inside sales and telemarketing activities. Integrated multi-channel inbound/outbound capabilities enable customer service representatives to serve prospects and customers in their media of choice, including phone, fax, e-mail or Internet. Integrated customer self-service portals with automated e-mail response, automated call escalation and interface to Computer Telephony Integration systems help streamline customer interaction processes. Work scheduling and demand balancing optimize staff utilization. Employee portals with access to comprehensive real-time customer data and decision support tools including intelligent knowledge management and scripting for problem resolution, drive higher staff productivity. The objectives of Astea's Alliance Contact Center software are to reduce overhead through improved first-call resolution rates and shorter service-call handling times, as well as more efficient customer service and higher levels of customer satisfaction. A knowledge engine enhances the diagnostic tools available to contact center agents. This knowledge engine is also available in other areas of the solution suite such as Depot Repair and Field Service.

## Alliance Depot Repair

Alliance Depot Repair automates tracking of assets through equipment calibration and repair chains, including merchandise ownership, location, repair status and warranty coverage. Objectives are to gain real-time visibility of all repair chain activities, ensure compliance with warranty and contractual agreements, respond to customer inquiries with up-to-the-minute repair status, collect and analyze repair statistics for product design improvement, and reduce overhead such as inventory carrying costs. Applications support in-house, subcontractor and vendor calibration and repair; customer and vendor exchanges and advance exchanges; equipment on loan; change of ownership; merchandise shipments, cross shipments and pickups; consolidated repair orders; and, storage and refurbishment programs. Integration with other *Astea Alliance* modules allows repair orders and repair status queries to be initiated from customer contact centers, field service, field sales and warehouses as well as the repair depot.

# Alliance Field Service

The Alliance Field Service core application delivers a set of automated capabilities intended to streamline and improve management of field service activities. By automating workflow, field service representatives should be able to efficiently complete and document assignments, manage vehicle assets, capture expenses and generate revenue through add-on sales

during a customer contact. Applications alert dispatchers to contractual minimum response times and expedite coordination of field force skills matching, scheduling, dispatch and repair parts logistics. The use of the Dynamic Scheduling Engine should automate much of this process. The software supports all field service categories including equipment installations, break/fix, planned maintenance and meter reading. Applications can also be integrated with equipment diagnostic systems for fully automated solutions that initiate and prioritize service requests and dispatch assignments to field employees' smartphones, laptops or tablets without human intervention

# Alliance Logistics

The Alliance Logistics core application is divided into three functional portals. These are Supply Chain, Inventory Management and Reverse Supply Chain, reflecting the diversity of needs in this area. Seamlessly integrated with sales and service applications, Alliance Logistics enables service organizations to control inventory costs, manage assets and implement proactive service management strategies. Automated calculation of stock profiles based on usage eliminates overstocking and dramatically reduces costs associated with storing, depreciating, and insuring inventory. The application supports parts and tools management for effective field service delivery and Service Level Agreements compliance. We believe that improved cost management improves cash flow by streamlining and shortening the cycles from inventory to usage to billing. Lower logistics costs open opportunities to recognize higher margins on products and services. Key areas to apply Alliance Logistics include asset management, field service parts/tools management, demand fulfillment, and sales fulfillment.

### Alliance Order Processing

The Alliance Order Processing module provides straightforward functionality for the management of quotations and order fulfillment. Quotations can be created for the sale of products and the provision of field services. Integration with the approvals process and the Logistics and Field Service modules should ensure efficient management control and sustainable promises for delivery. This application is ideally suited to the sale of "consumable products" in association with the provision of equipment-based services, but can be equally applied to the supply of finished products resulting from up-sell and cross-sell opportunities.

## Alliance Professional Services

Alliance Professional Services supports management of knowledge workers, such as those deployed by professional services organizations and internal service departments of large organizations. Functionality focuses on planning, deploying and billing service engagements that can extend for days, weeks, months and years. Applications are expected to improve resource planning and allocation, workflow management, consultant time and expense reporting, subcontractor and vendor invoice processing, customer billing, and visibility of service engagements. Integration with other Astea Alliance modules delivers an end-to-end solution to market, sell, manage and bill professional services. Capabilities to share sales, service, project, and post-project field service data across the enterprise, generally enables professional services organizations to operate with less overhead, improved cash flow, higher profitability, and more competitive bidding.

## Alliance Sales

Alliance Sales consolidates and streamlines the sales processes of an enterprise, from quote generation through order processing, at all points of customer contact including field sales, inside sales, contact center sales and field service sales. Lead-to-close sales process capabilities include integration with customer support and field service applications, leveraging all enterprise knowledge pools with the goal to increase sales opportunities, margins and close rates. Consolidated views of sales and service data also provide a clearer understanding of enterprise operations to drive strategic business decisions. Sales force automation application automates business rules and practices such as enterprise-defined sales methodologies, sales pipeline management, territory management, contact and opportunity management, forecasting, collaborative team selling and literature fulfillment. Other applications prompt customer support and service staff to up-sell and cross-sell during contact with customers.

## Alliance Dynamic Scheduling Engine ("Alliance DSE")

Alliance DSE is the next level of field service scheduling solutions for a new era of service management. It is a real-time scheduling solution designed to optimize and balance the tradeoffs between service cost and level of service. It addresses the specific challenges of field service scheduling, while simultaneously calculating ways to increase efficiency, accuracy and profitability with the goal to help users sustain a competitive advantage in today's volatile environment. Astea has taken a scheduling engine that was developed to handle mission critical environments such as emergency response, where a response time determined life or death, adapted and embedded it into its core product. We believe that Alliance DSE provides for

maximum flexibility that enables companies to proactively drive, manage and monitor their technicians through demand forecasting, workforce profiling, and operational optimization. Astea's Alliance DSE is designed to enhance productivity, improve business processes and maximize return on investment.

## Alliance Workforce Planning

Workforce Planning assists in forecasting workforce requirements based on planned and unplanned orders and tracks actual results against the plan. Multiple workforce plans can be created, and plans can be maintained for different groups of resources and/or different planning periods. The Workforce planning module is flexible and can be leveraged to create plans that are comprised of days dedicated to only unplanned work, or the workforce can be allocated a percentage of planned work to be accomplished. Workforce demands for service technicians are not always consistent from period to period or from branch to branch. This creates a surplus of manpower in some locations and a shortage in others. Based on an Alliance Workforce plan, personnel can be temporarily transferred to another branch or action group to take care of the workload. A workforce plan shows the daily available hours for labor, and compares these to the daily activities from both planned and unplanned selected sources, including PM schedules, field change orders, project demands, committed sales orders and unplanned work. Plans can be frozen to compare actual time spent against the frozen plan to track performance.

### **Astea Alliance Mobile Applications**

Astea's Alliance Mobility Suite consists of Alliance Mobile Select, which is Astea's original mobile solution supporting Windows Mobile devices and Windows laptops, Alliance Mobile Universal, and Alliance Third Party Vendor Mobile. Alliance Mobile Universal is optimized to operate with the latest devices in the market including Android smartphones and tablets, iPhones, and iPads. Organizations can choose the device that works best for their environment and still be able to leverage the most powerful mobile solution designed specifically for the way field technicians work. Astea's Alliance Mobility Suite leverages the latest HTML5 technology to deliver a sleek and innovative user interface while still providing the ability for mobile workers to continue working whether they are in or out of wireless coverage. Field service technicians' days are transformed by receiving work orders which are automatically sent to the device, being able to view asset and service history; customer, account and job site information; contract and warranty information; receiving step-by-step guidance to complete the job; capturing customer signature; and completing work orders for invoicing. The real-time connectivity integrates field sales and service activity with automated front-office processes and eliminates the time, costs, procedural delays and errors of paper reporting. Expected benefits include reduced field administration costs; electronic data sharing among field and in-house personnel; improved speed, accuracy, content and compliance of field reporting; faster sales order processing and customer service invoicing; and other operational efficiencies.

## **Astea Alliance Extended Portals**

### Alliance Customer Portal

The Alliance Customer Portal is a secure, multi-level entry point that supports unattended e-business transactions for customer self-service and self-sales. Alliance Customer Portal empowers customers as it lessens dependence on sales and service staff to conduct transactions that can be performed over the Internet. It reduces routine voice and fax calls to customer contact centers, freeing lines for customers whose critical needs do require assistance from a service representative. The predefined Entry-Level, Standard and Enterprise profiles, in connection with a security utility, are designed to ensure tight control on access to sensitive data and a range of features that can be enabled. It also provides another channel to promote and sell more products and services to an existing customer base. The customer portal can delay or eliminate needs for contact center expansion and associated increases in facility, equipment and staffing costs.

## Alliance Vendor & Third Party Management Portal

The Vendor & Third Party Management portal enables companies to manage their external vendors and third party service providers with a robust, secure and unified platform. This portal can now serve as their single point of information for all full-time and out-sourced stakeholders. As a result, they will have the necessary level of upstream and downstream visibility and accountability that is a critical stepping stone to better service network automation and optimizations. Whether that third party is an external service agent or a vendor that supplies parts, they will now be able to track and manage all of the parties that participate in your service supply chain. Their vendors and external service agents (SAs) will have access to a secure portal that allows them to enter, update and view pertinent information as it relates to a service order and logistics and reverse logistics functions. Service organizations are able to easily interconnect their entire service lifecycle ecosystem to eliminate redundant processes and drive ongoing efficiencies. Additionally, organizations benefit by increased visibility, collaboration and communication.

## Astea Alliance Reporting and Business Intelligence ("Alliance BI")

For proactive service management, Alliance BI provides highly visual, real-time analysis of business performance, focusing on key performance indicators - a tool that facilitates businesses' understanding of customer behavior. Alliance BI enables the viewing of information for the entire enterprise, increasing revenues and identifying new business opportunities. Alliance BI has been designed to ensure that users of all kinds have immediate access to crucial information whenever it's needed. In the boardroom, at agent level, or even for customers, this tool effortlessly allows the viewing of performance data such as performance against service level agreements, contract profitability, product failure rate, repair turnaround times, customer satisfaction and engineer efficiency. Reports allow businesses to see how many orders have met their contractual service ETA and how many failed, which helps organizations better understand customer satisfaction. Workloads show the available working hours at a specific location in contrast to the demand for workforce planning and optimization.

### **Astea Alliance Tools**

### Alliance Link

Alliance Link is an enterprise application integration product that interfaces Astea Alliance to other enterprise systems, such as back-office financial and ERP applications, remote equipment monitoring and diagnostic software, and wireless data transmission services. Alliance Link extends Astea Alliance's return on investment for customers by making all Alliance modules accessible to external software through web services and open, well defined, synchronous and asynchronous application programming interfaces that are eXtensible Markup Language ("XML") based.

# Alliance Knowledge Base

Alliance Knowledge Base provides powerful and scalable enterprise search functionality for corporate content, across a network or on a portal, intranet or Internet site. Delivering single-point access to enterprise-wide data collections; full-text searches can be conducted quickly and easily across disparate data sources, improving knowledge retention and sharing across the organization. Alliance Knowledge Base offers advanced functionality for entering queries and results navigation to help users quickly find the information they need. Alliance Knowledge Base can provide user-friendly access to a vast range of information, including product manuals, technical support documentation, maintenance histories, repair notes, announcements, and much more. With search functionality, Alliance Knowledge Base becomes much more than simply an operations tool; it provides organizations the capability to share all sorts of information, improve problem resolution times, and improve the quality of decision-making across an organization.

# FieldCentrix Enterprise Suite

The FieldCentrix Enterprise is a service management solution that runs on a wide range of mobile devices, and integrates seamlessly with popular customer relationship management (CRM) and ERP applications. Add-on features include a web-based customer self-service portal, workforce management capabilities, and equipment-centric functionality. FieldCentrix has licensed applications to companies in a wide range of sectors including HVAC, building and real estate services, manufacturing and process instruments and controls, and medical equipment.

The current FieldCentrix Enterprise offering consists of:

- FX Service Center;
- FX Mobile;
- FX e-Service;
- FX Fleet Manager;
- FX Interchange;
- FX Interchange for JD Edwards; and
- FX Mobility Express.

## FX Service Center

FX Service Center is an Internet-based service management and dispatch solution that gives organizations command over their field service operation in order to more effectively manage call taking, entitlement verification, field personnel scheduling and dispatching, customer service, work orders, timesheets, service agreements, inventory and equipment tracking, pre-invoicing, and reporting. The software is intuitive, giving organizations graphical picture views of the scheduling board, work order lists, field service worker and site locations, and more. Real-time drag-and-drop scheduling

and re-scheduling take just a few mouse clicks, and pre-scheduling preventive maintenance calls are simple as well. FX Service Center makes completed work order and timesheet information instantly available for export to an organization's accounting, ERP, or CRM system. They can integrate FX Service Center with an organization's accounting, ERP or CRM system for seamless information flow. FX Resource Utilization is a strategic workforce modeling tool expected to accurately plan, track, and analyze service resources in real-time. It provides an automated way to size, manage, and report on resource capacity and utilization across the enterprise to provide suggestions to deploy resources, cost-effectively balance workloads and service engineers, and still make sure all service level commitments are met and contracts remain profitable. By adding FX Resource Utilization as part of the Service Center module, organizations have a new tool that is designed to increase the productivity and efficiency of their work force and service operations through load balancing and optimized resource planning.

#### FX Mobile

FX Mobile is a workflow software product that uses wireless communications technology with smartphones, laptops, and tablets to automate field service processes and should help field service personnel do their jobs better and faster. FX Mobile leverages the latest HTML5 technology, optimized for the latest devices such as Android, iPhone and iPad, to deliver a sleek and innovative user interface while still providing the ability for mobile workers to continue working whether they are in or out of wireless coverage. With FieldCentrix's technology, field service workers are be able to complete their work, uninterrupted, regardless of wireless coverage. Along with FX Service Center, FX Mobile eliminates the manual inefficiencies and paperwork that can overwhelm service technicians and an organization's business. With FX Mobile, service technicians receive work orders electronically on their mobile devices. It then guides them, screen by screen, through the job – prompting them to perform standard tasks, take notes, and even record future recommended repairs or activities. With FX Mobile, field service personnel can now spend their time in the field, better serving customers, generating new business, and increasing organizations' bottom lines. FX Mobile is an international offering that supports various languages, as well as currencies, measurement systems and time zones.

#### FX e-Service

FX e-Service is an extension of the FieldCentrix solution that provides a dynamic customer self-service portal that links directly from a customer's web site. When integrated with FX Mobile software, it provides the unique capability to truly deliver real-time information from the point of service to your customers. Working seamlessly with FX Service Center call center and dispatching software, FX e-Service gives an organization's customers the flexibility of submitting service requests, accessing work order information, and managing their account over the Internet. Customers can receive an e-mail notification each time the status of a work order changes. This allows them to know instantly when the request has been received, scheduled, is in progress and when it is complete – all without ever calling into the office, waiting on hold or taking up valuable CSR resource.

### FX Fleet Manager

FX Fleet Manager is FieldCentrix's Global Positioning System offering to help customers manage their mobile resources more effectively. FX Fleet Manager gives companies control and management of their field operations with the expectation that they will make decisions that will increase profitability, reduce service costs, enhance customer responsiveness and satisfaction, and improve productivity and efficiency. With FX Fleet Manager, dispatchers and office personnel will always know where mobile resources are located — in real-time. Are they where they should be? Are they lost? Are they safe? There's an emergency service request — which resource is the closest with the right parts and skill sets? All this information and more should contribute to more efficiently managed mobile resources.

## FX Interchange

FX Interchange software provides data transporting services that allow enterprises to quickly and easily integrate FieldCentrix Enterprise to existing legacy and business systems – that are expected to maximize value from field data. FX Interchange converts data stored in FX Service Center knowledge base to XML or a Microsoft SQL Server database. Once converted, the data is accessible to other systems for basic billing and payroll extraction, and bi-directional integration purposes that should support the needs of an accounting, call center, or service dispatch integrated solution.

# FX Interchange for JD Edwards®

FieldCentrix field service automation software and JD Edwards<sup>®</sup> Enterprise and EnterpriseOne applications are integrated to provide medium to large companies with an easy-to-use, cost-effective way to streamline and automate field service

operations. The systems are integrated through FX Interchange<sup>TM</sup> for JD Edwards. This interface dynamically transfers key customer, work order, and accounting related information between the FieldCentrix and JD Edwards applications. This means the key functions that organizations need to run their business efficiently and cost-effectively are now seamless and completed electronically — without paper.

With the FieldCentrix and JD Edwards solution, service workers in the field access and enter all work order information using a mobile device at the job site. When the work is done, the service worker closes the work order and the completed information is sent wirelessly back to the office automatically. The electronic information is instantly accessible for processing by an organization's billing system so there's no data entry needed. Because you also no longer have to wait for the field service worker to bring in the paperwork before you can close the work order, customers can be billed quicker.

# FX Mobility Express<sup>TM</sup>

For customers who want to mobilize their workforce without deploying a full field service automation solution, FieldCentrix offers a special mobilized application development toolkit called FX Mobility Express<sup>TM</sup>. The FX Mobility Express toolkit is bundled with FieldCentrix's popular mobile middleware and allows organizations to quickly and easily build custom mobile applications that fully leverage FieldCentrix's robust and scalable mobile infrastructure and user-friendly interface. Mobilizing applications with FX Mobility Express should provide organizations with a cost-effective way to create a solution that fits their unique business requirements on a platform built from years of mobile and wireless technology experience and used by thousands of users worldwide.

### **Astea Client Services**

## **Professional Services**

Astea's typical professional services engagement includes planning, prototyping and implementing Astea's products within the client's organization. Some customers may require customization, but they are relatively insignificant.

During the initial planning phase of the engagement, Astea's professional services personnel work closely with representatives of the customer to prepare a detailed project plan that includes a timetable, resource requirements, milestones, in-house training programs, onsite business process training and demonstrations of Astea's product capabilities within the customer's organization.

The next phase of the Astea professional services engagement is the prototyping phase, in which Astea works closely with representatives of the customer to configure Astea's software solutions to the customer's specific business process requirements.

The next integral phase in the professional services engagement is the implementation phase, in which Astea's professional services personnel work with the client to develop detailed data mapping, conversions, interfaces and other technical and business processes necessary to integrate Astea's solutions into the customer's computing environment. Ultimately, education plans are developed and executed to provide the customer with the process and system knowledge necessary to effectively utilize the software and fully implement the solution. Professional services are generally charged on an hourly or daily basis.

The last phase of the engagement utilizes Astea's professional services personnel to assist in *Go Live* planning and the *Go Live* effort. Astea will assist in the planning for installation, initialization, data preparation, operational procedures, schedules and required resources. The initialization and creation of the production database is planned and prepared for the data history, open orders and all required data for go live processing. During the cutover to the solution, Astea business resources are best utilized to assist new users with functionality/processes while Astea technical resources support the customer's IT staff.

Following go live, Astea's professional services team engages the customer in the *Assessment Phase*. During this effort, the delivered system is assessed to validate benefits, analyze processes to measure key performance indicators, document and understand lessons learned. To perform these assessments, Astea consultants collect and analyze the planned benefits, processes used to capture and report on the key performance indicators, and document the lessons learned from all phases of the implementation. An action plan is then developed from the lessons learned and key performance indicators for use in future phases and/or releases.

## **Technical Services**

Astea's technical services teams provide services related to installation, data verification, functional design, technical design, system infrastructure setup or changes, customizations, Quality Assurance (QA) activities, testing and go live support. Initially, software and database installation resources are available to prepare the environment for the prototyping phase.

Data verification and feedback services can be provided for initial data verification analysis. These efforts are conducted to determine the present state of information as far as type, conversions, data manipulation, location, frequency, method of interface (initial load, ongoing load, data export or data import) and data integrity. Findings are documented and shared with the project team.

During the implementation phase, Astea's technical services team is often engaged to assist with the functional and/or technical design as related to customer desired system personalization, minor customization and interfaces, often referred to as 'gaps'. Gap solutions are assessed and categorized into system, studio, customization or interface. Utilizing the services of the customer project team, Astea professional services and Astea technical services create Business Requirement Documents ("BRDs") for all customizations and interfaces. Astea technical services will provide specifications and a quote for the customization. The customer and Astea agree on the outcome of the customization and all expected outputs prior to the actual development customization. Following acceptance of the BRDs, code will be written as per design. QA of the code with test data sets will complete these efforts.

Astea's technical services team will also provide testing and go live support, as required.

# Customer Support

Astea's customer support organization provides customers with telephone and online technical support, as well as product enhancements, updates and new software releases. The Company can provide 24X7 "follow-the-sun" support through its global support network. Local representatives support all regions of Astea's worldwide operations. Astea personnel or a distributor's personnel familiar with local business customs and practices provide support in real-time and usually spoken in native languages. Typically, customer support fees are established as a fixed percentage of license fees and are invoiced to customers on an annual basis. Astea's customer support representatives are located in the United States, Europe, Israel, Japan and Australia. In addition, Astea provides customer support 24X7 with its self-service portal. The maintenance offering provides customers with support and help desk services, as well as software service packs and unspecified release upgrades for the modules they have purchased.

# **Education & Training**

# **Application Training:**

Key business owners responsible for the implementation of the core components will receive in-depth training designed to present the features, functionality and terminology of Astea's solutions. The objective of this training is to provide the audience with a working knowledge of these solutions. This exposure to the system will enable project communication and add insight into specific business processes.

End-user training plans and documents are created during the implementation phase. These plans and documentation are utilized to conduct end-user training sessions prior to go live.

## **Technical Training:**

Software and database installation/creation training is provided, as required and/or recommended.

System Administration training provides the customer's IT staff pre-requisite knowledge to manipulate and manage administrative tasks associated with the Astea solutions. Included within these tasks are: Security, Batch Applications, Escalation, Import, etc.

Many customers are interested in performing their own personalization and minor customization to the system. Training sessions are available to enhance customer understanding of available options for personalization and how to perform customizations.

### **Customers**

The Company estimates that it has sold licenses to approximately 650 customers ranging from small, rapidly growing companies to large, multinational corporations with geographically dispersed operations and remote offices. The broad applicability of the Company's products is demonstrated by the wide range of companies across many markets and industries that use one or more of Astea's products, including customers in information technology, medical devices and diagnostic systems, industrial controls and instrumentation, retail/point-of-sale systems equipment, HVAC, office automation equipment, imaging systems, fire and security, gaming/leisure equipment, facilities management, telecommunications and other related industries with equipment sales and service. In 2015 there was one customer that accounted for 12% of total revenues and in 2014 there was no one customer that accounted for 10% or more of total revenues.

### Sales and Marketing

The Company markets its products through a worldwide network of direct and indirect sales and services offices with corporate headquarters in the United States and regional headquarters in the United Kingdom (Europe, Middle East and Africa Operations), Japan and Australia (Asia Pacific Operations). Sales partners include distributors (value-added resellers, system integrators and sales agents) and OEM partners. The Company actively seeks to expand its reseller network and establish an international indirect distribution channel targeted at the mid-market tier. See "Risk Factors — Need to Expand Indirect Sales."

