ASTEA INTERNATIONAL INC Form 10-Q November 14, 2018
UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549
FORM 10-Q (Mark One) [X] Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the quarterly period ended September 30, 2018 or
[] Transition Report Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 1934.
For the transition period from to
Commission File Number: <u>0-26330</u>
ASTEA INTERNATIONAL INC. (Exact name of registrant as specified in its charter)
Delaware 23-2119058 (State or other jurisdiction of (I.R.S. Employer incorporation or organization) Identification No.)
240 Gibraltar Road, Horsham, PA 19044 (Address of principal executive offices) (Zip Code)
Registrant's telephone number, including area code: (215) 682-2500
N/A (Former name, former address and former fiscal year, if changed since last report)
Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes X No
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes X No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting

company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelera

Accelerated Non-accelerated filer

Emerging (Do not check if a

Smaller reporting company growth smaller reporting

company company)

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ____ No <u>X</u>

As of November 13, 2018, 3,616,549 shares of the registrant's Common Stock, par value \$.01 per share, were outstanding.

ASTEA INTERNATIONAL INC. AND SUBSIDIARIES

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PART I - FINANCIAL INFORMATION

Item 1. FINANCIAL STATEMENTS

ASTEA INTERNATIONAL INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED BALANCE SHEETS

	September 30, 2018 (Unaudited)	December 31, 2017
ASSETS	,	
Current assets:		
Cash and cash equivalents	\$1,342,000	\$1,924,000
Accounts receivables, net of reserves allowance of \$91,000 (unaudited)		
and \$239,000, respectively	6,654,000	6,589,000
Prepaid expenses and other current assets	454,000	295,000
Deferred hosting costs	780,000	-
Total current assets	9,230,000	8,808,000
Property and equipment, net	94,000	105,000
Capitalized software development costs, net	4,563,000	4,073,000
Restricted cash	74,000	77,000
Other long-term assets	513,000	506,000
Total assets	\$14,474,000	\$13,569,000
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Term note	\$-	\$225,000
Accounts payable and accrued expenses	4,309,000	3,988,000
Deferred revenues	9,814,000	11,025,000
Total current liabilities	14,123,000	15,238,000
Long-term liabilities:		
Borrowings under line of credit	2,697,000	2,305,000
Long-term accrued expenses	308,000	312,000
Deferred tax liability	49,000	49,000
Deferred revenues, net of current portion	1,474,000	504,000
Total long-term liabilities	4,528,000	3,170,000
Commitments and contingencies		
Stockholders' 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	8,000	8,000
Common stock \$.01 par value, 25,000,000 shares authorized; shares	37,000	36,000
issued 3,659,000 and outstanding 3,617,000 at September 30, 2018;		

shares issued 3,636,000 and outstanding 3,594,000 at December 31,

2017		
Additional paid-in-capital	31,534,000	31,710,000
Accumulated deficit	(34,468,000)	(35,338,000)
Accumulated other comprehensive loss	(1,088,000)	(1,055,000)
Treasury stock at cost, 42,000 common shares	(208,000)	(208,000)
Total stockholders' deficit	(4,177,000)	(4,839,000)
Total liabilities and stockholders' deficit	\$14,474,000	\$13,569,000

See accompanying notes to the unaudited condensed consolidated financial statements.

ASTEA INTERNATIONAL INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

	Three Months Ended Septem 2018		Ninth Month Ended Septer 2018	
Revenues:	Φ 7 (5,000	t 022 000	Φ2.076.000	φ1.5 7 0.000
Software license fees	·	\$933,000	\$2,076,000	\$1,578,000
Subscriptions	1,412,000	592,000	3,104,000	1,863,000
Services and maintenance	4,948,000	4,957,000	15,273,000	14,998,000
Total revenues	7,125,000	6,482,000	20,453,000	18,439,000
Costs of revenues:				
Cost of software license fees	750,000	526,000	1,976,000	1,816,000
Cost of subscriptions	369,000	193,000	794,000	626,000
Cost of services and maintenance	3,696,000	3,760,000	10,705,000	10,913,000
Total cost of revenues	4,815,000	4,479,000	13,475,000	13,355,000
Gross profit	2,310,000	2,003,000	6,978,000	5,084,000
Operating Expenses:				
Product development	330,000	150,000	697,000	947,000
Sales and marketing	1,013,000	853,000	2,991,000	2,587,000
General and administrative	972,000	737,000	2,868,000	2,105,000
Total operating expenses	2,315,000	1,740,000	6,556,000	5,639,000
(Loss) income from operations	(5,000)	263,000	422,000	(555,000)
Interest expense, net	64,000	70,000	163,000	144,000
(Loss) income before income taxes	(69,000)	193,000	259,000	(699,000)
Income tax expense	1,000	7,000	19,000	21,000
Net (loss) income	(70,000)	186,000	240,000	(720,000)
Preferred dividend	125,000	125,000	375,000	375,000
Net (loss) income allocable to common stockholders	\$(195,000)	\$61,000	\$(135,000) \$(1,095,000)
Basic (loss) income per share allocable to common	.	h o o o	.)
stockholders Dilytod (loss) income mer share allegable to common	\$(0.05)	\$0.02	\$(0.04) \$(0.30
Diluted (loss) income per share allocable to common Stockholders	\$(0.05)	\$0.02	\$(0.04) \$(0.30
Weighted average shares outstanding used in computing basic (loss) income per common share	3,607,000	3,594,000	3,600,000	3,594,000
Weighted average shares outstanding used in computing diluted (loss) income per common share	3,607,000	3,614,000	3,600,000	3,594,000