Astea's direct sales force employs a consultative approach to selling, working closely with prospective clients to understand and define their needs and determine how such needs can be addressed by the Company's products. These clients typically represent the mid- to high-end of the market. A prospect development organization comprised of telemarketing representatives, who are engaged in outbound telemarketing and inbound inquiry response to a variety of marketing vehicles, develops and qualifies sales leads prior to referral to the direct sales staff. Additional prospects are identified and qualified through the networking of direct sales staff and the Company's management as part of daily business activities.

The modular structure of Astea's software and its ongoing product development efforts provide opportunities for incremental sales of product modules and consulting services to existing accounts. See "Risk Factors — Continued Dependence on Large Contracts May Result in Lengthy Sales and Implementation Cycles and Impact Revenue Recognition and Cash Flow."

Astea's corporate marketing department is responsible for product marketing, lead generation and marketing communications, including the Company's corporate website, dialogue with high tech industry analysts, trade conferences, advertising, e-marketing, online and traditional seminars, direct mail, product collateral and public relations. Based on feedback from customers, analysts, business partners and market data, the marketing department provides input and direction for the Company's ongoing product development efforts and opportunities for professional services. The Company also participates in an annual conference for users of Astea Alliance and FieldCentrix products. Conference participants attend training sessions, workshops and presentations, and interact with other Astea product users, Astea management and staff, and technology partners, providing important input for future product direction.

Astea's international sales accounted for 35% of the Company's revenues in 2015 and 38% of the Company's revenues in 2014. See "Risk Factors — Expansion of International Sales."

## **Product Development**

Astea's product development strategy is to provide products that perform with exceptional depth and breadth of functionality and are easy to implement, use and maintain. Products are designed to be flexible, modular and scalable, so that they can be implemented incrementally in phases and expanded to satisfy the evolving information requirements of Astea's clients and their customers.

The Company uses widely accepted commercially available application development tools from Microsoft Corporation. These software tools provide the Company's customers with the flexibility to deploy Astea's products across a variety of hardware platforms, operating systems and relational database management systems. The latest Astea Alliance solution suite is engineered for existing and emerging Microsoft technologies such as Microsoft.NET Framework, Visual Studio 2012, Windows Presentation Framework, Internet Information Server, and supports Windows 7, Windows 8, Windows 10, Windows Server 2012 & 2012 R2, MS SQL 2012 R2, MS SQL 2015, Oracle Databases 10 & 11, and BizTalk Server. Astea Alliance also supports deployments in both on-premise as well as cloud environments by leveraging a multitenant architecture. This multi-tenant architecture supports running the application using one set of hardware/software, serving multiple client organizations (tenants). The computing resources and application code are generally shared between

all the tenants on a server. Each tenant has its own set of data that remains logically isolated from data that belongs to all other tenants.

In addition to product development that is conducted at Company facilities in the United States and Israel, Astea may participate in contractual relationships with complementary technology companies to reduce time-to-market with new product capabilities in order to continually increase its value proposition to existing and prospective customers.

The Company's expense for product development for the years ended December 31, 2015 and 2014 was \$1,382,000 and \$1,350,000, respectively. These expenses amounted to 6% and 7% of total revenues for 2015 and 2014, respectively. The Company's capitalized software development costs were \$2,407,000 and \$2,532,000 in 2015 and 2014, respectively. Total software development costs decreased \$93,000 to \$3,789,000 in 2015 compared to \$3,882,000 in 2014. The Company anticipates that it will continue to allocate substantial resources to its development effort for the upgrade of its suite of products. See "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Risk Factors — Need for Development of New Products."

### Manufacturing

The Company's software products are distributed on CD ROMs and electronically via a client-server file transfer protocol. Included with the software products are security keys (a software piracy protection) and documentation available on CD ROM and hard copy. Historically, the Company has purchased media and duplicating and printing services for its product packaging from outside vendors.

# Competition

The service management software market is intensely competitive and subject to rapid change. To maintain or increase its position in the industry, the Company will need to continually enhance its current product offerings, introduce new products and features and maintain its professional services capabilities. The Company currently competes on the basis of the depth and breadth of its integrated product features and functions, including the adaptability and scalability of its products to specific customer environments; the ability to deploy complex systems locally, regionally, nationally and internationally; product quality; ease-of-use; reliability and performance; breadth of professional services; integration of Astea's offerings with other enterprise applications; price; and the availability of Astea's products on popular operating systems, relational databases, Internet and communications platforms.

Competitors vary in size, scope and breadth of the products and services offered. The Company encounters competition generally from a number of sources, including other software companies, third-party professional services organizations that develop custom software, and information systems departments of potential customers developing proprietary, custom software. In the service management marketplace, the Company competes against publicly held companies and numerous smaller, privately held companies. Some of the Company's competitors include SAP AG ("SAP"), Oracle Corporation ("Oracle"), and a number of smaller privately held companies. See "Risk Factors — Competition in the CRM Software Market is Intense."

## **Licenses and Intellectual Property**

Astea considers its software proprietary and licenses its products to its customers under written license agreements. The Company also employs an encryption system that restricts a user's access to source code to further protect the Company's intellectual property. Because the Company's products allow customers to use the software's built in features to customize their applications without altering the framework source code, the framework source code for the Company's products is typically neither licensed nor provided to customers. The Company does, however, license source code from time to time and maintains certain third-party source code escrow arrangements. See "— Customers" and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

The Company seeks to protect its products through a combination of copyright, trademark, trade secret and fair business practice laws. The Company also requires employees, consultants and third parties to sign nondisclosure agreements. Despite these precautions, it may be possible for unauthorized parties to copy certain portions of the Company's products or reverse engineer or obtain and use information that the Company regards as proprietary. The Company presently has no patents or patent applications pending. See "Risk Factors — Dependence on Proprietary Technology."

Because the software development industry is characterized by rapid technological change, Astea believes that factors such as the technological and creative skills of its personnel, new product developments, frequent product enhancements, and reliable

product maintenance are more important to establishing and maintaining a technology leadership position than current legal protections.

## **Employees**

As of December 31, 2015, the Company, including its subsidiaries, had a total of 166 full-time employees worldwide, 83 in the United States, 15 in the United Kingdom, 3 in the Netherlands, 43 in Israel, 12 in Australia and 10 in Japan. In addition, we have 5 part-time employees, 2 in the United States, and 3 in Israel. The Company's future performance depends, in significant part, upon the continued service of its key technical and management personnel and its continuing ability to attract and retain highly qualified and motivated personnel in all areas of its operations. See "Risk Factors — Dependence on Key Personnel; Competition for Employees." None of the Company's employees is represented by a labor union. The Company has not experienced any work stoppages and considers its relationships with its employees to be good.

# **Corporate History**

The Company was incorporated in Pennsylvania in 1979 under the name Applied System Technologies, Inc. In 1992, the Company changed its name to Astea International Inc. Until 1986, the Company operated principally as a softwareconsulting firm, providing professional software consulting services on a fee for service and on a project basis. In 1986, the Company introduced its DISPATCH-1 product. In November 1991, the Company's sole stockholder acquired the outstanding stock of The DATA Group Corporation ("Data Group"), a provider of field service software and related professional services for the mainframe-computing environment. Data Group was merged into the Company in January 1994. In February 1995, the Company and its sole stockholder acquired the outstanding stock of Astea Service & Distribution Systems BV ("Astea BV"), the Company's distributor of DISPATCH-1 and related services in Europe. In May 1995, the Company reincorporated in Delaware. In July 1995, the Company completed its initial public offering of Common Stock. In February 1996, the Company merged with Bendata, Inc. In June 1996, the Company acquired Abalon AB. In September 1998 (effective July 1, 1998), the Company sold Bendata, Inc. In December 1998, the Company sold Abalon AB. In December 1997, the Company introduced ServiceAlliance and in October 1999, SalesAlliance. Both products were subsequently re-engineered into components of the AllianceEnterprise suite which was introduced in 2001. Through 2001 and into 2002, the Company rebuilt its product functionality for Web-based applications and in August 2003 introduced Astea Alliance version 6. The Company released a new system architecture based on Microsoft.NET during the third quarter of 2004. On September 21, 2005, the Company acquired substantially all the assets and certain liabilities of FieldCentrix, Inc. In the first quarter of 2010, the Company delivered Astea Alliance version 10.0. In 2011, Astea launched Alliance Mobile Universal to deliver enterprise functionality optimized for the latest devices such as Android, iPhone and iPad leveraging the latest HTML5 technology. In 2013, the latest software version, Astea Alliance 11.0 was released. With this release, Astea introduced an abundance of new features and enhancements that were developed based on three primary concepts; optimizing and streamlining processes, enabling proactive service insight and intelligence at every level, and significantly increasing ease of use and customizations without technical skills. Accelerated revenue growth, proactive intelligence, productivity and process optimization, enriched employee interaction experience, and increased customer satisfaction are just a few of the advantages organizations will be able to achieve with this release. Astea Alliance is available either as an on-premise or cloud application, allowing every company to choose the right offering that aligns with their strategy and IT ecosystem. In 2014, Astea introduced Astea Alliance 11.5. This release introduced many new innovations such as third party vendor mobile app, advanced customization capabilities, additional reporting and dashboard capabilities, as well as extending reports and visual indicators to the mobile device. With Astea's latest mobile release, organizations can create sales quotations, perform inventory cycle counts, support complex items with subcomponents, create and support different workflows/apps for different groups/types of work, and much more. Astea's mobile solution provides the level of flexibility necessary that makes it easy for organizations to modify and adapt the solution without needing development skillsets or adding additional costs. In February 2015, Astea released v12, and subsequently released v12.5 in September 2015. Astea Alliance Version 12.0 included scheduling enhancements, additional visualization and collaboration tools, optimized navigation, as well as numerous customer-driven features from around the globe. Astea Alliance 12.0 delivered a number of noteworthy advancements that help companies accelerate response times, improve the overall customer experience, and gain instant access to actionable intelligence. Astea Alliance Version 12.5 included a fresh, new Customer Self-Service Portal, a new Service Manager Analytics App, and many additional features designed to optimize service outcomes. Additional enhancements were also developed in the areas of scheduling optimization, knowledge management, mobile field service, and logistics.

# Item 1A. Risk Factors.

The following discussion of the Company's risk factors should be read in conjunction with the financial statements and related notes thereto set forth elsewhere in this report. The following factors, among others, could cause actual results to

differ materially from those set forth in forward looking statements contained or incorporated by reference in this report and presented by management from time to time. Such factors, among others, may have a material adverse effect upon the Company's business, results of operations and financial condition.

## **History of Net Losses**

The Company has a history of net losses. In 2015, the Company generated a net loss of \$4.4 million compared to a net loss of \$3.4 million in 2014. As of December 31, 2015, the Company had an accumulated deficit of approximately \$35.8 million. Moreover, the Company expects to continue to incur additional operating expenses for research and development and investment in software development costs to achieve its projected revenue growth. There is no assurance that the Company may be able to achieve the necessary revenue growth or profitability in the future. If the Company does not attain or sustain profitability or raise additional equity or debt in the future, the Company may be unable to continue its operations.

### **Need for Development of New Products**

The Company's future success will depend upon its ability to enhance its current products and develop and introduce new products on a timely basis that keep pace with technological developments, industry standards and the increasingly sophisticated needs of its customers, including developments within the client/server, thin-client and object-oriented computing environments. Such developments may require, from time to time, substantial capital investments by the Company in product development and testing. The Company intends to continue its commitment to research and development and its efforts to develop new products and product enhancements. There can be no assurance that the Company will not experience difficulties that could delay or prevent the successful development, introduction and marketing of new products and product enhancements; that new products and product enhancements will meet the requirements of the marketplace and achieve market acceptance; or that the Company's current or future products will conform to industry requirements. Furthermore, reallocation of resources by the Company, such as the diversion of research and development personnel to development of a particular feature for a potential or existing customer, can delay new products and certain product enhancements. Some of our customers adopted our software on an incremental basis. These customers may not expand usage of our software on an enterprise-wide basis or implement new software products introduced by the Company. The failure of the software to perform to customer expectations or otherwise to be deployed on an enterprise-wide basis could have a material adverse effect on the Company's ability to collect revenues or to increase revenues from new as well as existing customers. If the Company is unable to develop and market new products or enhancements of existing products successfully, the Company's ability to remain competitive in the industry will be materially adversely affected.

## **Rapid Technological Change**

In the software industry there is a continual emergence of new technologies and continual change in customer requirements. Because of the rapid pace of technological change in the application software industry, the Company's current market position could be rapidly eroded by product advancements. In order to remain competitive, the Company must introduce new products or product enhancements that meet customers' requirements in a timely manner. If the Company is unable to do this, it may lose current and prospective customers to competitors.

The Company's application environment relies primarily on software development tools from Microsoft Corporation. If alternative software development tools were to be designed and generally accepted by the marketplace, we could be at a competitive disadvantage relative to companies employing such alternative developmental tools.

While the Company has licensed Astea Alliance to over 300 companies worldwide from 1998 through 2015, and more than 50 companies for the FieldCentrix suite supported by the Company since September 2005, revenues from sales of both Astea Alliance and FieldCentrix may not be sufficient to support the expenses of the Company. The Company's future success will depend mainly on its ability to increase licensed users of both the Astea Alliance suite and FieldCentrix offerings, on developing new products and product enhancements to complement its existing product offerings, on its ability to continue to generate professional services, support and maintenance revenues to Astea Alliance and FieldCentrix customers and on its ability to control its operating expenses. Any failure of the Company's products to achieve or sustain market acceptance, or of the Company to sustain its current position in the CRM software market due to rapid technological changes, would have a material adverse effect on the Company's business and results of operations. There can be no assurance that the Company will be able to increase demand for Astea Alliance and FieldCentrix products, maintain an acceptable level of support and maintenance revenues or to lower its expenses, thereby avoiding future losses.

### **Burdens of Customization**

On rare occasions, the Company's clients may request significant customization of Astea Alliance and FieldCentrix products to address unique characteristics of their businesses or computing environments. In these situations, the Company would apply contract accounting to determine the recognition of license revenues. The Company's commitment to the customization could place a burden on its client support resources or delay the delivery or installation of products, which, in turn, could materially adversely affect its relationship with significant clients or otherwise adversely affect business and results of operations. In addition, the Company could incur penalties or reductions in revenues for failures to develop or timely deliver new products or product enhancements under development agreements and other arrangements with customers. If customers are not able to customize or deploy the Company's products successfully, the customer may not complete expected product deployment, which would prevent recognition of revenues and collection of amounts due, and could result in claims against the Company.

## **Product Defects: Failure to Meet Performance Criteria**

The Company's software is intended for use in enterprise-wide applications that may be critical to its customers' business. As a result, customers and potential customers typically demand strict requirements for installation and deployment. The Company's software products are complex and may contain undetected errors or failures, particularly when software must be customized for a particular customer, when first introduced or when new versions are released. Although the Company conducts extensive product testing during product development, the Company has at times delayed commercial release of software until problems were corrected and, in some cases, has provided enhancements to correct errors in released software. The Company could, in the future, lose revenues or incur additional and unexpected costs as a result of software errors or defects. Despite testing by the Company and by current and potential customers, errors in the software, customizations or releases might not be detected until after initiating commercial shipments, which could result in additional costs, delays, possible damage to the Company's reputation and could cause diminished demand for the Company's products. This could lead to customer dissatisfaction and reduce the opportunity to renew maintenance contracts or sell new licenses.

# Our Sales Cycles Can be Long, Unpredictable and Require Considerable Time and Expense, Which May Cause our Operating Results to Fluctuate

The timing of our closing sales to customers is difficult to predict. These efforts require us to educate our customers about the use and benefit of our services, including the technical capabilities and potential cost savings to an organization. customers typically undertake a significant evaluation process that has in the past resulted in a lengthy sales cycle, typically between four and twelve months. We spend substantial time, effort and money on our sales efforts without any assurance that our efforts will produce any sales. In addition, service subscriptions are frequently subject to budget constraints and unplanned administrative, processing and other delays. If sales expected from a specific customer for a particular quarter are not realized in that quarter or at all, our results could fall short of public expectations, and our business operating results and financial condition could be adversely affected from quarter to quarter.

# Continued Dependence on Large Contracts May Result in Lengthy Sales and Implementation Cycles and Impact Revenue Recognition and Cash Flow

The sale and implementation of the Company's products generally involve a significant commitment of resources by prospective customers. As a result, the Company's sales process is often subject to delays associated with lengthy approval processes attendant to significant capital expenditures, definition of special customer implementation requirements, and extensive contract negotiations with the customer. Therefore, the sales cycle varies substantially from customer to customer and typically lasts between four and twelve months. During this time the Company may devote significant time and resources to a prospective customer, including costs associated with multiple site visits, product demonstrations and feasibility studies. The Company may experience a number of significant delays over which the Company has no control. Because the costs associated with the sale of the product are fixed in current periods, there may be a lag between the time the Company incurs costs with regard to a particular customer or contract and the time the Company begins to receive or recognize revenues from such customer or contract. Moreover, in the event of any downturn in any existing or potential customer's business or the economy in general, purchases of the Company's products may be deferred or canceled.

In addition, the implementation of the Company's products typically takes several months of integration of the product with the customer's other existing systems and customer training requires a close working relationship between the customer and members of the Company's professional service organization. These issues make it difficult to predict the quarter in which expected orders will occur. Delays in implementation of products could cause some or all of the professional services revenues from those projects to be shifted from the expected quarter to a subsequent quarter or quarters.

When the Company has provided consulting services to implement certain larger projects, some customers have delayed payment of a portion of license fees until implementation was complete and in some cases have disputed the consulting fees charged for implementation. There can be no assurance the Company will not experience additional delays or disputes regarding payment in the future, particularly if the Company receives orders for large, complex installations. Additionally, as a result of the application of the revenue recognition rules applicable to the Company's licenses under generally accepted accounting principles, license revenues may be recognized in periods after those in which the respective licenses were signed. The Company believes that period-to-period comparisons of its results of operations should not be relied upon as any indication of future performance.

# We Cannot Accurately Predict Subscription Renewals Rates and the Impact These Rates May Have on Our Future Revenue and Operating Results

Our customers have no obligation to renew their subscriptions for our cloud service after the expiration of their initial subscription period, which is typically 36 months. Some customers may elect not to renew. In addition, our customers may renew for fewer users or renew for shorter contract lengths. We cannot accurately predict attrition rates given our varied customer base and the number of multi-year subscription contracts. Our attrition rates may increase or fluctuate as a result of a number of factors, including customer dissatisfaction with our service, customers' spending levels, decreases in the number of users at our customers, pricing changes and deteriorating general economic conditions. If our customers do not renew their subscriptions for our subscription services or reduce the number of paying subscriptions at the time of renewal, our revenue will decline and our business may suffer.

Our future success also depends in part on our ability to sell new and additional services and/or more subscription service to new and existing customers. The rate at which our customers purchase new licenses or upgraded services depends on a number of factors, including general economic conditions and that our customers do not react negatively to any price changes related to these services. If our efforts to sell to new and existing customers are not successful, our business may suffer.

### Fluctuations in Quarterly Operating Results May Be Significant

The Company's quarterly operating results have in the past and may in the future vary significantly depending on factors such as:

- revenue from software sales;
- timing of new product releases;
- market acceptance of new and enhanced versions of the Company's products;
- customer order deferrals in anticipation of enhancements or new products;
- size and timing of significant orders, the recognition of revenue from such orders;
- changes in pricing policies by the Company and its competitors;
- introduction of alternative technologies;
- changes in operating expenses;
- changes in the Company's strategy;
- personnel changes; and
- effect of potential acquisitions by the Company and its competitors.

The Company has limited or no control over many of these factors. Due to all these factors, it is possible that in some future quarter the Company's operating results will be materially adversely affected.

# Fluctuations in Quarterly Operating Results Due to Seasonal Factors

The Company expects to experience fluctuations in the sale of licenses for its products due to seasonal factors. The Company has experienced and anticipates that it may experience relatively lower sales in the first fiscal quarter due to patterns in capital budgeting and purchasing cycles of current and prospective customers. The Company also expects that sales may decline during the summer months of its third quarter, particularly in the European markets. Moreover, the Company generally records most of its total quarterly license revenues in the third month of the quarter, with a concentration of these revenues in the last half of that third month. This concentration of license revenues is influenced by customer tendencies to make significant capital expenditures at the end of a fiscal quarter. The Company expects these revenue patterns to continue for the foreseeable future. Thus, its results of operations may vary seasonally in accordance with licensing activity, and will also depend upon recognition of revenue from such licenses from time to time. The Company believes that period-to-period comparisons of its results of operations are not necessarily meaningful and should not be relied upon as an indication of future performance.

## **Impairment of Intangible Assets**

If goodwill becomes impaired, it could impact our results of operations and financial position in the reporting period identified. Our identifiable intangible assets except for goodwill, were fully amortized as of September 30, 2015. The only intangible asset remaining was goodwill. We assess the potential impairment of goodwill on at least an annual basis, as well as whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors that could trigger an impairment of such assets, include the following:

- significant underperformance relative to historical or projected future operating results;
- significant changes in the manner of or use of the acquired assets or the strategy for our overall business;
- significant negative industry or economic trends;
- significant decline in our stock price for a sustained period;
- changes in our organization or management reporting structure that could result in additional reporting units, which may require alternative methods of estimating fair values or greater disaggregation or aggregation in our analysis by reporting unit; and
- a decline in our market capitalization below net book value.

On October 1, 2015, we performed our annual impairment test, which resulted in a goodwill impairment charge of \$1.5 million for the year ended December 31, 2015. Due to the impairment charge as of December 31, 2015, there is no remaining value of goodwill reported on our balance sheet.

### Competition in the CRM Software Market is Intense

The Company competes in the CRM software market. This market is highly competitive and the Company expects competition in the market to increase. The Company's competitors include large public companies such as Oracle, which owns PeopleSoft and Siebel, as well as traditional ERP software providers such as SAP that are developing CRM capabilities. In addition, a number of smaller privately held companies generally focus only on discrete areas of the CRM software marketplace. Because the barriers to entry in the CRM software market are relatively low, new competitors may emerge with products that are superior to the Company's products or that achieve greater market acceptance. Moreover, the CRM industry is currently experiencing significant consolidation, as larger public companies seek to enter the CRM market through acquisitions or establish other cooperative relationships among themselves, thereby enhancing their ability to compete in this market with their combined resources. Some of the Company's existing and potential competitors have greater financial, technical, marketing and distribution resources than the Company. These and other competitors pose business risks to the Company because:

- they compete for the same customers that the Company tries to attract;
- if the Company loses customers to its competitors, it may be difficult or impossible to win them back;
- lower prices and a smaller market share could limit the Company's revenue generating ability, reduce its gross margins and restrict its ability to become profitable or sustain profitability; and
- competitors may be able to devote greater resources to more quickly respond to emerging technologies and changes in customer requirements or to the development, promotion and sales of their products.

There can be no assurance that the Company will be able to compete successfully against current and future competitors or that competitive pressures faced by the Company will not adversely affect its business and results of operations.