See accompanying notes to the unaudited condensed consolidated financial statements.

ASTEA INTERNATIONAL INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME (Unaudited)

Three Months Ended Nine Months Ended September 30, September 30, 2018 2017 2018 2017

Net (loss) income \$(70,000) \$186,000 \$240,000 \$(720,000)

Other comprehensive losses

Foreign currency translation adjustment (23,000) (77,000) (33,000) (242,000) Comprehensive (loss) income \$(93,000) \$109,000 \$207,000 \$(962,000)

See accompanying notes to the unaudited condensed consolidated financial statements.

ASTEA INTERNATIONAL INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' DEFICIT (Unaudited)

	preferred	Series B bleonvertible preferred stock at par value		Additional paid-in- capital	Accumulated other comprehensive loss	Accumulated deficit	Treasury Stock	Total stockholders' deficit
Balances at December 31, 2017	\$8,000	\$8,000	\$36,000	\$31,710,000	\$(1,055,000)	\$(35,338,000)	\$(208,000)	\$(4,839,000)
Cumulative effect from change in accounting	_	_	_	_	_	630,000	_	630,000
Exercise of stock options	_	_	1,000	83,000	_	_	_	84,000
Net income			_	_		240,000	_	240,000
Series A and B preferred stock dividends	_	_	_	(375,000)	_	_	_	(375,000)
Stock-based compensation	_	_	_	116,000	_	_	_	116,000
Other comprehensive loss	_	_	_	_	(33,000)	_	_	(33,000)
Balances at September 30, 2018	\$8,000	\$8,000	\$37,000	\$31,534,000	\$(1,088,000)	\$(34,468,000)	\$(208,000)	\$(4,177,000)

See accompanying notes to the unaudited condensed consolidated financial statements.

ASTEA INTERNATIONAL INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

(Onaudited)	Nine Months l September 30,	
	2018	2017
Cash flows from operating activities: Net income (loss)	\$240,000	\$(720,000)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:	1 002 000	1 022 000
Depreciation and amortization	1,993,000	1,822,000
Amortization of deferred financing costs Amortization of deferred hosting costs	32,000 786,000	113,000
E .	116,000	-
Stock-based compensation Allowance for doubtful accounts	(148,000)	99,000
Changes in operating assets and liabilities:	(146,000)	-
Receivables	(18,000)	(499,000)
Prepaid expenses and other	(188,000)	(170,000)
Deferred hosting costs	(936,000)	(170,000)
Other assets	(6,000)	(10,000)
Accounts payable and accrued expenses	47,000	455,000
Deferred revenues	(196,000)	961,000
Deterred revenues	(170,000)	701,000
Net cash provided by operating activities	1,722,000	2,051,000
Cash flows from investing activities:	-,. ==,	_, ,
Purchases of property and equipment	(42,000)	(4,000)
Capitalized software development costs	(2,430,000)	(1,987,000)
	, , , ,	, , , ,
Net cash used in investing activities	(2,472,000)	(1,991,000)
Cash flows from financing activities:		
Proceeds from exercise of stock options	84,000	-
Dividend payments on preferred stock	(105,000)	(125,000)
Proceeds on term note from Bridge Bank	-	400,000
Payment on term note from Bridge Bank	(225,000)	-
Proceeds on line of credit with CEO/Director	-	350,000
Payments on line of credit with CEO/Director	-	(350,000)
Payment on line of credit from Silicon Valley Bank	-	(8,661,000)
Proceeds on line of credit from Silicon Valley Bank	-	6,734,000
Fees associated with line of credit and term note	-	(49,000)
Proceeds on line of credit from Bridge Bank	8,367,000	2,323,000
Payment on line of credit from Bridge Bank	(7,975,000)	-
Net cash provided by financing activities	146,000	622,000
Effect of exchange rate changes on cash	19,000	(8,000)
Net (decrease) increase in cash, cash equivalents and restricted cash	(585,000)	674,000
Cash, cash equivalents and restricted cash, beginning of period	2,001,000	730,000
Cash, cash equivalents and restricted cash, end of period		\$1,404,000
,	, -,,	,,

Supplemental disclosure of cash flows information:

Cash paid for interest \$107,000 \$29,000

Supplemental disclosure of non-cash flows information:

Accrued preferred dividends \$375,000 \$375,000

See accompanying notes to the unaudited condensed consolidated financial statements.

Item 1. FINANCIAL STATEMENTS (Continued)

ASTEA INTERNATIONAL INC. AND SUBSIDIARIES NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

1. BASIS OF PRESENTATION

The condensed consolidated financial statements at September 30, 2018 and for the three and nine month periods ended September 30, 2018 and 2017 of Astea International Inc. and subsidiaries ("Astea" or the "Company") are unaudited and reflect all adjustments (consisting only of normal recurring adjustments) which are, in the opinion of management, necessary for a fair presentation of the financial position and operating results for the interim periods. The accompanying unaudited financial statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC"). Certain information and note disclosures normally included in annual financial statements prepared in accordance with generally accepted accounting principles have been omitted pursuant to the rules and regulations of the SEC for quarterly reports on Form 10-Q. It is suggested that these financial statements be read in conjunction with the financial statements and the notes thereto, included in the Company's latest annual report (Form 10-K) and our Form 10-Q's for the quarters ended March 31, 2017, June 30, 2017, September 30, 2017, March 31, 2018 and June 30, 2018. The interim financial information presented is not necessarily indicative of results expected for the entire year ending December 31, 2018.

Comparability

Effective January 1, 2018, the Company adopted a new accounting standard. Prior periods were not retrospectively restated, so the consolidated balance sheet as of December 31, 2017 and results of operations for the nine months ended September 30, 2017 were prepared using an accounting standard that was different than the one in effect for the nine months ended September 30, 2018. Therefore, the condensed consolidated balance sheets as of September 30, 2018 and December 31, 2017 are not directly comparable, nor are the results of operations for the three and nine months ended September 30, 2018 and September 30, 2017.

Accumulated Deficit

The following table presents the cumulative effect adjustment to the beginning accumulated deficit for the new accounting standard adopted by the Company on January 1, 2018:

	Accumulated Deficit
Balance, December 31, 2017, as previously reported Cumulative effect adjustment from the adoption of new accounting standard:	\$(35,338,000)
Revenue from Contracts with Customers	630,000
Balance, January 1, 2018, as adjusted Net income	(34,708,000) 240,000
Balance, September 30, 2018	\$(34,468,000)

Recently Adopted Accounting Standards - Revenue from Contracts with Customers

In May 2014, 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. The standard requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. Additionally, under the new guidance, expenses incurred, will be deferred as an asset and will be amortized over the period that services or goods are transferred to the customer.

The Company adopted Revenue from Contracts with Customers on January 1, 2018 using the modified retrospective transition method. Under this method, the Company evaluated contracts that were in effect at January 1, 2018 as if those contracts had been accounted for under the new guidance. The Company did not evaluate individual modifications for those periods prior to the adoption date. The aggregate effect of all modifications as of the adoption date and such effects are provided below. Under the modified retrospective transition approach, periods prior to the adoption date were not adjusted and continue to be reported in accordance with historical, pre-adoption accounting. A cumulative catch up adjustment was recorded to beginning accumulated deficit to reflect the impact of all existing arrangements under Revenue from Contracts with Customers (new guidance).

The most significant impact of the adoption of revenue from the new guidance was that the Company deferred \$630,000 of incremental hosting costs at the adoption date directly related to hosting customer contracts and the related hosting implementation costs for customers that had not gone live as of the date of adoption. The Company is amortizing these costs over the remaining life of the contract or expected customer life whichever is longer, once the customer goes live. The contract period is generally 1 to 3 years and the average expected customer life is 2 years.