# Part of our Business is Dependent on Market Demand for, and Acceptance of, the Cloud-based Model for the Use of Software

We derive, and expect to continue to derive a growing percentage of our revenue from the sale of cloud-based services. As a result, widespread acceptance and use of the cloud-based business model is critical to our future growth and success. Under the perpetual or periodic license model for software procurement, users of the software typically run applications on their hardware. Because companies are generally predisposed to maintaining control of their IT systems and infrastructure, there may be resistance to the concept of accessing the functionality that software provides as a service through a third party. If the market for cloud-based, software solutions ceases to grow or grows more slowly than we currently anticipate, demand for our services could be negatively affected.

## **Dependence on Proprietary Technology**

The Company depends heavily on proprietary technology for its business to succeed. The Company licenses its products to customers under license agreements containing, among other terms, provisions protecting against the unauthorized use, copying and transfer of the licensed program. In addition, the Company relies on a combination of trade secrets, copyright and trademark laws and confidentiality procedures to protect the Company's proprietary rights in its products and technology. The legal protection is limited, however. Unauthorized parties could copy aspects of the Company's products and obtain and use information that the Company believes is proprietary. Other parties may breach confidentiality agreements or other contracts they have made with the Company. Policing unauthorized use of the Company's software is difficult and, while the Company is unable to determine the extent to which piracy of its software products exists, software piracy can be expected to be a persistent problem. There can be no assurance that any of the measures taken by the Company will be adequate to protect its proprietary technology or that its competitors will not independently develop technologies that are substantially equivalent or superior to the Company's technologies. If the Company fails to successfully enforce its proprietary technology, its competitive position may be harmed.

Other software providers could develop similar technology independently, which may infringe on the Company's proprietary rights. The Company may not be able to detect infringement and may lose a competitive position in the market before it does so. In addition, competitors may design around the Company's technology or develop competing technologies. The laws of some foreign countries do not protect the Company's proprietary rights to the same extent as do the laws of the United States. Litigation may be necessary to enforce the Company's proprietary rights. Such litigation is time-consuming, has an uncertain outcome and could result in substantial costs and diversion of management's attention and resources. However, if the Company fails to successfully enforce its proprietary rights, the Company's competitive position may be harmed.

## **Limited Number of Data Centers to Deliver our Cloud Services**

We host our cloud-based software using several third-party data center facilities. We do not control the operation of these facilities. The owners of our data center facilities have no obligation to renew their agreements with us on commercially reasonable terms, or at all. If we are unable to renew these agreements on commercially reasonable terms, we may be required to transfer to other data center facilities, and we may incur significant costs and possible service interruption in connection with a transfer of this type.

Any changes in third-party service levels at our data centers or any errors, defects, disruptions or other performance problems with our services could harm our reputation and may damage our customers' businesses. Interruptions in our services might reduce our revenue, cause us to issue credits to customers, subject us to potential liability, cause customers to terminate their subscriptions or harm our renewal rates.

Our data centers are vulnerable to damage or interruption from human error, intentional bad acts, pandemics, earthquakes, hurricanes, floods, fires, war, terrorist attacks, power losses, hardware failures, systems failures, telecommunications failures and similar events. The occurrence of a natural disaster or an act of terrorism, or vandalism or other misconduct, a decision to close the facilities without adequate notice or other unanticipated problems could result in lengthy interruptions in our services.

# Our Success Depends on Our Customers' Continued High-Speed Access to the Internet

Because our cloud services are designed to work over the Internet, our revenue growth depends on our customers' high-speed access to the Internet, as well as the continued maintenance and development of the Internet infrastructure. The future delivery of our cloud services will depend on third-party Internet service providers to expand high-speed Internet access, to maintain a reliable network with the necessary speed, data capacity and security, and to develop complementary products and services, including high-speed modems, for providing reliable and timely Internet access and services. The success of our business directly depends on the continued accessibility, maintenance and improvement of the Internet as a convenient means of customer interaction, as well as an efficient medium for the delivery and distribution of information by businesses to their employees. All of these factors are out of our control.

To the extent that the Internet continues to experience increased numbers of users, frequency of use or bandwidth requirements, the Internet may become congested and be unable to support the demands placed on it, and its performance or reliability may decline. Any future Internet outages or delays could adversely affect our ability to provide cloud services to our customers.

## Possible Infringement of Third Party Intellectual Property Rights

Substantial litigation and threats of litigation regarding intellectual property rights are common in this industry. The Company is not aware that its products and technologies employ technology that infringes any valid, existing proprietary rights of third parties. While there currently are no pending lawsuits against the Company regarding infringement of any existing patents or other intellectual property rights or any notices that it is infringing the intellectual property rights of others, third parties may assert such claims in the future. Any claims, with or without merit, could:

- be time consuming to defend;
- result in costly litigation or damage awards;
- divert management's attention and resources;
- cause product shipment delays; or
- require the Company to seek to enter into royalty or licensing agreements, which may not be available on terms acceptable to the Company, if at all.

A successful claim of intellectual property infringement against the Company or the Company's failure or inability to license the infringed or similar technology could seriously harm its business because the Company would not be able to sell the impacted product without exposing itself to litigation risk and damages. Furthermore, redevelopment of the product so as to avoid infringement could cause the Company to incur significant additional expense and delay.

# **Dependence on Technology from Third Parties**

The Company integrates various third-party software products as components of its software. The Company's business would be disrupted if this software, or functional equivalents of this software, were either no longer available to the Company or the Company was no longer able to gain access to this software on commercially reasonable terms. In either case, the Company would be required to either redesign its software to function with alternate third-party software or develop these components itself, which would result in increased costs and could result in delays in software shipments. Furthermore, the Company might be forced to limit the features available in its current or future software offerings.

# Security Breaches and Other Disruptions Could Compromise our Information and Expose us to Liability, Which Would Cause our Business and Reputation to Suffer.

In the ordinary course of the Company's business, it collects and stores sensitive data, including intellectual property and proprietary business information of the Company and the Company's customers, suppliers and business partners as well as personally identifiable information of the Company's customers and employees. The secure processing, maintenance and transmission of this information is critical to the Company's operations and business strategy. Despite the Company's security measures, its information technology and infrastructure may be vulnerable to attacks by hackers or breached due to employee error, malfeasance or other disruptions. Any such breach could compromise the Company's networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, and regulatory penalties, disrupt the Company's operations and the services the Company provides to customers, damage the Company's reputation, and cause a loss of confidence in the Company's products and services, which could adversely affect the Company's business/operating margins, revenues and competitive position.

## **Need to Expand Indirect Sales**

The Company has historically sold its products through its direct sales force and a limited number of distributors (value-added resellers, system integrators and sales agents). The Company's ability to achieve significant revenue growth in the future will depend in large part on its success in establishing relationships with distributors and OEM partners. The Company is currently investing, and plans to continue to invest, significant resources to expand its domestic and international direct sales force and develop distribution relationships. The Company's distributors also sell or can potentially sell products offered by the Company's competitors. There can be no assurance that the Company will be able to retain or attract a sufficient number of its existing or future third party distribution partners or that such partners will recommend, or continue to recommend, the Company's products. The inability to establish or maintain successful relationships with distributors and OEM partners or to train its direct sales force could cause its sales to decline.

## **Future Acquisitions**

As part of Astea's growth strategy, it may pursue the acquisition of businesses, technologies or products that are complementary to its business. Acquisitions involve a number of special risks that could harm the Company's business, including the diversion of management's attention, the integration of the operations and personnel of the acquired companies, and the potential loss of key employees. In particular, the failure to maintain adequate operating and financial control systems or unexpected difficulties encountered during expansion could harm the Company's business. Acquisitions may result in potentially dilutive issuances of equity securities, and the incurrence of debt and contingent liabilities, any of which could materially adversely affect the Company's business and results of operations.

Under the covenants with Silicon Valley Bank ("SVB") regarding our line of credit, the Company must first get SVB's approval before entering into any acquisition transactions.

## **Expansion of International Sales**

Astea's international sales accounted for 35% of the Company's revenues in 2015 and 38% in 2014. The Company expects that international sales will continue to be a significant component of its business. In the Company's efforts to expand its international presence, it will face certain risks, which it may not be successful in addressing. These risks include:

- difficulties in establishing and managing international distribution channels and in translating products into foreign languages;
- difficulties finding staff to manage foreign operations and collect accounts receivable;
- difficulties enforcing intellectual property rights;
- liabilities and financial exposure under foreign laws and regulatory requirements;
- potential political, economic or military instability in the countries in which the Company operates;
- fluctuations in the value of foreign currencies and currency exchange rates; and
- potentially adverse tax consequences.

Additionally, the current economic difficulties in several European and Asian countries could have an adverse impact on the Company's international operations in future periods. Any of these factors, if not successfully addressed, could harm the Company's operating results.

## **Subjection to Anti-Bribery and Anti-Corruption Laws**

We are required to comply with anti-bribery and anti-corruption laws in the jurisdictions in which we operate, including the U.S. Foreign Corrupt Practices Act (the "FCPA"). The FCPA generally prohibits covered entities and their intermediaries from engaging in bribery or making other prohibited payments to foreign officials for the purpose of obtaining or keeping business or other benefits. In addition, the FCPA imposes accounting standards and requirements on covered entities which are intended to prevent the diversion of corporate funds to the payment of bribes and other improper payments, and to prevent the establishment of "off-books" slush funds from which such improper payments can be made. Although we believe that we have acted in compliance with applicable anti-corruption laws, there is no assurance that our practices have prevented or will work to prevent anti-corruption violations or that they will protect us against liability under anti-corruption laws for actions taken by our integrators, distributors, agents and other intermediaries with respect to our business or any businesses that we may acquire.

Compliance with the FCPA and other applicable anti-corruption laws is expensive and difficult, particularly in countries in which corruption is a recognized problem. If we or our intermediaries acting on our behalf are found to have failed to comply with the FCPA or other applicable anti-corruption laws, we may be subject to criminal and civil penalties, disgorgement and other remedial measures, any of which could have an adverse impact on our business, results of operations and financial condition. Any investigation of any potential violations of anti-corruption laws also could have an adverse impact on our business, results of operations and financial condition, such as through legal expenses and reputational effects.

# Research and Development in Israel; Potential Political, Economic or Military Instability

Astea's principal research and development facilities are located in Israel. Accordingly, political, economic and military conditions in Israel may directly affect its business. Continued political and economic instability or armed conflicts in Israel or in the region could directly harm the Company's business and operations.

Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its Arab neighbors, and a state of hostility has existed in varying degrees and intensity. This state of hostility has led to security

and economic problems for Israel. The future of peace efforts between Israel and its Arab neighbors, particularly in light of the recent violence and political unrest in the Middle East, remains uncertain and several countries still restrict business with Israel and Israeli companies. These restrictive laws and policies may also materially harm the Company's operating results and financial condition. Any hostilities involving Israel or the interruption or curtailment of trade between Israel and its trading partners could adversely affect our operations and results of operations. As an example, in early 2011, riots and uprisings in several countries in the Middle East have led to severe political instability and to a decline in the regional security situation. Such instability may affect the global economy and marketplace and could adversely affect business conditions and therefore affect the Company's operations. The political and security situation in Israel may also result in parties with whom we have agreements involving performance in Israel claiming that they are not obligated to perform their commitments under those agreements pursuant to force majeure provisions in such agreements.

# Dependence on Key Personnel Who Are Required to Perform Military Service

Many of the Company's employees in Israel are obligated to perform annual military reserve duty in the Israeli army and are subject to being called to active duty at any time, which could adversely affect the Company's ability to pursue its planned research and development efforts. The Company cannot assess the full impact of these requirements on its workforce or business and the Company cannot predict the effect of any expansion or reduction of these obligations. However, in light of the recent violence and political unrest in Israel, there is an increased risk that a number of the Company's employees could be called to active military duty without prior notice. The Company's operations could be disrupted by the absence for a significant period of time of one or more of our key employees or a significant number of other employees due to military service. Any such disruption in the Company's business could harm its operations.

## **Inflation and Currency Fluctuations**

The Company generates most of its revenues in U.S. dollars but all of its costs associated with the foreign operations located in Europe, the Pacific Rim, Japan, and Israel are denominated in the respective local currency and translated into U.S. dollars for consolidation and reporting. As a result, the Company is exposed to risks to the extent that the rate of inflation in Europe, the Pacific Rim, Japan, or Israel exceeds the rate of devaluation of their related foreign currency in relation to the U.S. dollar or if the timing of such devaluations lags behind inflation in Europe, the Pacific Rim, Japan, or Israel. In that event, the cost of the Company's operations in Europe, the Pacific Rim, Japan, and Israel measured in terms of U.S. dollars will increase and the U.S. dollar-measured results of operations will suffer. Historically, Israel has experienced periods of high inflation.

### **Dependence on Key Personnel; Competition for Employees**

The continued growth and success largely depends on the managerial and technical skills of key technical, sales and management personnel. In particular, the Company's business and operations are substantially dependent on the performance of Zack Bergreen, the founder and chief executive officer. If Mr. Bergreen were to leave or become unable to perform services for the Company, the business would likely be harmed. The Company's success also depends, to a substantial degree, upon its continuing ability to attract, motivate and retain other talented and highly qualified personnel. Competition for key personnel is intense, particularly so in recent years. From time to time the Company has experienced difficulty in recruiting and retaining talented and qualified employees. There can be no assurance that the Company can retain its key technical, sales and managerial employees or that it can attract, assimilate or retain other highly qualified technical, sales and managerial personnel in the future. If the Company fails to attract or retain enough skilled personnel, its product development efforts may be delayed, the quality of its customer service may decline and sales may decline.

# **Concentration of Ownership**

Currently, Zack Bergreen, the Company's chief executive officer, beneficially owns approximately 54.5% of the outstanding Common Stock of the Company, which includes 826,000 shares of Series A Convertible Preferred Stock and 797,000 shares of Series B Convertible Preferred Stock. As a result, Mr. Bergreen exercises significant control over the Company through his ability to influence and control the election of directors and all other matters that require action by the Company's stockholders. Under certain circumstances, Mr. Bergreen could prevent or delay a change of control of the Company which may be favored by a significant portion of the Company's other stockholders, or cause a change of control not favored by the majority of the Company's other stockholders. Mr. Bergreen's ability under certain circumstances to influence, cause or delay a change in control of the Company also may have an adverse effect on the market price of the Company's Common Stock.

## Possible Volatility of Stock Price

The market price of the Common Stock has in the past been, and may continue to be, subject to significant fluctuations in response to, and may be adversely affected by, variations in quarterly operating results, changes in earnings estimates by analysts, developments in the software industry, and adverse earnings or other financial announcements of the Company's customers as well as other factors. In addition, the stock market can experience extreme price and volume fluctuations from time to time, which may bear no meaningful relationship to the Company's performance. Broad market fluctuations, as well as economic conditions generally and in the software industry specifically, may result in material adverse effects on the market price of the Company's Common Stock.

Under Our Loan Agreement with SVB, if We Fail to Meet Certain Earnings Covenants, SVB May Increase Our Interest Rate, Lower Our Borrowing Base or Refuse to Grant Us Any Additional Borrowings in the Future.

The Company entered into a Loan and Security Agreement, as amended (the "Loan Agreement") with SVB. The Loan Agreement established a revolving credit facility (the "Revolving Facility") for the Company in the principal amount of up to \$2,000,000.

Subject to certain exceptions, the Loan Agreement contains covenants prohibiting the Company from, among other things: (a) conveying, selling, leasing, transferring or otherwise disposing of their properties or assets; (b) liquidating or dissolving; (c) engaging in any business other than the business currently engaged in or reasonably related thereto; (d) entering into any merger or consolidation, or acquiring all or substantially all of the capital stock or property of another entity; (e) becoming liable for any indebtedness; (f) allowing any lien or encumbrance on any of their property; and (g) paying any dividends (other than dividends on outstanding convertible preferred stock); and (i) making payment on subordinated debt. Further, the Company must maintain a minimum "adjusted quick ratio," tested as of the last day of each month, of at least 1.25:1.00. The adjusted quick ratio is the ratio of (a) the Company's consolidated, unrestricted cash plus net booked accounts receivable to (b) the Company's' liabilities to SVB plus, without duplication, the aggregate amount of the Company's' liabilities that mature within 1 year, minus the current portion of deferred revenue.

The Revolving Facility is secured by a first priority perfected security interest in substantially all of the assets of the Company, excluding the intellectual property of the Company. The Loan Agreement contains a negative covenant prohibiting the Company from granting a security interest in its intellectual property to any party.

However, there is no assurance that in the future that SVB will agree to grant a waiver or enter into a forbearance agreement with the Company if it fails to be in compliance with its covenants. Continued compliance with its covenants is dependent on the Company achieving certain operating results in 2016 and throughout the remaining term of the loan agreement. Market conditions have been difficult to predict and there is no assurance that in future periods the Company will meet the operating income targets in order to meet certain operating covenants as currently defined in the amended loan agreement.

# **Limitations of the Company Charter Documents**

The Company's Certificate of Incorporation and By-Laws contain provisions that could discourage a proxy contest or make more difficult the acquisition of a substantial block of the Company's Common Stock, including provisions that allow the Board of Directors to take into account a number of non-economic factors, such as the social, legal and other effects upon employees, suppliers, customers and creditors, when evaluating offers for the Company's acquisition. Such provisions could limit the price that investors might be willing to pay in the future for the Company's shares of Common Stock. The Board of Directors is authorized to issue, without stockholder approval, up to 5,000,000 shares of preferred stock with voting, conversion and other rights and preferences that may be superior to the Company's Common Stock and that could adversely affect the voting power or other rights of our holders of Common Stock. There are currently 826,000 Series A and 797,000 Series B Convertible Preferred Stock shares outstanding. The issuance of preferred stock or of rights to purchase preferred stock could be used to discourage an unsolicited acquisition proposal.

### Item 1B. Unresolved Staff Comments.

None

## Item 2. Properties.

The Company's headquarters are located in a leased facility of approximately 24,000 square feet in Horsham, Pennsylvania which runs through April 2017. The Company also leases facilities for operational activities in Irvine, California; Arnhem, Netherlands; and Karmiel, Israel, and for sales and customer support activities in Maidenhead, England; Tokyo, Japan; and

North Sydney, Australia. The Company believes that suitable additional or alternative office space will be available in the future on commercially reasonable terms as needed.

## Item 3. Legal Proceedings.

None

# Item 4. Mine Safety Disclosures.

Not applicable

### **PART II**

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

The Company's Common Stock was traded on Capital Market of The NASDAQ Stock Market, LLC ("NASDAQ") under the symbol "ATEA" until February 18, 2015 when the Company delisted the common stock from NASDAQ and transferred the trading market for its common stock to the OTCQB marketplace of the OTC Markets Group, Inc. ("OTCQB). The trading on the OTCQB began on February 19, 2015 under the symbol "ATEA." The following table sets forth the high and low sale prices for the Common Stock as reported by OTCQB in fiscal year 2015 and NASDAQ for the fiscal year 2014:

2015	High	Low
First quarter	\$2.25	\$1.04
Second quarter	2.00	1.19
Third quarter	2.61	1.50
Fourth quarter	3.00	1.80
2014	High	Low
First quarter	\$ 3.91	\$2.55
Second quarter	3.35	1.23
Third quarter	2.75	1.87

As of March 25, 2016, there were approximately 37 holders of record of the Company's Common Stock. On March 25, 2016, the last reported sale price of the Common Stock as reported by OTCQB was \$1.85 per share. The Company currently has outstanding 826,000 Series A Convertible Preferred Stock shares and 797,000 Series B Convertible Preferred Stock shares.

### Dividend Policy

The Board of Directors from time to time reviews the Company's forecasted operations and financial condition to determine whether and when payment of a dividend or dividends on common stock is appropriate. No common stock dividends have been declared since June 2000. The Company has no intention at this time to pay dividends on its common stock. In September 2008, the Company issued 826,000 shares of Series A Convertible Preferred Stock. Dividends accrue daily at a rate of 10% and are payable quarterly only when they are declared by the Board of Directors. The first dividend was paid at the end of 2008. In June 2014, the Company issued 797,000 shares of Series B Convertible Preferred Stock. Dividends accrue daily at a rate of 7%, until June 20, 2016 and which time the rate increase to 10%. The first dividend payment was paid at the end of December 2014. The Company continues to either accrue or disburse quarterly payments on the preferred dividends.

# Securities Authorized for Issuance Under Equity Compensation Plans

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants & Rights	Weighted Average Exercise Price of Outstanding Options, Warrants & Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders Equity compensation plans not approved by security holders	738,000	\$3.06	240,000
Total	738,000	\$3.06	240,000

Item 6. Selected Financial Data.

Years ended December 31,		2015		2014	2013	2012	2011
(in thousands, except per share data)							
Consolidated Statement of Income Data							
Revenues:							
Software license	\$	5,000	\$	3,357 \$	2,809 \$	4,796 \$	6,704
Subscriptions		1,082		790	153	-	-
Services and maintenance		16,875		16,587	17,375	21,594	19,883
Total revenues		22,957		20,734	20,337	26,390	26,587
Costs of revenues:							
Cost of software license fees		3,805		3,623	1,846	1,526	1,830
Cost of subscriptions, services and maintenance		13,307		11,588	12,456	14,048	12,987
Total cost of revenues		17,112		15,211	14,302	15,574	14,817
Gross profit		5,845		5,523	6,035	10,816	11,770
Operating expenses:							
Product development		1,382		1,350	1,349	2,075	2,724
Sales and marketing		4,167		3,980	3,915	4,982	4,558
General and administrative		3,276		3,455	3,391	4,095	3,572
Restructuring		· -		-	226	-	-
Goodwill impairment		1,538		-	-	-	
Total operating expenses		10,363		8,785	8,881	11,152	10,854
(Loss) income before interest and taxes		(4,518)		(3,262)	(2,846)	(336)	916
Net interest (expense) income		(4,318) $(159)$		(124)	(67)	(330)	27
Net interest (expense) meonic	_	(137)		(124)	(07)	14	21
(Loss) income before income taxes		(4,677)		(3,386)	(2,913)	(322)	943
Income tax (benefit) expense		(311)		61	83	(84)	270
nicome tax (benefit) expense	_	(311)		01	0.5	(04)	270
Net (loss) income		(4,366)		(3,447)	(2,996)	(238)	673
Preferred dividend		500		400	300	300	300
Net (loss) income allocable/available to common stockholders	\$	(4,866)	\$	(3,847) \$	(3,296) \$	(538) \$	373
Basic and diluted net (loss) income per share	\$	(1.36)	\$	(1.07) \$	(0.92) \$	(0.15) \$	0.10
Shares used in computing basic (loss) income per share	Ψ	3,587	Ψ	3,587	3,594	3,574	3,562
Shares used in computing diluted (loss) income per share		3,587		3,587	3,594	3,574	3,720
Consolidated Balance Sheet Data at December 31,							
Working (deficit) capital	\$	(5,632)	\$	(6,136) \$	(3,790) \$	(1,611) \$	(157)
Total assets	•	11,421		12,665	13,900	14,705	16,728
Long-term debt, less current portion		1,374		1,004	2,000	-	- ,
Accumulated deficit		(35,847)		(31,481)	(28,034)	(25,038)	(24,800)
Total stockholders' (deficit) equity		(4,537)		221	1,829	5,149	5,460
		,			•	•	•

# Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

### Overview

The Company develops, markets and supports service management software solutions, which are licensed to companies that sell and service equipment, or sell and deliver professional services. The Company's principal product offerings, Astea Alliance and FieldCentrix Enterprise suites, integrate and automate sales and service business processes and are designed to assist its users to increase competitive advantages, top-line revenue growth and profitability through better management of information, people, assets and cash flows. We believe that Astea Alliance offers substantially broader and far superior capabilities over the Company's predecessor product, DISPATCH-1, which was designed for only field service and customer support management applications.