As noted above, upon adoption on January 1, 2018, the Company recognizes revenues in accordance with "Revenue from Contracts with Customers". As such, the Company identifies a contract with a customer, identifies the performance obligations in the contract, determines the transaction price, allocates the transaction price to each performance obligation in the contract and recognizes revenues when (or as) the Company satisfies a performance obligation.

The Company's implementation team has completed its project plan, which included evaluating customer contracts across the organization, developing policies, processes and tools to report financial results including expanding our disclosures in the financial statements, and implementing and updating the Company's internal controls over financial reporting that are necessary under the new standard. The Company has designed specific controls related to revenue recognition under the new guidance that were implemented beginning in January 2018. The next step was to identify any differences that would result from applying the new requirements and controls of the new standard to its perpetual and subscription sales contracts. The Company completed its analysis of its perpetual contracts under the new standard which supports the recognition of its license fee revenue at the time the license is delivered, consistent with its current revenue policy. The Company is still in the process of implementing changes to its accounting system to allow the Company to track revenue and cost by customer versus maintaining all the required information in excel format. The implementation is expected to be completed in the first quarter of 2019.

The Company performed an analysis of the impact for revenue recognition under the new guidance. We completed the evaluation on the largest perpetual license sales in 2017 and other license sales in the prior years with potential additional performance obligations. After review of the contracts, it was determined that there would be no impact on revenue recognized or any new performance obligations identified for these customers as it relates to the new guidance.

Based on the evaluation of our current contracts and revenue streams, revenue recognition is mostly consistent under both the previous and new standard as noted above, with the exception of subscription costs which are described below. Upon adoption, the Company will continue to recognize subscription revenue once a customer goes-live ratably over the remaining contract period or customer life whichever is longer. The contract period is typically 1 to 3 years. The average expected life of a customer is 2 years. The average customer takes about 8 to 10 months to go live. The Company expects the average life of a customer to increase as more customers begin to renew their subscription contracts.

The primary change in how we report revenues and expenses under the new guidance is the way we report expenses related to our subscription business. In the past, we deferred all hosting revenue until the customer went live. This practice has continued. The purpose of this practice is to only recognize subscription revenue over the period in which the customer receives the benefit of using the system (performance obligation is satisfied). The major change resulting from the adoption of the new guidance relates to costs incurred in getting a hosted customer live. Through the end of 2017, the Company charged all implementation costs to expense in the period incurred. Starting January 1, 2018, we defer all implementation related costs on the balance sheet (primarily labor costs and hosting costs) until the customer goes live. Once live, we report the deferred implementation costs related to that customer ratably over the remaining expected life of the customer contract or two years, whichever is longer. At this point, based on the Company's relatively short time-span as a provider of a hosted solution, our analysis shows that the average lifespan of an Astea hosted customer is 2 years. Therefore, we amortize the deferred costs over 2 years or the remaining life of

the contract, whichever is longer. This is consistent with the revenue recognition methodology used for the subscription service revenue for that customer. The Company satisfies performance obligations as discussed in further detail below. Revenue is recognized at the time the related performance obligation is satisfied by transferring a promised service to a customer.

Software license fee revenues are recognized when the software licenses have been delivered to the customer.

The Company recognizes revenues from maintenance ratably over the term of the underlying maintenance contract term. The term of the maintenance contract is usually one year. Renewals of maintenance contracts create new performance obligations that are satisfied over the contract term. Revenues are recognized ratably over the contract term

Revenues from professional services consists mostly of time and material services. The performance obligations are satisfied, and revenues are recognized, when the services are provided or when the service term has expired.

In contracts with multiple performance obligations, the Company accounts for individual performance obligations separately, if they are distinct. The Company allocates the transaction price to each performance obligation based on its relative standalone selling price out of total consideration of the contract. For maintenance and support, the Company determines the standalone selling price based on the price at which the Company separately sells a renewal contract. The Company determines the standalone selling price for sales of licenses using the residual approach. For professional services, the Company determines the standalone selling prices based on the price at which the Company separately sells those services. The Company does not grant a right of return to its customers.