The Company's products and services are primarily used in industries such as information technology, medical devices and diagnostic systems, industrial controls and instrumentation, retail systems, office automation, imaging systems, facilities management and telecommunications. An eclectic group of other industries, all with equipment sales and service requirements, are also represented in Astea's customer base. The Company maintains offices in the United States, United Kingdom, Australia, Israel, Japan and the Netherlands.

The Company generates revenues from three sources: software license fees for its software products, subscriptions services from its cloud services, and services and maintenance revenues from professional services, which includes consulting, implementation, training and maintenance related to those products.

Software license fees accounted for 22% of the Company's total revenues in 2015. Software license fee revenues include some fees from the sublicensing of third-party software and mapping software licenses. Typically, customers pay a license fee for the software based on the number of licensed users. Depending on the contract terms and conditions, software license fees are recognized as revenue upon delivery of the product if no significant vendor obligations remain and collection of the resulting receivable is deemed probable. If significant vendor obligations exist at the time of delivery or if the product is subject to uncertain customer acceptance, revenue is deferred until no significant obligations remain and/or acceptance has occurred.

We provide Software-as-a-Service ("SaaS") solutions which generate revenue from cloud subscription services. Our SaaS customers typically purchase three year license subscriptions, but occasionally will purchase annual license subscriptions. We do not recognize any revenue from SaaS sales until the customer goes live. The revenue recognized from SaaS projects were attributable to projects that went live in 2015 and 2014 as well as existing customers renewing their subscriptions allowing us to recognize revenue of \$1,082,000 and \$790,000 in the years ended December 31, 2015 and 2014, respectively. It generally takes several months for the customer to go live. Once the customer goes live we recognize the revenue ratably over the contract life.

The remaining component of the Company's revenues consists principally of fees derived from professional services associated with the implementation and deployment of the Company's software products, and maintenance fees for ongoing customer support, primarily external customer technical support services and unspecified product upgrades and enhancements. Professional services (including training) are generally charged on an hourly or daily basis and invoiced on a regular basis pursuant to customer work orders. Training services may also be charged on a per-attendee basis with a minimum daily charge. Out-of-pocket expenses incurred by Company personnel performing professional services are typically reimbursed by the customer. The Company recognizes revenue from professional services as the services are performed unless the services are under a fixed-price arrangement. Consulting, training and other services that are sold under fixed-price arrangements are recognized using the proportional performance method based on direct labor hours incurred to date as a percentage of total estimated direct labor hours required to complete the project. Consulting services primarily comprise implementation support related to the installation and configuration of the Company's products and do not typically require significant production, modification or customization of the software. In arrangements that require significant production, modification or customization of the software are not available from third-party suppliers, the consulting and license fees are recognized concurrently. When total cost estimates exceed revenue in a fixed-price arrangement, the estimated losses are recognized immediately in cost of revenue.

Maintenance fees are typically paid to the Company under written agreements entered into at the time of the initial software license sale. Maintenance revenue, which is generally invoiced annually, is recognized ratably over the term of the agreement.

## **Critical Accounting Policies and Estimates**

The Company's significant accounting policies are more fully described in its "Summary of Significant Accounting Policies," Note 2, to the Company's consolidated financial statements. The preparation of financial statements in conformity with accounting principles generally accepted within the United States of America requires management to make estimates and assumptions in certain circumstances that affect amounts reported in the accompanying financial statements and related notes. In preparing these financial statements, management has made its best estimates and judgments of certain amounts included in the financial statements, giving due consideration to materiality. The Company does not believe there is a great likelihood that materially different amounts would be reported related to the accounting policies described below; however, application of these accounting policies involves the exercise of judgments and the use of assumptions as to future uncertainties and, as a result, actual results could differ from these estimates.

### Revenue Recognition

Astea's revenue is principally recognized from three sources: (i) licensing arrangements, (ii) subscription services and (iii) services and maintenance.

The Company markets its products primarily through its direct sales force and resellers. License agreements do not provide for a right of return, and historically, product returns have not been significant.

The Company recognizes revenue from license sales when all of the following criteria are met: persuasive evidence of an arrangement exists, delivery has occurred, the license fee is fixed and determinable and the collection of the fee is probable. We utilize written contracts as a means to establish the terms and conditions by which our products, services and maintenance support are sold to our customers. Delivery is considered to have occurred when title and risk of loss have been transferred to the customer, which generally occurs after a license key has been delivered electronically to the customer. Revenue for arrangements with extended payment terms in excess of one year is recognized when the payments become due, provided all other recognition criteria are satisfied. If collectability is not considered probable, revenue is recognized when the fee is collected. Our typical end user license agreements do not contain acceptance clauses. However, if acceptance criteria are required, revenues are deferred until customer acceptance has occurred.

If these criteria are not met, then revenue is deferred until such criteria are met or until the period(s) over which the last undelivered element is delivered. If there is objective and reliable evidence of fair value for all units of accounting in an arrangement, the arrangement consideration is allocated to the separate units of accounting based on each unit's relative fair value. There may be cases, however, in which there is objective and reliable evidence of fair value of the undelivered item(s) but no such evidence for the delivered item(s). In those cases, the residual method is used to allocate the arrangement consideration. Under the residual method, the amount of consideration allocated to the delivered item(s) equals the total arrangement consideration less the aggregate fair value of the undelivered item(s). We apply the revenue recognition policies discussed below to each separate unit of accounting.

Astea allocates revenue to each element in a multiple-element arrangement based on the elements' respective fair value, determined by the price charged when the element is sold separately. Specifically, Astea determines the fair value of the maintenance portion of the arrangement based on the price, at the date of sale, if sold separately, which is generally a fixed percentage of the software license selling price. The professional services portion of the arrangement is based on hourly rates which the Company charges for those services when sold separately from software. If evidence of fair value of all undelivered elements exists, but evidence does not exist for one or more delivered elements, then revenue is recognized using the residual method. If an undelivered element for which evidence of fair value does not exist, all revenue in an arrangement is deferred until the undelivered element is delivered or fair value can be determined. Under the residual method, the fair value of the undelivered elements is deferred and the remaining portion of the arrangement fee is recognized as revenue. The proportion of the revenue recognized upon delivery can vary from quarter-to-quarter depending upon the determination of vendor-specific objective evidence ("VSOE") of fair value of undelivered elements. The residual value, after allocation of the fee to the undelivered elements based on VSOE of fair value, is then allocated to the perpetual software license for the software products being sold.

When appropriate, the Company may allocate a portion of its software revenue to post-contract support activities or to other services or products provided to the customer free of charge or at non-standard rates when provided in conjunction with the licensing arrangement. Amounts allocated are based upon standard prices charged for those services or products which, in the Company's opinion, approximate fair value. Software license fees for resellers or other members of the indirect sales channel are based on a fixed percentage of the Company's standard prices. The Company recognizes software license revenue for such contracts based upon the terms and conditions provided by the reseller to its customer. The Company

regularly communicates with its resellers and recognizes revenue based on information from its resellers regarding possible returns and collectability. However, the Company does not have a history of returns from the resellers.

In subscription based arrangements, even though customers use the software element, they generally do not have a contractual right to take possession of the software at any time during the hosting period without significant penalty to either run the software on its own hardware or contract with an unrelated third party to host the software. Accordingly, these SaaS arrangements, including the software license fees within the arrangements, are accounted for as subscription services provided all other revenue recognition criteria have been met. The revenue is recognized on a straight-line basis over the lifetime of the contract. The term of a SaaS contract is generally 1 to 3 years. In accordance with generally accepted accounting principles, the Company may not recognize any SaaS revenue before the customer goes live, to ensure that the revenue will match the use of services. The implementation period can be anywhere between 3 and 12 months. When upfront implementation, consulting and training services are bundled with the subscription based arrangement, the services are recognized over the life of the initial contract rather than the estimated life of the customer as the Company does not have sufficient history of renewals for its SaaS customers.

The post-contract support on perpetual licenses provides for technical support and unspecified updates to the Company's software products. Post-contract support is charged separately for renewals of annual maintenance in subsequent years. Fair value for maintenance is based upon either renewal rates stated in the contracts or separate sales of renewals to customers. Revenue is recognized ratably, or monthly, over the term of the maintenance period, which is typically one year.

Consulting and training service revenue are generally unbundled and, therefore, recognized at the time the services are performed except when these services are bundled with subscription revenues. If the Company has any fixed-price arrangements for services, the revenue is recognized using the proportional performance method based on direct labor hours incurred to date as a percentage of total estimated direct labor hours required to complete the project. Fees from licenses sold together with consulting services are generally recognized upon shipment, provided that the contract has been executed, delivery of the software has occurred, fees are fixed and determinable and collection is probable. The Company offers a variety of consulting services that include project management, implementation, data conversion, integration, custom report writing and training. Our professional services are generally billed on a time and materials basis using hourly rates together with reimbursement for travel and accommodation expenses. We recognize revenue as these professional services are performed. On rare occasions these consulting service arrangements involve acceptance criteria. In such cases, revenue is recognized upon acceptance.

We believe that our accounting estimates used in applying our revenue recognition are critical because:

- the determination that it is probable that the customer will pay for the products and services purchased is inherently judgmental;
- the allocation of proceeds to certain elements in multiple-element arrangements is complex;
- the determination of whether a service is essential to the functionality of the software is complex;
- establishing company-specific fair values of elements in multiple-element arrangements requires adjustments from time-to-time to reflect recent prices charged when each element is sold separately; and
- the determination of the stage of completion for certain consulting arrangements is complex.

Changes in the aforementioned items could have a material effect on the type and timing of revenue recognized.

For the years ended December 31, 2015 and 2014, the Company recognized \$22,957,000 and \$20,734,000, respectively, of revenue related to software license fees, subscription revenue, and services and maintenance.

We present taxes assessed by a governmental authority including sales, use, value added and excise taxes on a net basis and therefore the presentation of these taxes is excluded from our revenues and is included in accrued expenses in the accompanying consolidated balance sheets until such amounts are remitted to the taxing authority.

Cost of Software License Fees

Cost of software license fees includes amortization of the capitalized software development costs and the cost of third party licenses sold to customers.

## Cost of Subscriptions, Services and Maintenance

Cost of subscription, services and maintenance includes compensation and benefits provided to our professional service employees, independent consultants, telecommunication cost, third party hosting costs, outside monitoring costs, unreimbursed travel expenses and allocated facility costs.

## Product Development

Product development costs include our research and development expenses which consist primarily of personnel, contractors, and related costs, including salaries and employee benefits for software engineers. To date, our product development efforts have been devoted to new products and service offerings and increases in features and functionality of our existing products and services.

## Sales and Marketing

Sales and marketing costs include compensation, commissions and benefits paid to our sales and marketing teams, telecommunication costs, travel costs, marketing and sales costs, professional fees and facility costs.

### General and Administrative Costs

General and administrative costs include salaries, benefits and related costs for the Company's finance, administrative and executive management personnel, external accounting and audit costs, bad-debt expense, professional fees, corporate facility costs, Board of Director expenses and other costs associated with being a public company.

# Depreciation and Amortization

Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets, which range from three to ten years for computers and related equipment, furniture and fixtures, software and office equipment, and the lesser of the lease term or estimated useful life for leasehold improvements. Intangible assets are amortized using the straight-line method over their estimated useful lives, which range from five to ten years.

# Deferred Revenue

Deferred revenue includes amounts billed to or received from customers for which revenue has not been recognized. This generally results from post-contract support, software installation, subscription fees for hosting, hosting consulting fees not yet recognized and training or license revenue which has been deferred until all revenue recognition requirements have been met or services performed.

## Accounts Receivable and Allowance for Doubtful Accounts

The Company evaluates the adequacy of its allowance for doubtful accounts at the end of each quarter. In performing this evaluation, the Company analyzes the payment history of its customer accounts that are significantly past due, subsequent cash collections on these accounts and comparative accounts receivable aging statistics. Based on this information, along with consideration of the general strength of the economy, the Company develops what it considers to be a reasonable estimate of the uncollectible amounts included in accounts receivable. This estimate involves significant judgment by the management of the Company. Actual uncollectible amounts may differ from the Company's estimate.

Unbilled accounts receivables are established when revenue is deemed to be recognized based on the Company's revenue recognition policy, but due to contractual restraints over the timing of invoicing, the Company does not have the right to invoice the customer by the balance sheet date.

We believe that our estimate of our allowance for doubtful accounts is critical because of the significance of our accounts receivable balance relative to total assets. If the general economy deteriorated, or factors affecting the profitability or liquidity of the industry changed significantly, then this could affect the accuracy of our allowance for doubtful accounts.

## Capitalized Software and Research and Development Costs

The Company capitalizes software development costs incurred during the period subsequent to the establishment of technological feasibility through the product's availability for general release. Costs incurred prior to the establishment of technological feasibility are charged to product development expense as they are incurred. Product development expense

includes payroll, employee benefits, other headcount-related costs associated with product development and any related costs to third parties under sub-contracting or net of any collaborative arrangements.

Capitalized software development costs are amortized on a product-by-product basis over the greater of the ratio of current revenues to total anticipated revenues or on a straight-line basis over the estimated useful lives of the products beginning with the initial release to customers. The Company's estimated life for its capitalized software products is two years based on current sales trends and the rate of product release. The Company continually evaluates whether events or circumstances have occurred that indicate that the remaining useful life of the capitalized software development costs should be revised or that the remaining balance of such assets may not be recoverable. The Company evaluates the recoverability of capitalized software based on the net realizable value of each product, which includes the estimated future gross revenues from that product reduced by the estimated future costs of completing and disposing of that product, including the costs of performing maintenance and customer support required to satisfy the Company's responsibility set forth at the time of sale. As of December 31, 2015, management believes that no revisions to the remaining useful lives or write-downs of capitalized software development costs are required.

We believe that our estimate of our capitalized software costs and the period for their amortization is critical because of the significance of our balance of capitalized software costs relative to our total assets. Potential impairment is determined by comparing the balance of unamortized capitalized software costs to the net realizable value for a capitalized software product. If efforts to sell that software product are terminated, or if the net realizable value from that software product drops below the unamortized balance, then an impairment would be recognized.

### Goodwill

Part of the purchase price for the FieldCentrix assets, acquired September 21, 2005, included the acquisition of goodwill. Goodwill represents the excess of the purchase price over the fair value of net assets acquired in connection with business combinations accounted for using the purchase method of accounting. Goodwill is not amortized, but instead goodwill is required to be tested annually for impairment and more frequently under certain circumstances. The Company performs testing of goodwill on October 1 of each year, or as events occur or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount.

The Company conducts a two-step test for impairment of goodwill. The first step of the test for goodwill impairment compares the fair value of the applicable reporting unit with its carrying value. If the fair value of a reporting unit is less than the reporting unit's carrying value, the Company will perform the second step of the test for impairment of goodwill. During the second step of the test for impairment of goodwill, the Company will compare the implied fair value of the reporting unit's goodwill with the carrying value of that goodwill. If the carrying value of the goodwill exceeds the calculated implied fair value, the excess amount will be recognized as an impairment loss. Based upon the results of the impairment testing, conducted after October 1, 2015, the Company determined that an impairment existed at December 31, 2015 and recognized a charge of \$1,538,000.

### Acquired Intangible Asset

Acquired intangible asset with a finite life (excluding goodwill) is amortized on a straight-line basis over its estimated useful life and reviewed for impairment if an event or circumstance occurs indicating that the asset may be impaired. The impairment test will consist of comparing the undiscounted cash flows expected to be generated by the acquired intangible asset to its carrying amount. If the asset is considered to be impaired, an impairment loss will be recognized in an amount by which the carrying amount of the asset exceeds its fair value. No impairment of acquired intangible asset has been identified during any of the periods presented. As of December 31, 2015, our only acquired intangible asset was fully amortized.

## Stock-Based Compensation - Option Plans

The Company estimates the fair value of stock options granted using the Black-Scholes-Merton ("Black-Scholes") option-pricing formula and amortizes the estimated option value using an accelerated amortization method where each option grant is split into tranches based on vesting periods. The Company's expected term represents the period that the Company's share-based awards are expected to be outstanding and was determined based on historical experience regarding similar awards, giving consideration to the contractual terms of the share-based awards and employee termination data. Executive level employees who hold a majority of options outstanding, and non-executive level employees each have similar historical option exercise and termination behavior and thus were grouped for valuation purposes. The Company's expected volatility is based on the historical volatility of its traded common stock and places exclusive reliance on historical volatilities to estimate our stock volatility over the expected term of its awards. The Company has historically not paid dividends to

common stockholders and has no foreseeable plans to issue dividends. The risk-free interest rate is based on the yield from the U.S. Treasury zero-coupon bonds with an equivalent term.

Under the Company's stock option plans, options awards generally vest over a four year period of continuous service and have a 10 year contractual term. The fair value of each option is amortized using an accelerated amortization method over the option's vesting period. The fair value of each option is estimated on the date of the grant using the Black-Scholes option pricing formula. There were 146,000 and 120,000 options granted during the years ended December 31, 2015 and 2014, respectively.

### Accounting for Income Taxes

Deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and operating loss and tax credit carryforwards and are measured using the enacted tax rates and laws that will be in effect when the difference and carryforwards are expected to be recovered or settled. A valuation allowance for deferred tax assets is provided when we estimate that it is more likely than not that all or a portion of the deferred tax assets may not be realized through future operations. This assessment is based upon consideration of available positive and negative evidence which includes, among other things, our most recent results of operations and expected future profitability. We consider our actual historical results to have a stronger weight than other more subjective indicators when considering whether to establish or reduce a valuation allowance on deferred tax assets.

As of December 31, 2015, we had approximately \$17.3 million of net deferred tax assets, against which we provided a 100% valuation allowance. Our net deferred tax assets were generated primarily by operating losses. Accordingly, it is more likely than not, that we will not realize these assets through future operations.

The Company prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Estimated interest is recorded as a component of interest expense and penalties are recorded as a component of general and administrative expenses.

## Correction of an Immaterial Error

The Company identified an immaterial error related to its classification on the consolidated balance sheet for an accrued liability that is due more than a year after the balance sheet date. The Company determined that in accounting for this accrued liability, it did not properly classify it in long-term liabilities on the consolidated balance sheet as of December 31, 2014. The Company reviewed the impact of this error on the prior periods in accordance with SEC guidelines on materiality of the error from a qualitative and quantitative perspective and determined that the error was not material to the prior period consolidated financial statements. However, the Company has corrected the balance sheet for the year ended December 31, 2014 by increasing the long-term accrued expenses and decreasing the accounts payable and accrued expenses in current liabilities by \$213,000. The impact of the error increased our working capital ratio from .56:1 to .57:1 as of December 31, 2014. In addition, the error had no impact on our bank covenants as of December 31, 2014.

## New Accounting Pronouncements

In May 2014, as part of its ongoing efforts to assist in the convergence of U.S. GAAP and International Financial Reporting Standards, the Financial Accounting Standards Board (FASB) issued a new standard related to revenue recognition. Under the new standard, recognition of revenue occurs when a customer obtains control of promised goods or services in an amount that reflects the consideration to which the entity expects to receive in exchange for those goods or services. In addition, the standard requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The new standard will be effective for us beginning January 1, 2018. Early adoption is permitted only as of annual reporting periods beginning after December 15, 2016. We anticipate this standard may have a material impact on our consolidated financial statements, and we are currently evaluating its impact.

In August 2014, FASB issued Preparation of Financial Statements - Going Concern, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern. Under GAAP, continuation of a reporting entity as a going concern is presumed as the basis for preparing financial statements unless and until the entity's liquidation becomes imminent. Preparation of financial statements under this presumption is commonly referred to as the going concern basis of accounting. If and when an entity's liquidation becomes imminent, financial statements should be prepared under the liquidation basis of accounting in accordance with Presentation of Financial Statements — Liquidation Basis of Accounting. Even when an entity's liquidation is not imminent, there may be conditions or events that raise substantial doubt about the entity's ability to continue as a going concern. In those situations, financial statements should continue to be prepared under the going concern

basis of accounting, but the amendments in this update should be followed to determine whether to disclose information about the relevant conditions and events. The amendments in this update are effective for us on January 1, 2017. Early application is permitted. The Company will evaluate the going concern considerations, however, at the current period, management does not believe that it has met conditions which would subject these financial statements for additional disclosure. We anticipate this update will not have a material impact on our consolidated financial statements.

In November 2015, the FASB issued Income Taxes: Balance Sheet Classification of Deferred Taxes, which simplifies the presentation of deferred income taxes by requiring deferred tax assets and liabilities be classified as noncurrent on the balance sheet. The updated standard is effective for us beginning on January 1, 2017 with early application permitted as of the beginning of any interim or annual reporting period. We anticipate that this standard will not have a material impact on our consolidated financial statements.

In February 2016, the FASB completed its Leases project by issuing Accounting Standards Update No. 2016-02, *Leases*. The updated guidance establishes the principles to report transparent and economically neutral information about the assets and liabilities that arise from leases. The updated guidance:

- Results in a more faithful representation of the rights and obligations arising from leases by requiring lessees to
  recognize the lease assets and lease liabilities that arise from leases in the statement of financial position and to
  disclose qualitative and quantitative information about lease transactions, such as information about variable lease
  payments and options to renew and terminate leases,
- Results in fewer opportunities for organizations to structure leasing transactions to achieve a particular accounting outcome on the statement of financial position,
- Improves understanding and comparability of lessees' financial commitments regardless of the manner they choose to finance the assets used in their businesses,
- Aligns lessor accounting and sale and leaseback transactions guidance more closely to comparable guidance in Revenue from Contracts with Customers and Other Income,
- Provides users of financial statements with additional information about lessors' leasing activities and lessors' exposure to credit and asset risk as a result of leasing, and
- Clarifies the definition of a lease to address practice issues that were raised about the previous definition of a lease and to align the concept of control, as it is used in the definition of a lease, more closely with the control principle in Consolidation.

The updated guidance is effective for us beginning January 1, 2019. Early adoption of the update is permitted. The Company is evaluating the impact of this updated guidance on its consolidated financial statements and related disclosures.

# **Results of Operations**

The following table sets forth for the periods indicated, selected financial data and the percentages of the Company's total revenues by each line item for the periods presented:

Years ended December 31,	2015	2014
Revenues:		_
Software license fees	21.8 %	16.2 %
Subscriptions	4.7	3.8
Services and maintenance	73.5	80.0
Total revenues	100.0 %	100.0 %
Cost of revenues:		
Cost of software license fees	16.5 %	17.4 %
Cost of subscriptions, services and maintenance	58.0	55.9
Total cost of revenues	74.5	73.3
Gross profit	25.5	26.7
Operating Expenses:		
Product development	6.0	6.5
Sales and marketing	18.1	19.2
General and administrative	14.3	16.7
Goodwill impairment	6.7	-
Total operating expenses	45.1	42.4
Loss from operations	(19.6)	(15.7)
Interest expense, net	0.7	0.6
Income tax (benefit) expense	(1.3)	0.3
Net loss	(19.0 %)	(16.6 %)

### Comparison of Years Ended December 31, 2015 and 2014

### Revenues

Total revenues increased \$2,223,000 or 11%, to \$22,957,000 for the year ended December 31, 2015 from \$20,734,000 for the year ended December 31, 2014. Software license revenues increased 49% in 2015 compared to 2014. Subscription revenues increased \$292,000 or 37% to \$1,082,000 from \$790,000 in 2014. Services and maintenance fees for 2015 amounted to \$16,875,000, a 2% increase from 2014.

Software license fee revenues increased \$1,643,000 or 49% to \$5,000,000 in 2015 from \$3,357,000 in 2014. Astea Alliance license revenues increased to \$4,976,000 in 2015 from \$3,281,000 in 2014, an increase of 52%. The increase resulted from an increase in Astea license sales in the U.S., Europe and Asia Pacific regions partially offset by decreases in license sales in Japan. The Company sold \$24,000 of FieldCentrix licenses in 2015, a decrease of \$52,000 from last year. The decrease was the result of selling fewer licenses to existing customers in 2015 compared to 2014.

Subscription revenue for the year ended December 31, 2015 was \$1,082,000, an increase of 37%, compared to \$790,000 recognized in 2014. The increase resulted from the number of hosted customers who went live in 2015. The Company continues to add new hosting customers. Even though the Company signed several new SaaS customers in 2015, revenue is not recognized until the customers go live.

Total services and maintenance revenues increased \$288,000 or 2% to \$16,875,000 in 2015 from \$16,587,000 in 2014. Service and maintenance revenue increased \$738,000, or 5% on the Astea Alliance products. The increase resulted from the revenue recognition of deferred professional services revenues on hosted projects, which were deferred until the customer went live. When hosted customers do go live, the deferred professional services revenue is recognized ratably over the remaining life of the initial contract. FieldCentrix service and maintenance revenue decreased \$450,000 or 15%. The decrease is due to a reduction in upgrade projects, customers transitioning to Alliance and loss of customers compared to the same period in 2014.

In 2015, there was one customer that accounted for 12% of total revenues and in 2014 there were no customers that accounted for 10% or more of total revenues.

#### **Costs of Revenues**

Costs of software license fees increased 5% to \$3,805,000 in 2015 from \$3,623,000 in 2014. Included in the cost of software license fees is the amortization of capitalized software development costs and the cost of all third party software embedded in the Company's software licenses which are sold to customers. Amortization of capitalized software development costs increased 6% to \$3,723,000 in 2015 compared to \$3,502,000 in 2014. This increase resulted from the additional amortization of Version 12.5 that was released in 2015 along with amortization of versions 12.0, 11.0 and 11.5. The gross margin percentage on software license sales was 24% in 2015 and (8%) in 2014. The increase in license gross margin resulted primarily from increased license sales partially offset by an increase in amortization in 2015.

Costs of subscriptions, services and maintenance increased 15% to \$13,307,000 in 2015 from \$11,588,000 in 2014. The increase in cost of subscription, service and maintenance is attributed primarily to increases in headcount in Europe and Australia, travel expenses in all regions and hosting costs from a growing customer base, partially offset by a decrease in the use of outside consultants in the U.S. and European locations. The subscriptions, service and maintenance gross margin percentage was 26% in 2015 and 33% in 2014. The decrease in gross margin on subscription, services and maintenance revenues resulted from the increase in costs discussed above, partially offset by an increase in subscription and service revenue.

#### **Gross Profit**

Gross profit increased 6% to \$5,845,000 in 2015 from \$5,523,000 in 2014. As a percentage of revenue, gross profit was 25% for the year ended December 31, 2015 compared to 27% for year ended December 31, 2014. The year-over-year decrease in gross profit as a percentage of revenue was driven by the 11% increase in revenues, offset by a 12% increase in costs of revenues. The increase in costs of revenues resulted primarily from increased amortization of capitalized software, which is included in the cost of license fees, and increases in the cost of subscriptions, which resulted from increases in the number of users and increases in the cost of services due to increase headcount in Europe and Australia.

#### **Operating Expenses**

#### **Product Development**

Product development expenses increased \$32,000 to \$1,382,000 in 2015 from \$1,350,000 in 2014. Software development costs of \$2,407,000 were capitalized in 2015 compared to \$2,532,000 during the same period in 2014. Gross development expense was \$3,789,000 in 2015, a reduction of 2%, compared to \$3,882,000 for the same period in 2014. The decrease was primarily due to a decrease in the value of the Israeli shekel compared to the U.S. dollar. Most of the Company's development occurs in Israel. Product development as a percentage of revenues was 6% in 2015 and 7% in 2014.

#### Sales and Marketing

Sales and marketing expenses increased 5%, or \$187,000, to \$4,167,000 in 2015 from \$3,980,000 in 2014. The increase in sales and marketing expense is attributable to an increase in sales headcount in all regions, increase in commissions related to an increase in license revenue and increases in external marketing costs compared to the prior year. In 2015, the Company attended tradeshows in the U.S., Europe and Australia compared to the prior year where we only attended tradeshows in the U.S. The Company continues to focus on expanding its market presence through intensified marketing efforts to increase awareness of the Company's products, including SaaS and subscription services. This occurs through the use of Webinars focused in the vertical industries in which the Company operates, attendance at selected trade shows, and increased efforts in lead generation for its sales force. As a percentage of revenues, sales and marketing expenses was 18% in 2015 compared to 19% in 2014. The decreased percentage is due to increased revenues in 2015.

#### General and Administrative

General and administrative expenses consist of salaries, benefits and related costs for the Company's finance, administrative and executive management personnel, legal costs, accounting costs, bad debt expense and various costs associated with the Company's status as a public company. General and administrative expenses decreased 5%, or \$179,000, to \$3,276,000 in 2015 from \$3,455,000 in 2014. The decrease is primarily due to lower accounting fees, resulting from a change in the use of our registered public accounting firm, less usage of outside consultants and lower fees as the Company moved to the OTCQB

listing from NASDAQ. As a percentage of revenues, general and administrative expenses was 14% for 2015 compared to 17% for 2014. The Company remains focused on controlling its operating costs.

#### Goodwill Impairment

We conducted our annual goodwill impairment test as of October 1, 2015 for our FieldCentrix reporting unit. This test, which was based on our most recent forecasts for the operating unit, indicated that FieldCentrix's carrying value exceeded its estimated fair value. After completing step 2 of the goodwill impairment test, a goodwill impairment charge of \$1,538,000 was recorded in operating expenses in the fourth quarter of 2015. The non-cash goodwill impairment charge related to goodwill recorded in connection with our acquisition of FieldCentrix in 2005. During 2015, there has been a reduction in license, service, and maintenance revenues due to the loss of a few customers and a lack of new customers. Accordingly, our expectations for future growth and profitability for FieldCentrix are lower than our previous estimates. We do not expect this impairment charge to affect FieldCentrix's ongoing business operations or financial performance.

#### **Net Interest Expense**

Net interest expense was \$159,000 in 2015 compared to \$124,000 in 2014. The Company incurred interest expense resulting from borrowing against its line of credit with its chief executive officer and SVB Bank. The increase year over year is due to increased borrowings in 2015 compared to 2014 and the amortization of fees incurred to obtain the new line of credit with SVB. The Company earned interest income of \$1,000 in both 2015 and 2014. As of December 31, 2015 and 2014, the Company's investments consisted of mutual funds.

# **Income Tax (Benefit) Expense**

The Company recorded an income tax benefit of \$311,000 in 2015 compared to tax expense of \$61,000 in 2014. The decrease resulted from the impairment of goodwill for which the Company reversed the tax difference related to goodwill. Tax expense is comprised of U.S. alternative minimum tax, tax differences for goodwill, and the Israel tax expense.

#### **International Operations**

Total revenues from the Company's international operations increased by \$117,000 or 1% to \$8,013,000 in 2015 from \$7,896,000 in 2014. The increase resulted from improved license sales in Europe and Australia, as well as increases in professional services in the Asia Pacific region due mainly from revenue from certain customers that went live on the SaaS solution in 2015 and additional maintenance revenue in EMEA as they have increased their customer base over the past several years. Offsetting these increases in revenues were decreases in license and services revenues in Japan, due to fewer new license sales in 2015 and a decrease in service revenues in EMEA due to recent SaaS projects for which revenue is being deferred until the customer goes live. Overall, international operations generated a net loss of \$1,849,000 for 2015 compared to net loss of \$1,610,000 in 2014 due to delayed revenues in EMEA for SaaS deals and the decline in Japans license deals which has resulted in lower than usual service revenue and increased operating expenses due to increased headcount in all international regions except Japan.

#### **Net Loss**

The Company generated a net loss of \$4,366,000 for the year ended December 31, 2015 compared to net loss of \$3,447,000 in 2014. The reduction in net income of \$919,000 is primarily the result of the net impact of the goodwill impairment charge net of the related tax benefit. Without the goodwill impairment charge, the company would have had a net loss of \$3,221,000 which is a slight improvement compared to 2014. The improvement in operating results was due to an increase in revenues partially offset by increases in amortization of capitalized software and subscription, services, and maintenance costs.

# **Liquidity and Capital Resources**

#### Operating Activities

Net cash provided by operating activities was \$3,198,000 for the year ended December 31, 2015, an increase of \$1,131,000 compared to the year ended December 31, 2014 in which \$2,067,000 of cash was provided by operations. The increase was mainly attributable to an increase in cash provided by deferred revenues of \$1,559,000 and accounts payable and accrued expenses of \$1,205,000. Offsetting the increases in cash flow were a decrease in net income of \$919,000, and a decrease in cash provided by accounts receivable of \$1,952,000. In addition, there was an increase in adjustments for non-cash items of \$1,306,000, which includes the goodwill impairment charge of \$1,538,000.

#### **Investing Activities**

The Company used \$85,000 less for investment activities in 2015 compared to 2014. The decrease in cash used for investing activities is attributable to a decrease of \$125,000 in capitalized software development costs, partially offset by a \$2,000 increase in restricted cash, an increase of \$19,000 in the purchases of property and equipment and decrease in proceeds from the sale of short-term investments of \$19,000.

## Financing Activities

The Company used \$247,000 in cash for financing activities in 2015, a reduction of \$1,022,000 compared to 2014. Payments of preferred stock dividends increased \$180,000 in 2015 compared to 2014 due to the issuance of additional preferred shares in June 2014. In addition, the Company paid \$118,000 in deferred financing costs in 2014 compared to \$27,000 in 2015. The Company repaid \$150,000 on the line of credit from the CEO during 2015 compared to repaying \$250,000 in 2014. In 2014, the Company borrowed \$400,000 on the line of credit from the CEO versus no draw downs on this line of credit in 2015. In addition in 2014, the Company entered into a line of credit with SVB, in which the Company borrowed \$4,957,000 and repaid \$3,954,000 in 2014 compared to borrowing \$770,000 and repaying \$400,000 in 2015.

The cash effect of exchange rate changes on the U.S. dollar related to other currencies in which the Company operates, primarily the Australian dollar, Japanese yen, the Euro, the British pound sterling and Israel shekel, provided an outflow of \$127,000 in 2015 compared to an outflow of \$9,000 in 2014.

At December 31, 2015, the Company had a working capital ratio of approximately .58:1 compared to .57:1 at December 31, 2014. The Company had \$1,676,000 in cash, cash equivalents and investments available for sale at December 31, 2015, compared to \$1,362,000 at December 31, 2014.

The Company has projected revenues that management believes will provide sufficient funds to sustain its continuing operations for at least the next twelve months. However, the Company expects to continue to incur additional operating expenses for research and development and invest in software development costs to achieve its projected revenue growth. We continually evaluate our operating cash flows which can vary subject to the actual timing of expected new sales compared to our expectations of those sales and are sensitive to many factors, including changes in working capital and our net loss. The projections of future cash needs and cash flows are subject to substantial uncertainty. As of December 31, 2015, the Company did not owe anything against the line of credit from its Chief Executive Officer and owed \$1,374,000 against the line of credit from Silicon Valley Bank ("SVB") which is not due to be repaid until April 2018. The availability under the SVB line of credit is tied to a borrowing base formula that is based on 80% of the Company's eligible domestic accounts receivable. As of December 31, 2015, the availability under the SVB line of credit was \$626,000.

The Company was in compliance with the financial covenants with SVB as of December 31, 2015. In the event the Company does not continue to meet its financial covenants and SVB does not extend a waiver or forbearance agreement, and the Company believes that it does not have adequate liquidity to operate, the Company will implement a cost cutting plan that reduces its expenditures to the appropriate level that matches its operating cash flows.

The Company does not plan any significant capital expenditures for at least the next twelve months other than to support its operations. The Company's plans for continued investment in product development and capitalized software costs are expected to be similar to prior years.

# **Contractual Obligations and Commercial Commitments**

The following tables summarize our contractual and commercial obligations, as of December 31, 2015:

	Payment Due By Period									
		<u>Total</u>		<u>2016</u>		<u>2017-2018</u>		<u>2019-2020</u>		<u>thereafter</u>
Contractual Cash Obligations: Operating Leases Line of Credit	\$	1,674,000 1,374,000	\$	1,102,000	\$	559,000 1,374,000	\$	13,000	\$	- -
Total	\$	3,048,000	\$	1,102,000	\$	1,933,000	\$	13,000	\$	

Dividends may be paid on common stock, when and if, declared by the Board of Directors. However, no dividend has been paid on common stock since July 2000. Dividends on convertible preferred stock are payable at a rate of 10% on the Series

A and 7% on the Series B on a quarterly basis, as declared by the Board of Directors. The rate on the Series B will increase to 10% on June 30, 2016.

#### **Off-Balance Sheet Transactions**

There are no off balance sheet transactions that would require disclosure in the above contractual obligations and commercial commitments table.

#### Item 7A. Quantitative and Qualitative Disclosures about Market Risk.

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. We do not hold financial instruments for trading purposes.

#### **Interest Rate Risk**

At December 31, 2015, the Company's debt consists of a line of credit with SVB. At December 31, 2015, the outstanding balance owed on our line of credit under the revolving credit facility with SVB was \$1,374,000. At December 31, 2015 and 2014, our outstanding debt related to our outstanding lines of credit under the revolving credit facility with our Chief Executive Officer was \$0 and \$150,000, respectively. Our credit facility with SVB has a variable interest rate, which exposes us to interest rate risks.

#### Foreign Currency Risk

All costs associated with the Company's foreign operations in Europe, Asia/Pacific, Japan and Israel are denominated in their respective local currencies and translated into U.S. dollars for financial reporting. As a result, the Company is exposed to risks to the extent that the rate of inflation in any of its foreign operating regions differs from the rate of revaluation of their related currencies in relation to the U.S. dollar or if the timing of such revaluations lags behind inflation in these regions. In such an event, the costs of the Company's operations in these regions, measured in U.S. dollars, will change and the U.S. dollar measured results of operations will be affected.

The Company does not use foreign currency forward exchange contracts or purchased currency options to hedge local currency cash flows or for trading purposes. All sales arrangements with international customers are denominated in foreign currency. The Company does not expect any material loss with respect to foreign currency risk. For the twelve months ended December 31, 2015, approximately 35% of the Company's overall revenue resulted from sales to customers outside the United States. A 10% change in the value of the U.S. dollar relative to each of the currencies of the Company's non-U.S.-generated sales would not have resulted in a material change to its results of operations. The Company does not expect any material loss with respect to foreign currency risk.

#### Item 8. Financial Statements and Supplementary Data.

#### **Report of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholders of Astea International Inc.

We have audited the accompanying consolidated balance sheet of Astea International Inc. and subsidiaries (the "Company") as of December 31, 2015, and the related consolidated statements of operations, comprehensive loss, changes in stockholders' equity (deficit), and cash flows for the year then ended. 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 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 the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal controls over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. 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 audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Astea International Inc. and subsidiaries as of December 31, 2015, and the consolidated results of their operations and their cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

/s/ Eisner Amper LLP Philadelphia, Pennsylvania March 30, 2016

#### Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders Astea International Inc.

We have audited the accompanying consolidated balance sheet of Astea International Inc. and subsidiaries (the "Company") as of December 31, 2014 and the related consolidated statements of operations, comprehensive loss, changes in stockholders' equity, and cash flows for the year ended December 31, 2014. 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 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 the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Astea International Inc. and subsidiaries as of December 31, 2014, and the results of their operations and their cash flows for the year ended December 31, 2014 in conformity with accounting principles generally accepted in the United States of America.

/s/ GRANT THORNTON LLP Philadelphia, Pennsylvania March 31, 2015

# ASTEA INTERNATIONAL INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS

	December 31,		
	2015	2014	
ASSETS			
Current assets:			
Cash and cash equivalents	\$ 1,663,000	\$ 1,349,000	
Investments available for sale	13,000	13,000	
Accounts receivable, net of allowance of \$68,000 and \$73,000	5,597,000	4,084,000	
Prepaid expenses and other current assets	368,000	488,000	
Total current assets	7,641,000	5,934,000	
Property and equipment, net	173,000	176,000	
Intangibles, net	-	96,000	
Capitalized software development costs, net	3,381,000	4,697,000	
Goodwill	-	1,538,000	
Restricted cash	128,000	126,000	
Other long-term assets	98,000	98,000	
Total assets	\$ 11,421,000	\$ 12,665,000	
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)			
Current liabilities:			
Line of credit from director/ officer	\$ -	\$ 150,000	
Accounts payable and accrued expenses	2,580,000	2,130,000	
Deferred revenues	10,693,000	8,179,000	
Total current liabilities	13,273,000	10,179,000	
Long-term liabilities:			
Line of credit from Silicon Valley Bank	1,374,000	1,004,000	
Long term accrued expenses	237,000	213,000	
Deferred tax liabilities	29,000	374,000	
Deferred revenues	1,045,000	394,000	
Total long-term liabilities	2,685,000	1,772,000	
Commitments and Contingencies – Note 10			
Stockholders' equity (deficit):			
Convertible preferred stock, \$.01 par value, shares authorized 5,000,000:			
Series A issued and outstanding 826,000 shares	8,000	8,000	
Series B issued and outstanding 797,000 shares Common stock \$.01 par value, 25,000,000 shares authorized; issued	8,000	8,000	
3,629,000; outstanding 3,587,000 shares	36,000	36,000	
Additional paid-in-capital	32,417,000	32,716,000	
Accumulated deficit	(35,847,000)	(31,481,000)	
Accumulated other comprehensive loss	(951,000)	(858,000)	
Treasury stock at cost, 42,000 common shares	(208,000)	(208,000)	
Total stockholders' equity (deficit)	(4,537,000)	221,000	
Total liabilities and stockholders' equity (deficit)	\$ 11,421,000	\$ 12,665,000	

# ASTEA INTERNATIONAL INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS

Years ended December 31, 2015 2014 Revenues: \$ \$ Software license fees 5,000,000 3,357,000 1,082,000 790,000 Subscriptions 16,875,000 16,587,000 Services and maintenance Total revenues 22,957,000 20,734,000 Costs of revenues: Cost of software license fees 3,805,000 3,623,000 Cost of subscriptions, services and maintenance 13,307,000 11,588,000 Total cost of revenues 17,112,000 15,211,000 Gross profit 5,845,000 5,523,000 Operating expenses: Product development 1,382,000 1,350,000 Sales and marketing 3,980,000 4,167,000 General and administrative 3,276,000 3,455,000 Goodwill impairment 1,538,000 Total operating expenses 10,363,000 8,785,000 Loss from operations (4,518,000)(3,262,000)Interest expense, net 159,000 124,000 Loss before income taxes (4,677,000)(3,386,000)Income tax (benefit) expense (311,000)61,000 (3,447,000) Net loss (4,366,000)Preferred dividend 500,000 400,000 Net loss allocable/available to common stockholders (4,866,000)(3,847,000)Basic and diluted loss per share available to common stockholders (1.36)(1.07)Weighted average shares outstanding used in computing basic and diluted loss per share 3,587,000 3,587,000

# ASTEA INTERNATIONAL INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

		Years ended December 31,				
	_	2015		2014		
Net loss	\$	(4,366,000)	\$	(3,447,000)		
Other comprehensive loss:						
Foreign currency translation adjustment Change in unrealized loss on		(94,000)		54,000		
investments available for sale, net of tax		1,000		(1,000)		
Comprehensive loss	\$	(4,459,000)	\$	(3,394,000)		

# ASTEA INTERNATIONAL INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (DEFICIT)

	Series A convertible preferred stock at par value	preferred	Common stock	Additional paid-in- capital	Accumulated other comprehensive A loss	.ccumulated deficit	Treasury stock	Total stockholders' equity (deficit)
Balances at December 31, 2013	\$ 8,000	\$	36,000	30,938,000 \$	6 (911,000) \$	(28,034,000) \$	(208,000)	\$ 1,829,000
Net loss	_	_	_	_	_	(3,447,000)	_	(3,447,000)
Series A and B preferred dividends	_	_	_	(400,000)	_	_	_	(400,000)
Amortization of preferred stock dividend	_	_	_	30,000	_	_	_	30,000
Stock-based compensation	_	_	_	156,000	_	_	_	156,000
Other comprehensive loss	_	_	_	_	53,000	_	_	53,000
Series B preferred stock issued, net	_	8,000	_	1,992,000	_	_	_	2,000,000
Balances at December 31, 2014	\$ 8,000	\$ 8,000 \$	36,000	32,716,000 \$	(858,000) \$	(31,481,000) \$	(208,000)	\$ 221,000
Net loss		_	_	_	_	(4,366,000)	_	(4,366,000)
Series A and B preferred dividends	_	_	_	(500,000)	_	_	_	(500,000)
Amortization of preferred stock dividend	_	_	_	60,000	_	_	_	60,000
Stock-based compensation	_	_	_	141,000	_	_	_	141,000
Other comprehensive loss	_	_	_	_	(93,000)	_	_	(93,000)
Balances at December 31, 2015	\$ 8,000	\$ 8,000 \$	36,000	32,417,000 \$	6 (951,000) \$	(35,847,000) \$	(208,000)	\$ (4,537,000)

# ASTEA INTERNATIONAL INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS

Years ended December 31,	2015	2014	
Cash flows from operating activities:			
Net loss	\$ (4,366,000) \$	(3,447,000)	
Adjustments to reconcile net loss to net cash provided by			
operating activities:			
Depreciation and amortization	3,924,000	3,836,000	
Amortization of deferred financing cost	82,000	41,000	
Decrease in provision for doubtful accounts	(5,000)	(38,000)	
Stock-based compensation	141,000	156,000	
Deferred income taxes	(345,000)	34,000	
Goodwill impairment	1,538,000		
Changes in operating assets and liabilities:			
Receivables	(1,612,000)	340,000	
Prepaid expenses and other	101,000	162,000	
Accounts payable and accrued expenses	362,000	(843,000)	
Deferred revenues	3,378,000	1,819,000	
Other assets	<del></del>	7,000	
Net cash provided by operating activities	3,198,000	2,067,000	
rect cash provided by operating activities	3,170,000	2,007,000	
Cash flows from investing activities:			
Capitalized software development costs	(2,407,000)	(2,532,000)	
Purchases of property and equipment	(102,000)	(83,000)	
Sale of short-term investments	1,000	20,000	
Change in restricted cash	(2,000)		
Net cash used in investing activities	(2,510,000)	(2,595,000)	
Cash flows from financing activities:			
Repayment on line of credit from director/officer	(150,000)	(250,000)	
Proceeds from line of credit from director/officer	(120,000)	400,000	
Repayment on line of credit from Silicon Valley Bank	(400,000)	(3,954,000)	
Proceeds from line of credit from Silicon Valley Bank	770,000	4,957,000	
Dividends paid on preferred stock	(440,000)	(260,000)	
Deferred financing cost	(27,000)	(118,000)	
	( ' ', ' ' ' ' '	( -,,	
Net cash (used in) provided by financing activities	(247,000)	775,000	
Effect of exchange rate changes on cash and cash equivalents	(127,000)	(9,000)	
Net increase in cash and cash equivalents	314,000	238,000	
Cash and cash equivalents balance, beginning of year	1,349,000	1,111,000	
Cash and cash equivalents, end of period	\$ 1,663,000 \$	1,349,000	
Supplemental disclosure of cash flow information:			
Issuance of preferred stock (Series B)	\$ - \$	2,000,000	
Cancellation of line of credit from director/officer	¥	(2,000,000)	
Cash paid for interest	78,000	87,000	
Cash paid for income taxes	45,000	41,000	
Cash paid for income taxes	45,000	41,000	

# ASTEA INTERNATIONAL INC. AND SUBSIDIARIES NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

# 1. Company Background

Astea International Inc. and Subsidiaries (collectively the "Company" or "Astea") are a global provider of service management software that addresses the unique needs of companies who manage capital equipment, mission critical assets and human capital. Clients include Fortune 500 to mid-size companies, which Astea services through Company facilities in the United States, United Kingdom, Australia, Japan, the Netherlands and Israel. The Company's principal products are Astea Alliance, FX Service Center and FX Mobile. Astea Alliance supports the complete service lifecycle, from lead generation and project quotation to service and billing through asset retirement. FX Service Center is a service management and dispatch solution system that gives organizations command over their field service operations. FX Mobile offerings include mobile field service automation (FSA) systems, which include the wireless devices and support of mobile field technicians using portable, hand-held computing devices. Astea Alliance is also offered as a cloud solution. By leveraging the cloud delivery model, companies can access a solution that has robust and proven functionality at a lower, more predictable cost, with seamless upgrades and a quicker return on investment. Since its inception in 1979, Astea has licensed applications to companies in a wide range of sectors including information technology, telecommunications, instruments and controls, business systems, and medical devices. The Company's sales and marketing efforts are primarily focused on new software licensing (on premise and cloud solutions) and support services for its latest generation of Astea Alliance and FieldCentrix products.

#### Correction of an Immaterial Error

The Company identified an immaterial error related to its classification on the consolidated balance sheet for an accrued liability that is due more than a year after the balance sheet date. The Company determined that in accounting for this accrued liability, it did not properly classify it in long-term liabilities on the consolidated balance sheet as of December 31, 2014. The Company reviewed the impact of this error on the prior periods in accordance with SEC guidelines on materiality of the error from a qualitative and quantitative perspective and determined that the error was not material to the prior period consolidated financial statements. However, the Company has corrected the balance sheet for the year ended December 31, 2014 by increasing the long-term accrued expenses and decreasing the accounts payable and accrued expenses in current liabilities by \$213,000. The impact of the error increased our working capital ratio from .56:1 to .57:1 as of December 31, 2014. In addition, the error had no impact on our bank covenants as of December 31, 2014.

#### Operating Matters and Liquidity

The Company has a history of net losses and an accumulated deficit of \$35,847,000 as of December 31, 2015. In 2015, the Company generated a net loss of \$4.4 million compared to a net loss of \$3.4 million generated in 2014. Further, at December 31, 2015, the Company had a working capital ratio of .58:1, with cash and cash equivalents and investments available for sale of \$1,676,000. Moreover, the Company expects to continue to incur additional operating expenses for research and development and investment in software development costs to achieve its projected revenue growth. We continually evaluate our operating cash flows which can vary subject to the actual timing of expected new sales compared to our expectations of those sales and are sensitive to many factors, including changes in working capital and our net loss. The Company believes that it has sufficient cash to meet its anticipated operating cash needs for at least the next 12 months. However, projections of future cash needs and cash flows are subject to substantial uncertainty. We continually evaluate our operating cash flows which can vary subject to the actual timing of expected new sales compared to our expectations of those sales and are sensitive to many factors, including changes in working capital and our results of operations. As of December 31, 2015 the Company did not owe anything against the line of credit from its Chief Executive Officer and \$1,374,000 against the line of credit from Silicon Valley Bank ("SVB"). The availability under the SVB line of credit is tied to a borrowing base formula that is based on 80% of the Company's eligible domestic accounts receivable. As of December 31, 2015, the availability under the line of credit was \$626,000. The Company has projected revenues that management believes will provide sufficient funds along with lines of credit to sustain its continuing operations for at least the next twelve months.

The Company was in compliance with the financial covenants for the line of credit with SVB as of December 31, 2015. In the event the Company does not meet its financial covenants in the future, SVB does not extend a waiver or forbearance agreement, and the Company does not believe that it has adequate liquidity to operate, the Company will implement a cost cutting plan, if necessary, that would reduce its expenditures to the appropriate level that matches its operating cash flows.

The Company does not plan any significant capital expenditures for at least the next twelve months other than to replace its existing capital equipment as it becomes obsolete. The Company's plans for investment in product development and capitalized software costs are expected to be similar to prior years.

# 2. Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of Astea International Inc. and its wholly owned subsidiaries and branches. All significant intercompany accounts and transactions have been eliminated upon consolidation.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant assets and liabilities that are subject to estimates include allowances for doubtful accounts, the carrying amount of goodwill and other acquired intangible assets, valuation of deferred tax assets and certain accrued liabilities and share-based awards.

Revenue Recognition

Astea's revenue is principally recognized from three sources: (i) licensing arrangements, (ii) subscription services and (iii) services and maintenance.

The Company markets its products primarily through its direct sales force and resellers. License agreements do not provide for a right of return, and historically, product returns have not been significant.

The Company recognizes revenue from license sales when all of the following criteria are met: persuasive evidence of an arrangement exists, delivery has occurred, the license fee is fixed and determinable and the collection of the fee is probable. The Company utilizes written contracts as a means to establish the terms and conditions by which its product support and services are sold to customers. Delivery is considered to have occurred when title and risk of loss have been transferred to the customer, which generally occurs after a license key has been delivered electronically to the customer. Revenue for arrangements with extended payment terms in excess of one year is recognized when the payments become due, provided all other recognition criteria are satisfied. If collectability is not considered probable, revenue is recognized when the fee is collected. The Company's typical end user license agreements do not contain acceptance clauses. However, if acceptance criteria are required, revenues are deferred until customer acceptance has occurred.

If these criteria are not met, then revenue is deferred until such criteria are met or until the period(s) over which the last undelivered element is delivered. If there is objective and reliable evidence of fair value for all units of accounting in an arrangement, the arrangement consideration is allocated to the separate units of accounting based on each unit's relative fair value. There may be cases, however, in which there is objective and reliable evidence of fair value of the undelivered item(s) but no such evidence for the delivered item(s). In those cases, the residual method is used to allocate the arrangement consideration. Under the residual method, the amount of consideration allocated to the delivered item(s) equals the total arrangement consideration less the aggregate fair value of the undelivered item(s). The Company applies the revenue recognition policies discussed below to each separate unit of accounting.

Astea allocates revenue to each element in a multiple-element arrangement based on the elements' respective fair value, determined by the price charged when the element is sold separately. Specifically, Astea determines the fair value of the maintenance portion of the arrangement based on the price, at the date of sale, if sold separately, which is generally a fixed percentage of the software license selling price. The professional services portion of the arrangement is based on hourly rates which the Company charges for those services when sold separately from software. If evidence of fair value of all undelivered elements exists, but evidence does not exist for one or more delivered elements, then revenue is recognized using the residual method. If an undelivered element for which evidence of fair value does not exist, all revenue in an arrangement is deferred until the undelivered element is delivered or fair value can be determined. Under the residual method, the fair value of the undelivered elements is deferred and the remaining portion of the arrangement fee is recognized as revenue. The proportion of the revenue recognized upon delivery can vary from quarter-to-quarter depending upon the determination of vendor-specific objective evidence ("VSOE") of fair value of undelivered elements. The residual value, after allocation of

the fee to the undelivered elements based on VSOE of fair value, is then allocated to the perpetual software license for the software products being sold.

When appropriate, the Company may allocate a portion of its software revenue to post-contract support activities or to other services or products provided to the customer free of charge or at non-standard rates when provided in conjunction with the licensing arrangement. Amounts allocated are based upon standard prices charged for those services or products which, in the Company's opinion, approximate fair value. Software license fees for resellers or other members of the indirect sales channel are based on a fixed percentage of the Company's standard prices. The Company recognizes software license revenue for such contracts based upon the terms and conditions provided by the reseller to its customer. The Company regularly communicates with its resellers and recognizes revenue based on information from its resellers regarding possible returns and collectability. However, the Company does not have a history of returns from the resellers.

In subscription based arrangements, even though customers use the software element, they generally do not have a contractual right to take possession of the software at any time during the hosting period without significant penalty to either run the software on its own hardware or contract with an unrelated third party to host the software. Accordingly, software as a service (SaaS) arrangements, including the software license fees within the arrangements, are accounted for as subscription services provided all other revenue recognition criteria have been met. The revenue is recognized on a straight-line basis over the lifetime of the contract. A SaaS contract is generally 1 to 3 years in duration. In accordance with generally accepted accounting principles, the Company may not recognize any SaaS revenue before the services go live, to ensure that the revenue will match the use of services. The implementation period can usually be anywhere between 3 and 12 months. When upfront implementation, consulting and training services are bundled with the subscription based arrangement, the services are recognized over the remaining life of the initial contract, once the project goes live.

The post-contract support on perpetual licenses provides for technical support and unspecified updates to the Company's software products. Post-contract support is charged separately for renewals of annual maintenance in subsequent years. Fair value for maintenance is based upon either renewal rates stated in the contracts or separate sales of renewals to customers. Revenue is recognized ratably, or monthly, over the term of the maintenance period, which is typically one year.

Consulting revenue and training service revenue are generally unbundled and recognized at the time the services are performed, except as noted above, when these services are bundled with subscription revenues. If the Company enters into a fixed-price arrangement for services, the revenue is recognized using the proportional performance method based on direct labor hours incurred to date as a percentage of total estimated direct labor hours required to complete the project. Fees from licenses sold together with consulting services are generally recognized upon shipment, provided that the contract has been executed, delivery of the software has occurred, fees are fixed and determinable and collection is probable. The Company offers a variety of consulting services that include project management, implementation, data conversion, integration, custom report writing and training. Our professional services are generally billed on a time and materials basis using hourly rates together with reimbursement for travel and accommodation expenses. We recognize revenue as these professional services are performed. On rare occasions these consulting service arrangements involve acceptance criteria. In these cases, revenue is recognized upon acceptance.

We present taxes assessed by a governmental authority including sales, use, value added and excise taxes on a net basis. Therefore, the presentation of these taxes is excluded from our revenues and is included in accrued expenses in the accompanying consolidated balance sheets until such amounts are remitted to the taxing authority.

#### Reimbursable Expenses

The Company charges customers for out-of-pocket expenses incurred by its employees during the performance of professional services in the normal course of business. Billings for out-of-pocket expenses that are reimbursed by the customer are included in revenues with the corresponding expense included in cost of subscriptions, services and maintenance. During fiscal years 2015 and 2014, the Company billed \$360,000 and \$328,000, respectively, of reimbursable expenses to customers.

#### Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with an original maturity of three months or less when purchased to be cash equivalents.

#### Fair Value of Financial Instruments

The Company defines the fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

The Company accounts for certain assets and liabilities at fair value. The hierarchy below lists three levels of fair value based on the extent to which inputs in measuring fair value are observable in the market. We categorize each of our fair value measurements in one of these three levels based on the lowest level input that is significant to the fair value measurement in its entirety. These levels are:

- Level 1 Valuations based on quoted prices in active markets for identical assets that the Company has the ability to access.
- 2. Level 2 Valuations based on inputs on other than quoted prices included within Level 1, for which all significant inputs are observable, either directly or indirectly.
- 3. Level 3 Valuations based on inputs that are unobservable and significant to the overall fair value measurement. The inputs reflect the Company's assumptions about the assumptions a market participant would use in pricing the assets.

The carrying amounts of cash and cash equivalents, trade accounts receivable, trade accounts payable and accrued expenses and the line of credit approximate fair value because of the short-term nature of these instruments.

Investments classified as available for sale are measured using quoted market prices multiplied by the quantity held where quoted market prices were available. The Company is currently invested in mutual funds. The aggregate fair value of mutual funds as of December 31, 2015 and 2014 was \$13,000. The mutual funds are valued using Level 1 inputs and contain investments that seek high level of current income. There were no impairments of investments as of December 31, 2015 and 2014.

Investments are considered to be impaired when a decline in fair value is judged to be other-than-temporary. Fair value is calculated based on publicly available market information or other estimates determined by management. We employ a systematic methodology on a quarterly basis that considers available quantitative and qualitative evidence in evaluating potential impairment of our investments. If the cost of an investment exceeds its fair value, we evaluate, among other factors, general market conditions, credit quality, the duration and extent to which the fair value is less than cost, and for equity securities, our intent and ability to hold, or plans to sell, the investment. For fixed income securities, we also evaluate whether we have plans to sell the security or it is more likely than not that we will be required to sell the security before recovery. We also consider specific adverse conditions related to the financial health of and business outlook for the investee, including industry and sector performance, changes in technology, and operational and financing cash flow factors. Once a decline in fair value is determined to be other-than-temporary, an impairment charge is recorded to other income (expense) and a new cost basis in the investment is established.

#### Allowance for Doubtful Accounts

The Company records an allowance for doubtful accounts based on specifically identified amounts that management believes to be uncollectible. The Company also records an additional allowance based on certain percentages of aged accounts receivables, which are determined based on historical experience and management's assessment of the general financial conditions affecting the Company's customer base. Once management determines that an account will not be collected, the account is written off against the allowance for doubtful accounts. If actual collections experience changes, revisions to the allowance may be required.

Activity in the allowance for doubtful accounts is as follows:

	Balance at							Bala	nce at
	Year Ended December 31	beginning of year		Reductions		Write offs		end of year	
Ī	2015	\$	73,000	\$	(5,000)	\$	=	\$	68,000
	2014	\$	112,000	\$	(39,000)	\$	-	\$	73,000

The Company reviews accounts receivable on a monthly basis to determine if any accounts receivables will potentially be uncollectible. Based on a review and assessment of the information available at December 31, 2015 and 2014, the Company believes its allowance for doubtful accounts as of December 31, 2015 and 2014 is adequate. However, actual write-offs might exceed the recorded allowance.

#### Property and Equipment

Property and equipment are recorded at cost. Depreciation and amortization are provided using the straight-line method over the estimated useful lives of the related assets or the lease term, whichever is shorter. When property and equipment are sold or otherwise disposed of, the fixed asset account and related accumulated depreciation account are relieved and any gain or loss is included in operations. Expenditures for repairs and maintenance are charged to expense as incurred and significant renewals and betterments are capitalized.

#### Impairment of Long-Lived Assets

The Company evaluates its long-lived assets, including certain identifiable intangible assets, excluding goodwill, for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of any asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment is measured by the amount by which the carrying amount of the asset exceeds the fair value of the assets. As of December 31, 2015 and 2014, the Company determined that no impairments have occurred.

#### Capitalized Software Development Costs

The Company capitalizes software development costs incurred during the period from the establishment of technological feasibility through the product's availability for general release. Costs incurred prior to the establishment of technological feasibility are charged to product development expense. Product development expense includes payroll, employee benefits, allocation of indirect costs such as rent, other headcount-related costs associated with product development and any related costs to third parties under sub-contracting or net of any collaborative arrangements.

Software development costs are amortized on a product-by-product basis over the greater of the ratio of current revenues to total anticipated revenues (current and future revenues) or on a straight-line basis over the estimated useful lives of the products beginning with the initial release to customers. The Company's estimated life for its capitalized software products is two years based on current sales trends and the rate of product release. The Company continually evaluates whether events or circumstances had occurred that indicate that the remaining useful life of the capitalized software development costs should be revised or that the remaining balance of such assets may not be recoverable. The Company evaluates the recoverability of capitalized software based on the net realizable value of each product, which includes the estimated future gross revenues from that product reduced by the estimated future costs of completing and disposing of that product, including the costs of performing maintenance and customer support required to satisfy the Company's responsibility set forth at the time of sale. As of December 31, 2015 and 2014, management believes that no revisions to the remaining useful lives or write-downs of capitalized software development costs were required.

#### Research and Development Costs

The Company reports research and development costs as Product Development expense in its consolidated statement of operations. These costs include the costs incurred prior to the establishment of technological feasibility for new product development. In addition, research and development costs also include costs related to improving the quality of the Company's released software products and any costs incurred by third party companies that may be engaged from time to time, to assist the Company in its product development efforts that are not considered to be significant enhancements to the software products.

#### Goodwill

Part of the purchase price for the FieldCentrix assets, acquired September 21, 2005, included the acquisition of goodwill. Goodwill represents the excess of the purchase price over the fair value of net assets acquired in connection with business combinations accounted for using the purchase method of accounting. Goodwill was not amortized, but instead goodwill was required to be tested for impairment annually and more frequently if impairment indicators are present. The Company performs such testing of goodwill on October 1 of each year, or as events occur or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount.

The Company conducts a two-step test for impairment of goodwill. The first step of the test for goodwill impairment compares the fair value of the applicable reporting unit with its carrying value. If the fair value of a reporting unit is less than the reporting unit's carrying value, the Company will perform the second step of the test for impairment of goodwill. During the second step of the test for impairment of goodwill, the Company will compare the implied fair value of the reporting unit's goodwill with the carrying value of that goodwill. If the carrying value of the goodwill exceeds the calculated implied fair value, the excess amount will be recognized as an impairment loss.

During the fourth quarter of 2015, the Company completed the first step of the test for goodwill impairment. In addition, the Company evaluated other business factors, including macroeconomic conditions, the current business environment and changes in the operations of the business unit. Revenue and expense forecasts used in the evaluation of goodwill were based on trends of historical performance and management's estimate of future performance. During 2015, there had been a decline in license, service, and maintenance revenues due to loss of a few customers without any new customers. As a result, the Company's expectations of future revenue and profitability for FieldCentrix are declining compared to previous estimates performed. Based upon the results of the first step of the test for goodwill impairment, the Company concluded that the fair value of the FieldCentrix reporting unit was less than its carrying value as of December 31, 2015.

Because the step one test indicated that FieldCentrix's carrying value exceeded its estimated fair value, the second step of the goodwill impairment test was performed. Under the second step, the fair value of all FieldCentrix assets and liabilities were estimated, including tangible assets, existing technology and trade names for the purpose of deriving an estimate of the implied fair value of goodwill. The implied fair value of the goodwill was then compared to the recorded goodwill to determine the amount of the impairment. As a result, a goodwill impairment charge of \$1,538,000 was recorded in operating expenses in the fourth quarter of 2015.

# Concentration of Credit Risk

Financial instruments, which potentially subject the Company to credit risk, consist of cash equivalents and accounts receivable. The Company's policy is to limit the amount of credit exposure to any one financial institution. The Company places investments with financial institutions evaluated as being creditworthy, or investing in short-term money market which are exposed to minimal interest rate and credit risk. Cash balances are maintained with several banks. Certain operating accounts may exceed the Federal Deposit Insurance Corporation (FDIC) limits.

The Company sells its products to customers involved in a variety of industries including information technology, medical devices and diagnostic systems, industrial controls and instrumentation and retail systems throughout the world. While the Company does not require collateral from its customers, it does perform continuing credit evaluations of its customers' financial condition.

#### Income Taxes

Deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and operating loss and tax credit carryforwards and are measured using the enacted tax rates and laws that will be in effect when the difference and carryforwards are expected to be recovered or settled. A valuation allowance for deferred tax assets is provided when we estimate that it is more likely than not that all or a portion of the deferred tax assets may not be realized through future operations. This assessment is based upon consideration of available positive and negative evidence which included, among other things, our most recent results of operations and expected future profitability. We consider our actual historical results to have a stronger weight than other more subjective indicators when considering whether to establish or reduce a valuation allowance on deferred tax assets.

The Company prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Estimated interest is recorded as a component of interest expense and penalties are recorded as a component of general and administrative expenses.

#### Advertising

Advertising costs are expensed when incurred. Advertising costs for the years ended December 31, 2015 and 2014 were \$393,000 and \$353,000, respectively, and are included in sales and marketing expenses.

# Currency Translation

The accounts of the international subsidiaries and branch operations translate the assets and liabilities of international operations by using the exchange rate in effect at the balance sheet date. The results of operations are translated at average exchange rates during the period. The effects of exchange rate fluctuations in translating assets and liabilities of international operations into U.S. dollars are accumulated and reflected as a currency translation adjustment as a component of other comprehensive loss in the accompanying consolidated statements of changes in stockholders' equity (deficit). Transaction gains and losses are included in general and administrative expenses in the consolidated statements of operations. General and administrative expenses include exchange losses of \$108,000 and \$70,000 for the years ended December 31, 2015 and 2014, respectively.

#### Loss Per Share

Loss per share is computed on the basis of the weighted average number of shares and common stock equivalents outstanding during the period. In the calculation of diluted earnings per share, shares outstanding are adjusted to assume conversion of the Company's non-interest bearing convertible stock and exercise of options as if they were dilutive. In the calculation of basic loss per share, weighted average numbers of shares outstanding are used as the denominator.

The Company had net loss allocable to the common stockholders for the years ended December 31, 2015 and 2014. All options outstanding at December 31, 2015 and 2014 to purchase shares of common stock and shares of common stock issued on the assumed conversion of the eligible preferred stock were excluded from the diluted loss per common share calculation as the inclusion of these options and shares would have been antidilutive.

Years ended December 31,	2015	2014
Net loss	\$ (4,366,000)	\$ (3,447,000)
Preferred dividend	500,000	400,000
Net loss allocable available to common shareholders	(4,866,000)	(3,847,000)
Basic and diluted weighted average number of common shares outstanding	 3,587,000	3,587,000
Basic and diluted loss per common share	\$ (1.36)	\$ (1.07)

#### Comprehensive Loss

Comprehensive loss consists of net loss, unrealized gains (losses) on investments available for sale and foreign currency translation adjustments. The effects are presented in the accompanying consolidated statements of comprehensive loss.

#### Stock Compensation

The Company estimates the fair value of stock options granted using the Black-Scholes option-pricing model and amortizes the estimated option value using an accelerated amortization method where each option grant is split into tranches based on vesting periods. The Company's expected term represents the period that the Company's share-based awards are expected to be outstanding and was determined based on historical experience regarding similar awards, giving consideration to the contractual terms of the share-based awards and employee termination data. Executive level employees who hold a majority of options outstanding, and non-executive level employees each have similar historical option exercise and termination behavior and thus were grouped for valuation purposes. The Company's expected volatility is based on the historical volatility of its traded common stock and places exclusive reliance on historical volatilities to estimate our stock volatility over the expected term of its awards. The Company has historically not paid common stock dividends. The risk-free interest rate is based on the yield from the U.S. Treasury zero-coupon bonds with an equivalent term.

Under the Company's stock option plans, option awards generally vest over a four-year period of continuous service and have a 10-year contractual term. The fair value of each option is amortized using an accelerated amortization method over the option's vesting period. The fair value of each option is estimated on the date of the grant using the Black-Scholes option pricing model using the following assumptions:

	For the year ended December 31, 2015 Weighted Average	For the year ended December 31, 2014 Weighted Average		
Risk-free interest rate	1.49%	1.76%		
Expected life (in years)	5.59	5.48		
Volatility	90.93%	94.18%		
Expected dividends	-	-		
Annual forfeiture rate	23.38%	23.71%		

The weighted-average fair value of options granted during the years ended December 31, 2015 and 2014 was estimated as \$1.06 and \$1.92, respectively.

In May 2014, as part of its ongoing efforts to assist in the convergence of U.S. GAAP and International Financial Reporting Standards, the Financial Accounting Standards Board (FASB) issued a new standard related to revenue recognition. Under the new standard, recognition of revenue occurs when a customer obtains control of promised goods or services in an amount that reflects the consideration to which the entity expects to receive in exchange for those goods or services. In addition, the standard requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The new standard will be effective for us beginning January 1, 2018. Early adoption is permitted only as of annual reporting periods beginning after December 15, 2016. We anticipate this standard may have a material impact on our consolidated financial statements, and we are currently evaluating its impact.

In August 2014, FASB issued Preparation of Financial Statements - Going Concern, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern. Under GAAP, continuation of a reporting entity as a going concern is presumed as the basis for preparing financial statements unless and until the entity's liquidation becomes imminent. Preparation of financial statements under this presumption is commonly referred to as the going concern basis of accounting. If and when an entity's liquidation becomes imminent, financial statements should be prepared under the liquidation basis of accounting in accordance with Presentation of Financial Statements — Liquidation Basis of Accounting. Even when an entity's liquidation is not imminent, there may be conditions or events that raise substantial doubt about the entity's ability to continue as a going concern. In those situations, financial statements should continue to be prepared under the going concern basis of accounting, but the amendments in this update should be followed to determine whether to disclose information about the relevant conditions and events. The amendments in this update are effective for us on January 1, 2017. Early application is permitted. The Company will evaluate the going concern considerations, however, at the current period, management does not believe that it has met conditions which would subject these financial statements for additional disclosure. We anticipate this update will not have a material impact on our consolidated financial statements.

In November 2015, the FASB issued Income Taxes: Balance Sheet Classification of Deferred Taxes, which simplifies the presentation of deferred income taxes by requiring deferred tax assets and liabilities be classified as noncurrent on the balance sheet. The updated standard is effective for us beginning on January 1, 2017 with early application permitted as of the beginning of any interim or annual reporting period. We anticipate that this standard will not have a material impact on our consolidated financial statements.

In February 2016, the FASB completed its Leases project by issuing Accounting Standards Update No. 2016-02 *Leases*. The updated guidance establishes the principles to report transparent and economically neutral information about the assets and liabilities that arise from leases. The updated guidance:

- Results in a more faithful representation of the rights and obligations arising from leases by requiring lessees to
  recognize the lease assets and lease liabilities that arise from leases in the statement of financial position and to
  disclose qualitative and quantitative information about lease transactions, such as information about variable lease
  payments and options to renew and terminate leases,
- Results in fewer opportunities for organizations to structure leasing transactions to achieve a particular accounting outcome on the statement of financial position,
- Improves understanding and comparability of lessees' financial commitments regardless of the manner they choose to finance the assets used in their businesses,
- Aligns lessor accounting and sale and leaseback transactions guidance more closely to comparable guidance in Revenue from Contracts with Customers and Other Income,
- Provides users of financial statements with additional information about lessors' leasing activities and lessors' exposure to credit and asset risk as a result of leasing, and
- Clarifies the definition of a lease to address practice issues that were raised about the previous definition of a lease
  and to align the concept of control, as it is used in the definition of a lease, more closely with the control principle in
  Consolidation.

The updated guidance is effective for us beginning January 1, 2019. Early adoption of the update is permitted. The Company is evaluating the impact of this updated guidance on its consolidated financial statements and related disclosures.

#### 3. Accounts Receivable

Billed accounts receivable represent billings for the Company's products and services to end users and value added resellers. Unbilled accounts receivable represent contractual amounts due within one year under software licenses that have been delivered or statements of work for professional services, for work performed but not yet invoiced. Billed accounts

receivable are shown net of reserves for estimated uncollectible amounts. Accounts receivable net of allowance for doubtful accounts consist of the following:

	December 31,				
		2015	2014		
Billed accounts receivable, net	\$	5,116,000	\$ 3,568,000		
Unbilled accounts receivable		481,000	516,000		
	<u></u>				
	\$	5,597,000	\$ 4,084,000		

# 4. Property and Equipment

Property and equipment consist of:

-y 1F		December 31,		
	<b>Useful Life (Years)</b>	2015	2014	
Computers and related equipment	3	\$ 4,471,000	\$ 4,381,000	
Furniture and fixtures	10	606,000	606,000	
Leasehold improvements	The lesser of lease			
	term or 10	476,000	476,000	
Software	3	1,077,000	1,069,000	
Office equipment	3-7	811,000	807,000	
		7,441,000	7,339,000	
Less: Accumulated depreciation				
and amortization		(7,268,000)	(7,163,000)	
		\$ 173,000	\$ 176,000	

Depreciation and amortization expense for the years ended December 31, 2015 and 2014 was \$105,000 and \$198,000, respectively.

#### 5. Capitalized Software Development Costs

Capitalized software development costs consist of:

	Remaining Weighted	December	: 31,
	Average Life	2015	2014
Capitalized software development costs	16.8 months	\$ 26,289,000	\$23,882,000
Less: Accumulated amortization	_	(22,908,000)	(19,185,000)
		\$ 3,381,000	\$ 4,697,000

The Company capitalized software development costs of \$2,407,000 and \$2,532,000 for the years ended December 31, 2015 and 2014, respectively. Amortization of capitalized software development costs for the years ended December 31, 2015 and 2014 was \$3,723,000 and \$3,502,000, respectively, and is reflected in cost of software license fees in the consolidated statements of operations. The Company amortizes software developments costs using the greater of the straight-line basis over the estimated useful lives of the product (two years) or the revenue forecast method.

#### 6. Intangible Asset

Customer lists ("intangible asset") acquired as part of the FieldCentrix acquisition were amortized over their estimated annual life or over the period of its expected benefit, which was 10 years. Amortization expense related to this intangible asset was \$96,000 for the year ended December 31, 2015 and \$136,000 for the year ended December 31, 2014.

			Accumulated	<b>Amortization</b>	Net Carrying Value				
Description	Weighted <u>Avg. Life</u>	Gross Cost	2015	<u>2014</u>	<u>2015</u>	<u>2014</u>			
Customer List	10 years	\$1,360,000	\$1,360,000	\$1,264,000	-	\$96,000			

# 7. Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses consist of:

December 31,	2015	2014
Accounts payable	\$ 944,000	\$ 607,000
Accrued compensation and related benefits	1,161,000	1,006,000
Sales and payroll taxes payable	259,000	258,000
Preferred dividend payable	110,000	110,000
Income tax payable	7,000	68,000
Third party software costs payable	14,000	31,000
Accrued professional services	30,000	20,000
Accrued interest expense	6,000	1,000
Other accrued liabilities	49,000	29,000
	\$ 2,580,000	\$ 2,130,000

#### 8. Lines of Credit

#### Line of Credit from Director/ Officer-Related Party Transaction

On May 29, 2013, the Company entered into a Revolving Loan Agreement and associated Revolving Promissory Note (collectively the "Loan Documents") with Zack Bergreen, the Company's Chief Executive Officer. Pursuant to the Loan Documents, Mr. Bergreen provided an unsecured \$2,000,000 revolving line of credit to the Company (the "Line of Credit"). Amounts outstanding under the Line of Credit bore interest at a rate of 7% per annum, with interest payable monthly. The original maturity date of the Line of Credit was May 29, 2015. The Company was permitted to pay all amounts outstanding and terminate the Loan Documents prior to that time without any penalties. The Loan Documents contained customary covenants, default and other provisions. The Loan Documents were negotiated and approved by the Audit Committee of the Company's Board of Directors. Borrowings under the Line of Credit were subject to the Audit Committee's approval. On March 27, 2014, the Company amended its original Loan Documents with Mr. Bergreen. Pursuant to the amended Loan Documents, Mr. Bergreen provided an additional \$1,000,000 unsecured revolving line of credit to the Company to increase the total available line of credit to \$3,000,000. No other terms or conditions to the original agreement were changed. On June 20, 2014, the Company converted \$2,000,000 of outstanding principal owed to Mr. Bergreen under the Loan Documents into 797,000 shares of Series B Preferred Stock (see Note 12). In addition, during the second quarter of 2014, the Company repaid \$250,000 of borrowings under the line of credit to Mr. Bergreen. On May 28, 2015, the Company amended the original loan agreement maturity date to be October 1, 2015 and maximum principal amount to \$150,000. On October 1, 2015, the line of credit matured and there was no remaining balance. The Company incurred \$10,000 and \$81,000 of interest expense on this line of credit for the years ended December 31, 2015 and 2014, respectively.

#### Line of Credit from Silicon Valley Bank

On June 13, 2014, the Company entered into a Loan and Security Agreement with SVB (the "Prior Loan Agreement"). The Prior Loan Agreement established a revolving credit facility for the Company in the principal amount of up to \$3,000,000 (the "Prior Revolving Facility"). Availability under the Prior Revolving Facility was tied to a borrowing base formula that was based on 80% of the Company's eligible accounts receivable. Advances under the Prior Revolving Facility could have been repaid and reborrowed in accordance with the Prior Loan Agreement. No advances were made at closing of the loan. Pursuant to the Prior Loan Agreement, the Company agreed to pay SVB the outstanding principal amount of all borrowings, the unpaid interest thereon, and all other obligations incurred with respect to the Prior Loan Agreement on June 13, 2016.

On December 18, 2014, the Company and SVB amended and restated the Prior Loan Agreement to reduce the aggregate borrowing amount and revise certain other terms of the Prior Loan Agreement and the Prior Revolving Facility (the "Loan Agreement").

The Loan Agreement established a new revolving credit facility for the Company in the principal amount of up to \$2,000,000 (the "Revolving Facility"). Availability under the Revolving Facility is tied to a borrowing base formula that is based on 80% of the Company's eligible domestic accounts receivable. Advances under the Revolving Facility (the "Advances") may

be repaid and reborrowed in accordance with the Loan Agreement. No advances were made at closing. Pursuant to the Loan Agreement, the Company agreed to pay to SVB the outstanding principal amount of all Advances, the unpaid interest thereon, and all other obligations incurred with respect to the Loan Agreement on December 18, 2016. Interest, which is payable monthly, accrues on the unpaid principal balance of the Advances at a floating per annum rate equal to the greater of: (i) 2.25% above the prime rate (which may be reduced to 2.00% above the prime rate for every month in which the Company maintains an "adjusted quick ratio" of at least 1.50:1) or (ii) 5.25%; provided, that the minimum interest amount due per month shall not be less than \$2.000.

On January 14, 2016, the Company and SVB amended and restated the Loan Agreement to extend the maturity date of the credit facility through April 2018 and revised and clarified certain covenants and other terms of the credit facility ("Loan Modification Agreement").

If the Company is not in compliance with the terms of the Loan Modification Agreement at the end of any month, all outstanding advances plus accrued interest are immediately due and payable. Provided that no event of default exists, SVB may, in its good faith business discretion, refinance the outstanding borrowings with Advances based on specific eligible accounts. During an event of default, the rate of interest would increase 5% above the otherwise applicable rate, until such event of default is cured or waived.

Subject to certain exceptions, the Loan Agreement contains covenants prohibiting the Company from, among other things: (a) conveying, selling, leasing, transferring or otherwise disposing of their properties or assets; (b) liquidating or dissolving; (c) engaging in any business other than the business currently engaged in or reasonably related thereto; (d) entering into any merger or consolidation, or acquiring all or substantially all of the capital stock or property of another entity; (e) becoming liable for any indebtedness; (f) allowing any lien or encumbrance on any of their property; and (g) paying any dividends (other than dividends on outstanding convertible preferred stock); and (i) making payment on subordinated debt. Further, the Company must maintain a minimum "adjusted quick ratio," tested as of the last day of each month, of at least 1.25:1.00. The adjusted quick ratio is the ratio of (a) the Company's consolidated, unrestricted cash plus net booked accounts receivable to (b) the Company's liabilities to SVB plus, without duplication, the aggregate amount of the Company's liabilities that mature within 1 year, minus the current portion of deferred revenue.

The Revolving Facility is secured by a first priority perfected security interest in substantially all of the assets of the Company, excluding the intellectual property of the Company. The Loan Agreement contains a negative covenant prohibiting the Company from granting a security interest in their intellectual property to any party.

As of December 31, 2015 and 2014 the Company owed \$1,374,000 and \$1,004,000, respectively, against the Revolving Facility. The Company incurred \$150,000 and \$40,000 of interest expense to SVB for the years ended December 31, 2015 and 2014, respectively. As of December 31, 2015, the availability under the line of credit was \$626,000. The Company was in compliance with the covenants of the Loan Agreement as of December 31, 2015 and 2014.

#### 9. Income Taxes

The Company has identified its federal tax return and its state returns in Pennsylvania and California as "major" tax jurisdictions. Based on the Company's evaluation, it has been concluded that there are no significant uncertain tax positions requiring recognition in the Company's financial statements. The Company's evaluation was performed for tax years ended 2012 through 2015, the only periods subject to examination. The Company believes that its income tax positions and deductions will be sustained on a tax authority audit and does not anticipate any adjustments that will result in a material change to its financial position.

The Company's policy for recording interest and penalties associated with audits is to record such items as a component of income before income taxes. Penalties are recorded in general and administrative expenses and interest paid or received is recorded in interest expense or interest income, respectively, in the consolidated statement of operations. For the years ended December 31, 2015 and 2014, there were no interest or penalties related to uncertain tax positions.

Deferred tax assets and liabilities represent the future tax consequences of the differences between the financial statement carrying amounts for assets and liabilities versus the tax bases of assets and liabilities. Under this method, deferred tax assets are recognized for deductible temporary differences, operating loss and tax credit carryforwards. Deferred liabilities are recognized for taxable temporary differences. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. The impact of tax rate changes on deferred tax assets and liabilities is recognized in the year that the change is enacted. The provision (benefit) for income taxes is as follows:

Years ended December 31,	2015		2014		
Current:				_	
Federal	\$	2,000	\$	-	
State		-		-	
Foreign		32,000		25,000	
		34,000		25,000	
Deferred:					
Federal	\$	(251,000)	\$	37,000	
State		(103,000)		(7,000)	
Foreign		9,000		6,000	
	\$	(311,000)	\$	61,000	

Pre-tax loss for domestic locations for the years ended December 31, 2015 and 2014 was (\$2,898,000) and (\$3,079,000), respectively. Foreign locations had pre-tax loss of (\$1,779,000) and (\$307,000) in 2015 and 2014, respectively.

The approximate income tax effect of each type of temporary difference is as follows:

December 31,	2015	2014
Deferred tax assets:		_
Timing of revenue recognition	\$ 1,221,000	1,010,000
Accruals and reserves not currently deductible for tax	67,000	94,000
Domestic net operating loss carryforwards	12,869,000	12,906,000
Foreign net operating loss carryforwards	3,365,000	3,038,000
Depreciation and amortization	215,000	265,000
Alternative minimum tax	363,000	361,000
Non-qualified stock options	282,000	235,000
Other	223,000	24,000
Total deferred tax assets	18,605,000	17,933,000
Deferred tax liabilities:		
Capitalized software development costs	(1,305,000)	(1,814,000)
Amortization of deductible goodwill	-	(354,000)
Israel deferred tax liability	(29,000)	(20,000)
Total deferred tax liabilities	(1.224.000)	(2.189.000)
Total deferred tax flabilities	 (1,334,000)	(2,188,000)
Net deferred tax asset before valuation allowance	17,271,000	15,745,000
Valuation allowance	 (17,300,000)	(16,119,000)
Net deferred tax liabilities	\$ (29,000)	(374,000)

Realization of deferred tax assets is primarily dependent on future taxable income, the amount and timing of which is uncertain. The valuation allowance is adjusted on a periodic basis to reflect management's estimate of the realizable value of the net deferred tax assets. A valuation allowance has been recorded for the net deferred tax asset for all jurisdictions with the exception of a \$29,000 deferred tax liability recorded for the Company's subsidiary located in Israel.

Taxable income for the Israeli subsidiary was \$367,000 and \$278,000 for the years ended December 31, 2015 and 2014, respectively. The Israeli subsidiary has a tax provision of \$41,000 and \$31,000 for the years ended December 31, 2015 and 2014, respectively.

As of December 31, 2015, the Company had net operating loss carryforwards for United States federal income tax purposes of approximately \$30,140,000. Included in the aggregate net operating loss carryforward is \$8,900,000 of tax deductions related to equity transactions, the benefit of which will be credited to stockholders' equity, if and when realized after the other tax deductions in the carryforwards have been realized. The net operating loss carryforwards expire between 2019 through 2034.

The Company does not provide for federal income taxes or tax benefits on the undistributed earnings or losses of its international subsidiaries because earnings are reinvested and, in the opinion of management, will continue to be reinvested indefinitely. At December 31, 2015, the Company had not provided federal income taxes on cumulative earnings of individual international subsidiaries. Should these earnings be distributed in the form of dividends or otherwise, the Company would be subject to both U.S. income taxes and withholding taxes in various international jurisdictions. Determination of the related amount of unrecognized deferred U.S. income tax liability is not practicable because of the complexities associated with its hypothetical calculation. As noted above, the Company has significant net operating loss carryforwards for U.S. federal income taxes purposes, which are available to offset the potential tax liability if the earnings were to be distributed.

The extent to which the loss carryforward can be used to offset future taxable income and tax liabilities, respectively, may be limited, depending on the extent of ownership changes within any three-year period.

The effective tax rate differed from the statutory U.S. federal income tax rate as follows:

	Year ended December 31,		
	2015	2014	
Pre-tax book income	34.0%	34.0%	
State taxes	1.5%	0.1%	
Permanent differences	(0.9%)	(1.0%)	
Difference between statutory and foreign rates	(3.0%)	0.6%	
Change in foreign tax rate	-	(4.0%)	
Other	0.5%	0.3%	
Valuation allowance	(25.4%)	(31.8%)	
	6.7%	(1.8%)	

# 10. Commitments and Contingencies

#### Leases

The Company leases facilities and equipment under non-cancelable operating leases which may include escalation clauses. Rent expense for facility leases for the years ended December 31, 2015 and 2014 was \$935,000 and \$1,011,000, respectively. Equipment and vehicle lease expense for the years ended December 31, 2015 and 2014 was \$163,000 and \$212,000, respectively.

Future minimum lease payments under the Company's leases as of December 31, 2015 are as follows:

	<b>Operating Leases</b>
2016	\$1,102,000
2017	474,000
2018	85,000
2019	13.000

#### Litigation

From time to time, the Company may be involved in certain legal actions and customer disputes arising in the ordinary course of business. In the Company's opinion, the outcome of such actions will not have a material adverse effect on the Company's financial position, results of operations or cash flows.

# 11. Profit Sharing Plan/Savings Plan

The Company maintains a discretionary profit sharing plan, including a voluntary Section 401(k) feature, covering all qualified and eligible employees. Company contributions to the profit sharing plan are determined at the discretion of the Board of Directors. The Company may match 25% of eligible employees' contributions to the 401(k) plan up to a maximum of 1.5% of each employee's compensation. It was determined by the Board of Directors that there would be a match in 2015 and 2014. The Company elected to match 25% of 6.0% of compensation for each eligible employee's contributions to the 401(k) plans in 2015 and 2014 for a total match of \$78,000 and \$76,000, respectively.

# 12. Equity Plans

#### **Share-Based Awards**

Compensation costs in 2015 and 2014 include compensation costs for share-based payments granted to employees and directors based on the estimated grant date fair value.

As of December 31, 2015, the total unrecognized compensation cost related to non-vested options amounted to \$184,000, which is expected to be recognized over the options' remaining vesting periods of 2.48 years. No income tax benefit was realized by the Company in the years ended December 31, 2015 and 2014 as the Company maintains a full valuation allowance on its net deferred tax asset.

The Company has Stock Option Plans (the "Plans") under which incentive and non-qualified stock options may be granted to its employees, officers, directors and others. Generally, incentive stock options are granted at fair value, become exercisable over a four-year period, and are subject to the employee's continued employment. Non-qualified options are granted at exercise prices determined by the Board of Directors and vest over varying periods. A summary of the status of the Company's stock options as of December 31, 2015 and 2014 and changes during the years then ended are as follows:

	OPTIONS OU	<u>UTSTANDING</u>	<b>OPTIONS EXERCISABLE</b>			
		Wtd. Avg. Exercise		Wtd. Avg. Exercise		
	Shares	Price Per Share	Shares	Price Per Share		
Balance, December 31, 2013	666,000	\$ 3.92	482,000	\$ 4.23		
Granted	120,000	2.61	,			
Forfeited	(91,000)	3.05				
Exercised	-	-				
Expired	(6,000)	8.00				
Balance, December 31, 2014	689,000	\$ 3.78	515,000	\$ 4.10		
Granted	146,000	1.47	,			
Forfeited	(43,000)	3.04				
Exercised	· · · · ·	-				
Expired	(54,000)	7.57				
Balance, December 31, 2015	738,000	\$ 3.06	486,000	\$ 3.59		

There are 240,000 shares available for granting future options as of December 31, 2015. It is the Company's policy to issue shares from authorized but unissued common stock when stock options are exercised.

The following table summarizes outstanding options that are vested and expected to vest under the Company's stock option plans as of December 31, 2015:

	Number of <u>Shares</u>	Weighted Average Exercise Price <u>Per Share</u>	Weighted Average Remaining Contractual Term (in years)	Aggregate <u>Intrinsic Value</u>
Outstanding Options	738,000	\$3.06	5.58	\$127,000
Vested and Expected to Vest	663,000	\$3.19	5.20	\$84,000
Options Exercisable	486,000	\$3.59	3.96	\$2,000

The following table shows total share-based compensation expense included in the consolidated statement of operations:

	Year Ended			
	<b>December 31, 2015</b>	<b>December 31, 2014</b>		
Cost of subscriptions, services and maintenance	\$ 7,000	\$ 27,000		
Product development	1,000	3,000		
Sales and marketing	1,000	-		
General and administrative	132,000	126,000		
Pre-tax share-based compensation Income tax benefit	141,000	156,000		
Stock-based compensation expense, net	\$ 141,000	\$ 156,000		

#### Convertible Preferred Stock

#### Series A

On September 24, 2008, the Company issued 826,000 shares of Series-A Convertible Preferred Stock ("Series A Preferred Stock") to its Chief Executive Officer at a price of \$3.63 per share for a total of \$3,000,000. Dividends accrue daily on the Series A Preferred Stock at a rate of 10% and are payable only when, and if, declared by the Company's Board of Directors, quarterly in arrears. The Company reported \$300,000 in Series-A Preferred Stock dividends for the years ended December 31, 2015 and 2014, respectively.

The Series A Preferred Stock may be converted into common stock at the rate of one share of common for each share of Series A Preferred Stock. Since September 2010, the Company has had certain rights to cause conversion of all of the shares of Series A Preferred Stock outstanding. Since September 2012, the Company may redeem, subject to board approval, all of the shares of Series A Preferred Stock then outstanding at a price equal to the greater of (i) 130% of the purchase price plus all accrued and unpaid dividends and (ii) the fair market value of such number of shares of common stock which the holder of the Series A Preferred Stock would be entitled to receive had the redeemed Series A Preferred Stock been converted immediately prior to the redemption. In the event of a liquidation of the Company, the holder of the Series A and (Series B) Preferred Stock shall be entitled to receive in preference to the holders of the common stock, the original amount invested in the Preferred Stock plus any unpaid and accrued dividends. Preferred stock dividends on the Series A are declared quarterly by the Board of Directors. At December 31, 2015, there was an accrued dividend payable of \$75,000.

The Company reports the Series A Preferred Stock on the Company's consolidated balance sheet within stockholders' equity.

#### Series B

On June 20, 2014, the Company issued 797,000 of Series-B Convertible Preferred Stock ("Series B Preferred Stock") to its Chief Executive Officer at a price of \$2.51 per share in exchange for the cancellation of \$2,000,000 of outstanding principal owed to its Chief Executive Officer under a Revolving Promissory Note dated March 26, 2014 (See Note 8). The Audit Committee of the Board of Directors of the Company approved the transaction.

The per share price was determined as the greater of (i) the average closing bid price of a share of the Company's common stock reported by Nasdaq for the 30 trading days ending two trading days prior to the date of the Series B Preferred Stock agreement and (ii) 10% above the closing bid price of the Company's common stock on the date of the Series B Preferred Stock agreement. Accordingly, the per share price was set at \$2.51 ("Purchase Price"), corresponding to 10% above the closing bid price on June 20, 2014. Pursuant to the terms of the Series B Preferred Stock agreement, the Company also granted its Chief Executive Officer registration rights in the event the Company elects to file a registration statement with the Securities and Exchange Commission relating to an offering of its equity securities under the Securities Act of 1933, as amended.

The Series B Preferred Stock may be converted into shares of common stock on a one-to-one ratio, subject to customary antidilution provisions. The Series B Preferred Stock will pay a quarterly dividend, which will accrue at an annual rate of 7%, subject to certain rate adjustments as provided for under the agreement, until June 20, 2016 and at an annual rate of 10% thereafter. The Company's Chief Executive Officer may convert 100% of his shares of the Series B Preferred Stock into shares of common stock. Following June 20, 2016, each and every then outstanding share of Series B Preferred Stock is subject to mandatory and automatic conversion into shares of common stock if the closing price of the common stock as reported by the principal exchange or quotation system on which such common stock is traded or reported exceeds 300% of the then current conversion price for 30 consecutive trading days. The Company may redeem all of the outstanding shares of the Series B Preferred Stock issued at a price per share equal to 300% of the purchase price. The Series B Preferred Stock ranks senior to the Common Stock and on parity with the Company's Series A Convertible Preferred Stock. In the event of a liquidation of the Company, the holder of the Series B and (Series A) Preferred Stock shall be entitled to receive in preference to the holders of the common stock, the original amount invested in the preferred stock plus any unpaid and accrued dividends. Preferred stock dividends on the Series B are declared quarterly by the Board of Directors. At December 31, 2015, there were accrued dividends of \$35,000.

The Company reports the Series B Preferred Stock on the Company's consolidated balance sheet within stockholders' equity at the amount of net proceeds received less an imputed dividend cost. The imputed dividend cost of \$110,000 was the result of the preferred stock having a dividend rate during the first two years after its issuance (7%) that is lower than the rate that becomes fixed (10%) after the initial two-year period. The imputed dividend cost of \$110,000 is being amortized over the first two years from the date of issuance and is based upon the present value of the dividend discount using a 10% yield. The Company amortized \$60,000 and \$30,000 related to the imputed dividend cost for the years ended December 31, 2015 and 2014, respectively. The Company reported \$140,000 and \$70,000 in Series-B Preferred Stock dividends for the years ended December 31, 2015 and 2014, respectively.

# 13. Geographic Segment Data

The Company and its subsidiaries are engaged in the design, development, marketing and support of its service management software solutions. Substantially all revenues result from the license of the Company's software products and related professional services and customer support services. The Company's chief executive officer reviews financial information presented on a consolidated basis, accompanied by disaggregated information about revenues by geographic region for purposes of making operating decisions and assessing financial performance. Accordingly, the Company considers itself to have three reporting segments as follows:

Year ended December 31,		2015		2014
Revenues				
Software license fees				
United States	\$	3,237,000	\$	1,902,000
Total United States software license fees		3,237,000		1,902,000
Europe		1,303,000		1,102,000
Asia/Pacific		460,000		353,000
Total foreign software license fees	_	1,763,000		1,455,000
Total software license fees		5,000,000		3,357,000
Subscriptions				
United States		732,000		617,000
Total United States subscriptions		732,000		617,000
Europe		28,000		-
Asia/Pacific		322,000		173,000
Total foreign subscriptions		350,000		173,000
Total subscriptions		1,082,000		790,000
Services and maintenance United States		10,975,000		10,319,000
Total United States services and maintenance revenue		10,975,000		10,319,000
Europe		2,832,000		3,325,000
Asia/Pacific		3,068,000		2,943,000
Total foreign services and maintenance revenue		5,900,000		6,268,000
Total services and maintenance revenue		16,875,000		16,587,000
Total revenue	\$	22,957,000	\$	20,734,000
Net loss				
United States	\$	(2,517,000)	\$	(1,837,000)
Europe		(1,746,000)		(289,000)
Asia/Pacific	_	(103,000)		(1,321,000)
Net loss	\$	(4,366,000)	\$	(3,447,000)
Long lived assets	Φ.	2 500 000	Φ	6 <b>5</b> 0 <b>7</b> 000
United States	\$	3,589,000	\$	6,507,000
Europe		118,000		146,000
Asia/Pacific		73,000		78,000
Total long-lived assets	\$	3,780,000	\$	6,731,000
Total assets				
United States	\$	8,405,000	\$	9,503,000
Europe		1,691,000		1,610,000
Asia/Pacific		1,325,000		1,552,000
Total assets	\$	11,421,000	\$	12,665,000

#### 14. Selected Consolidated Quarterly Financial Data (Unaudited)

2015 Quarter Ended	Dec 31,	Sep 30,	Jun 30,	Mar 31,
Revenues	\$ 5,330,000	\$ 5,228,000	\$ 6,539,000	\$ 5,860,000
Gross profit	1,397,000	877,000	1,913,000	1,658,000
Net loss	(1,985,000)	(1,315,000)	(273,000)	(793,000)
Net loss allocable to common shareholders	(2,110,000)	(1,440,000)	(398,000)	(918,000)
Basic and diluted net loss per share Shares used in computing basic and diluted	\$ (0.59)	\$ (0.40)	\$ (0.11)	\$ (0.26)
net loss per share (in thousands)	3,587	3,587	3,587	3,587
2014 Quarter Ended	Dec 31,	Sep 30,	Jun 30,	Mar 31,
Revenues	\$ 5,483,000	\$ 5,115,000	\$ 5,297,000	\$ 4,839,000
Gross profit	1,559,000	1,317,000	1,661,000	986,000
Net loss	(639,000)	(795,000)	(752,000)	(1,261,000)
Net loss allocable to common shareholders	(764,000)	(920,000)	(827,000)	(1,336,000)
	(704,000)	(720,000)	(027,000)	(1,550,000)
Basic and diluted net loss per share Shares used in computing basic and diluted	\$ (0.21)	\$ (0.26)	\$ (0.23)	\$ (0.37)

# 15. Subsequent Event

On January 14, 2016, the Company and SVB amended and restated the Loan Agreement to extend the maturity date of the credit facility through April 2018 and revised and clarified certain covenants and other terms of the credit facility.

#### 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 of our principal executive officer and our principal financial officer, evaluated, as of the end of the period covered by this Form 10-K, the design adequacy and operating effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). Based on that evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures as of such date are effective at the reasonable assurance level in ensuring that information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934, as amended (the Exchange Act), is recorded, processed, summarized and reported within the time periods specified in the Securities Exchange Commission's rules and forms. Our disclosure controls and procedures include, without limitation, controls and procedures that are designed to reasonably assure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

# Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining an adequate system of 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 principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting, based on the framework in the Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO 2013").

Our system of internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the U.S.

Our internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets;
- provide reasonable assurance that our transactions are recorded as necessary to permit the preparation of our financial statements in accordance with accounting principles generally accepted in the U.S., and that our receipts and expenditures are being made only in accordance with authorizations of our management and our directors; and
- provide reasonable assurance regarding the prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, a system of internal controls over financial reporting can provide only reasonable assurance and may not prevent or detect misstatements. Further, because of changes in conditions, effectiveness of internal controls over financial reporting may vary over time. Our system contains self-monitoring mechanisms, and actions are taken to correct deficiencies as they are found.

Our management conducted an evaluation of the effectiveness of the system of internal control over financial reporting based on the framework in the 2013 Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, our management concluded that our system of internal controls over financial reporting was effective as of December 31, 2015.

This Form 10-K does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting as the rules of the Securities and Exchange Commission applicable to the Company do not require such an attestation report and permit us to provide only management's report in this Form 10-K.

### **Changes in Internal Controls Over Financial Reporting**

There have been no changes in our internal control over financial reporting during the fourth quarter ended December 31, 2015 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.

Certain information required by Part III is omitted from this Report in that the Company will file a definitive proxy statement within 120 days after the end of the Company's fiscal year pursuant to Regulation 14A (the "Proxy Statement") for its 2016 Annual Meeting of Stockholders proposed to be held on June 22, 2016, and the information therein is incorporated herein by reference.

The information in the Proxy Statement set forth under the captions "Election of Directors," "Executive Officers," "Section 16(a) Beneficial Ownership Reporting Compliance," "The Board of Directors Leadership Structure and Its Committees—Code of Conduct and Ethics," "The Board of Directors Leadership Structure and Its Committees—Nominating and Corporate Governance Committee" and "The Board of Directors Leadership Structure and Its Committees—Audit Committee" is incorporated herein by reference.

# Item 11. Executive Compensation.

#### **Executive Severance Agreements**

The information in the Proxy Statement set forth under the captions "Compensation Discussion and Analysis" and "Compensation and Other Information Concerning Directors and Officers" of the Proxy Statement, is incorporated herein by reference.

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

The information set forth under the caption "Security Ownership of Certain Beneficial Owners and Management" of the Proxy Statement is incorporated herein by reference. See "Securities Authorized for Issuance Under Equity Compensation Plans" under Part II, Item 5.

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

The information required by this Item is incorporated by reference from the Proxy Statement or amendment to the Form 10-K under the captions "Certain Relationships and Related Transactions" and "The Board of Directors Leadership Structure and its Committees."

# Item 14. Principal Accountant Fees and Services.

The information required by this Item is incorporated by reference from the Proxy Statement under the heading "Principal Accountant Fees and Services."

# PART IV

# Item 15. Exhibits and Financial Statement Schedules.

List of Exhibits.

(a)(3)

(a)(1)(A)	Consolidated Financial Statements.
i)	Consolidated Balance Sheets at December 31, 2015 and 2014.
ii)	Consolidated Statements of Operations for the years ended December 31, 2015 and 2014.
iii)	Consolidated Statement of Comprehensive Loss for the years ended December 31, 2015 and 2014.
iv)	Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2015 and 2014.
v)	Consolidated Statements of Cash Flows for the years ended December 31, 2015 and 2014.
vi)	Notes to the Consolidated Financial Statements.
(a)(1)(B)	Report of Independent Registered Public Accounting Firm.
(a)(2)	Schedules.
a)	Schedule II - Valuation and Qualifying Accounts
	The schedule listed above has been omitted because the information required to be set forth therein i not applicable or is shown in the accompanying Financial Statements or notes thereto.

The following exhibits are filed as part of and incorporated by reference into this Annual Report on Form 10-K:

Exhibit No.	Description
3.1	Certificate of Incorporation of the Company (Incorporated herein by reference to Exhibit 3.1 to the Company's Registration Statement on Form S-1, as amended (File No. 33-92778)).
3.2	By-Laws of the Company (Incorporated herein by reference to Exhibit 3.2 to the Company's Registration Statement on Form S-1, as amended (File No. 33-92778)).
3.3	Certificate of Designation of Series A Convertible Preferred Stock (Incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed September 26, 2008).
3.4	Certificate of Designation of Series B Convertible Preferred Stock (Incorporated herein by reference to the Company's Current Report on Form 8-K filed on June 24, 2014).
4.1	Specimen certificate representing the Common Stock (Incorporated herein by Reference to Exhibit 4.1 to the Company's Registration Statement on Form S-1, as amended (File No. 33-92778)).
10.1#	Amended and Restated 1995 Non-Employee Director Stock Option Plan (Incorporated herein by reference to Exhibit 10.9 to the Company's Annual Report on Form 10-K for the year ended December 31, 1997 filed on March 30, 1998).
10.2#	Form of Non-Qualified Stock Option Agreement under the 1995 Non-Employee Director Stock Option Plan (Incorporated herein by reference to Exhibit 4.5 to the Company's Registration Statement on Form S-8, filed on September 19, 1995 (File No. 33-97064)).
10.3#	1997 Stock Option Plan (Incorporated herein by reference to Exhibit 10.10 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1996 filed on March 31, 1997).
10.4#	Form of Non-Qualified Stock Option Agreement under the 1997 Stock Option Plan. (Incorporated herein by reference to Exhibit 10.11 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1996 filed on March 31, 1997).
10.5#	Form of Incentive Stock Option Agreement under the 1997 Stock Option Plan (Incorporated herein by reference to Exhibit 10.12 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1996 filed on March 31, 1997).
10.6#	1998 Stock Option Plan (Incorporated herein by reference to Exhibit 10.14 to the Company's Annual Report on Form 10-K for the year ended December 31, 1997 filed on March 30, 1998).
10.7#	Form of Non-Qualified Stock Option Agreement under the 1998 Stock Option Plan. (Incorporated herein by reference to Exhibit 10.15 to the Company's Annual Report on Form 10-K for the year ended December 31, 1997 filed on March 30, 1998).
10.8#	Form of Incentive Stock Option Agreement under the 1998 Stock Option Plan. (Incorporated herein by reference to Exhibit 10.16 to the Company's Annual Report on Form 10-K for the year ended December 31, 1997 filed on March 30, 1998).

10.9#	2001 Stock Option Plan (Incorporated herein by reference to Exhibit B to the Company's Proxy
	Statement on Schedule 14A filed July 5, 2001).
10.10#	Form of Severance Agreement, dated April 14, 2008, between Astea International Inc. and certain of its
	officers. (Incorporated herein by reference to the Company's Annual Report on Form 10-K for the year
	ended December 31, 2007 filed on April 15, 2008)

# Schedule of Differences

Each Severance Agreement executed with the executive officers listed below is substantially the same as the form of each other:

	Officers	<u>Title</u>
	$\mathcal{E}$	Chief Executive Officer
		Chief Financial Officer and Treasurer
	John Tobin	President
10. 11	September 24, 2008 (Incorporat on Form 8-K filed September 26	
10.12#	Company's Current Report on F	ock Option Plan (Incorporated herein by reference to Exhibit 10.1 to the Form 8-K filed on June 16, 2010).
10.13#		under Amended and Restated 2006 Stock Option Plan (Incorporated 0.2 to the Company's Current Report on Form 8-K filed June 16, 2010).
10.14#		ptions under Amended and Restated 2006 Stock Option Plan e to Exhibit 10.3 to the Current Report on Form 8-K filed June 16,
10.15#		ween Astea International Inc. and Zack Bergreen dated May 29, 2013 to to Exhibit 10.1 to the Company's Current Report on Form 8-K filed
10.16#	Amendment No.1dated March 2 and Zack Bergreen dated May 2	26, 2014 to Revolving Loan Agreement between Astea International Inc. 9, 2013 (Incorporated herein by reference to Exhibit 10.16 to the form 10-K for the year ended December 31, 2013 filed on March 31,
10.17#	Revolving Promissory Note between lender, dated May 29 (Incorpora	ween Astea international Inc., as borrower, and Zack Bergreen, as ated herein by reference to Exhibit 10.17 to the Company's Annual ar ended December 31, 2013 filed on March 31, 2014).
10.18	Service Corporation, FC Acquis	y and among Astea International Inc., Network Data, Inc., Virtual sition Corp., and Silicon Valley Bank dated June 13, 2014 (Incorporated 0.1 to the Company's Current Report on Form 8-K filed on June 16,
10.19		ment by and between the Astea International Inc. and Zack Bergreen ed herein by reference to Exhibit 10.1 to the Company's Current Report 2014).
10.20	Data, Inc., Virtual Service Corp December 18, 2014 (Incorporate on Form 8-K filed on December	d Security Agreement by and among Astea International Inc., Network oration, FC Acquisition Corp., and Silicon Valley Bank dated as of ed herein by reference to Exhibit 10.1 to the Company's Current Report 29, 2014).
21.1*	Subsidiaries of the Registrant.	
23.1*	Consent of EisnerAmper LLP.	
23.2*	Consent of Grant Thornton, LLI	
24.1*	Powers of Attorney (See the Sig	
31.1*		n 302 of the Sarbanes-Oxley Act of 2002 – Chief Executive Officer.
31.2*		n 302 of the Sarbanes-Oxley Act of 2002 – Chief Financial Officer.
32.1*		.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-
32.2*	Oxley Act of 2002 – Chief Execution Pursuant to 18 U.S Oxley Act of 2002 – Chief Final	.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-

<sup>\*</sup> Filed herewith.

<sup>#</sup> Management contract or compensatory plan or arrangement.

# **SIGNATURES**

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

#### ASTEA INTERNATIONAL INC.

By: /s/Zack Bergreen Zack Bergreen Chief Executive Officer

March 30, 2016

#### POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Zack Bergreen and Rick Etskovitz, jointly and severally, his attorney-in-fact, each with the power of substitution, for him in any and all capacities, to sign any amendments to this 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 of 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 on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/Zack Bergreen Zack Bergreen	Chief Executive Officer (Principal Executive Officer)	March 30, 2016
/s/Rick Etskovitz Rick Etskovitz	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 30, 2016
/s/Zack Bergreen Zack Bergreen	Chairman of the Board of Directors	March 30, 2016
/s/Keith Schneck Keith Schneck	Director	March 30, 2016
/s/Eric Siegel Eric Siegel	Director	March 30, 2016
/s/Mark Simon Mark Simon	Director	March 30, 2016
/s/John Tobin John Tobin	Director	March 30, 2016

# EXHIBIT INDEX

No.	<u>Description</u>
21.1	Subsidiaries of the Registrant
23.1	Consent of EisnerAmper LLP
23.2	Consent of Grant Thornton, LLP
24.1	Powers of Attorney (See the Signature Page)
31.1	Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002-Chief Executive Officer
31.2	Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002-Chief Financial Officer
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002-Chief Executive Officer
32.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002-Chief Financial Officer
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

# **Subsidiaries of the Registrant**

# <u>Company Name</u> <u>Jurisdiction of Organization</u>

Astea FSC Barbados Astea International Japan, Inc. Japan Astea Israel Ltd. Israel Astea (UK) Limited England Astea Service and Distribution Systems B.V. Netherlands FC Acquisition Corp. Delaware Network Data, Inc. Delaware Virtual Service Corp. Pennsylvania

# CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements of Astea International Inc. and subsidiaries on Form S-8 (Nos. 333-168793, 333-107757, 333-61981, 333-34865 and 333-33825) of our report dated March 30, 2016, on our audit of the consolidated financial statements as of December 31, 2015 and for the year then ended, which report is included in this Annual Report on Form 10-K to be filed on or about March 30, 2016.

/s/ EisnerAmper LLP Philadelphia, Pennsylvania March 30, 2016

# CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our report dated March 31, 2015, with respect to the consolidated financial statements for the year ended December 31, 2014 included in the Annual Report of Astea International Inc. and subsidiaries on Form 10-K for the year ended December 31, 2015. We hereby consent to the incorporation by reference of said report in the Registration Statements of Astea International Inc. and subsidiaries on Forms S-8 (File No. 333-168793, File No. 333-107757, File No. 333-61981, File No. 333-34865, and File No. 333-33825).

/s/ GRANT THORNTON LLP Philadelphia, Pennsylvania March 30, 2016

#### **CERTIFICATION**

# I, Zack Bergreen, certify that:

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

Date: March 30, 2016 By: /s/Zack Bergreen Zack Bergreen

Chief Executive Officer (Principal Executive Officer)

#### **CERTIFICATION**

#### I, Rick Etskovitz, certify that:

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

Date: March 30, 2016 By: /s/Rick Etskovitz

Rick Etskovitz Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

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

In connection with the Annual Report of Astea International Inc. (the "Company") on Form 10-K for the period ending December 31, 2015 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Zack Bergreen, Chief Executive Officer and Principal Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/Zack Bergreen Zack Bergreen Chief Executive Officer (Principal Executive Officer) March 30, 2016

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

In connection with the Annual Report of Astea International Inc. (the "Company") on Form 10-K for the period ending December 31, 2015 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Rick Etskovitz, Chief Financial Officer and Principal Financial and Chief Accounting Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/Rick Etskovitz
Rick Etskovitz
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)
March 30, 2016