Although the new guidance prefers that revenue in a contract with multiple performance obligations use the adjusted market approach which includes standalone selling price (SSP) or third part evidence (TPE) or expected cost plus margin approach as the methodology for allocating revenues to software, the Company is using the Residual Method for allocating the revenues from a contract to the license component of the sale. A Company should not presume that contractually stated prices or a list price for perpetual licenses represents the SSP for that performance obligation. Due to competition, highly variable pricing, customer demographics, varying size of our customers, and other such factors, the Company's selling prices are considered uncertain for each perpetual license sale. Therefore, SSP is not an appropriate methodology as it relates to our license revenue. In terms of TPE as a basis to price our software, our product is unique and expansive in terms of the system's inherent functionality. There are no directly comparable products in the marketplace today, which we could use as the basis to set our standard license pricing based on a comparison with other vendors. In addition, most of the Company's we compete with in our market are privately owned, which prevents us from obtaining reliable TPE. Accordingly, the new guidance permits the Company to use the Residual Method for allocating selling price if the first two preferable choices cannot be used. The residual between the total transaction price and the observable standalone selling prices of those performance obligations with observable standalone selling prices is considered to be the estimated standalone selling price of the goods or services underlying the performance obligation.

Astea commonly sells its software products bundled with other products (maintenance) and professional services. As noted above, the new standard requires an entity to allocate the transaction price to the distinct performance obligations in a contract on a relative SSP basis. Under the new guidance, "...an entity shall determine the standalone selling price at contract inception of the distinct good or service underlying each performance obligation in the contract and allocate the transaction price in proportion to those standalone selling prices." SSP is defined as the price at which an entity would sell a promised good or service separately to a customer. For example, the Company has a history of selling maintenance renewals and professional services on a standalone basis. Therefore, Astea will utilize SSP for its performance obligations as it relates to service and maintenance revenue. In addition, due to the Company having different maintenance and service rates in other parts of the world in which it operates, the Company has developed a reasonable range for its SSP for maintenance and services rather than a single point.

The incremental costs of obtaining a customer contract (i.e., those costs related to obtaining the customer contract that would not have been incurred if the customer contract was not obtained), such as a sales commission, should be capitalized if the Company expects to recover those costs (based on net future cash flows from the contract and expected contract renewals). The Company may expense the incremental costs of obtaining a contract if the amortization period would otherwise be one year or less. Since sales commissions are costs that are incremental and the amortization of sales commissions would be one year or less, the Company will continue to expense these items as

incurred. Costs of obtaining a customer contract that are not incremental (i.e., costs related to obtaining the customer contract that would have been incurred regardless of whether the customer contract had been obtained), such as travel costs incurred to present the customer proposal, should only be capitalized if those costs are explicitly chargeable to the customer regardless of whether the entity enters into a contract with the customer. Otherwise, such costs are expensed as incurred. The Company will continue to expense these costs as they are incurred.

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.

The cumulative effect of the changes made to our consolidated January 1, 2018 balance sheet for the new revenue standard requirements were as follows:

	As of December 31, 2017	Adjustments	As of January 1 2018	,
Assets Deferred hosting costs	3 \$-	\$630,000	\$ 630,000	
Stockholders' deficit Accumulated deficit	\$(35,338,000)\$630,000	\$(34,708,000)

In accordance with requirements of the new revenue standard, the impact of adoption on our condensed consolidated balance sheet and statement of operations for the nine months ended September 30, 2018 was as follows:

Effect of

Without

Adoption

As of September 30, 2018

As Reported

Total Cost of Revenue

Net income (loss)

Preferred dividend

Basic and diluted

Net (loss) income allocable to

common stockholders

Gross Profit

	110 110 p	3100	11 0 0ptio	(Change	
Assets Deferred hosting costs	\$ 780,000	0 \$	S -	\$ 1	780,000	
Equity Accumulated deficit	\$ (34,468	•	(35,248,0	·		2019
		For the n	ine month	s ended S	September 30,	, 2018
			W	ithout		
		As Rep	orted ac	doption	Effect of C	Change
Cost of Revenue:						
Cost of subscriptions		\$794,000	\$89	5,000	\$101,000	
Cost of services and ma	aintenance	10,705,	000 10	,754,000	49,000	
		13 475	000			

\$6,978,000

\$240,000

375,000

\$^{(135,000}

\$(0.04

The following table summarizes the effects of adopting the new standard requirements on the financial statement line items of the Company's condensed consolidated statement of cash flows for the nine months ended September 30,

\$90,000

)\$(285,000

)\$(0.08

375,000

\$13,625,000 \$150,000

\$6,828,000 \$150,000

\$150,000

)\$150,000

)\$0.04

2018:

As of September 30, 2018

Without

As Reported Adoption Effect of Change

Cash flows from operating activities:

 Net income
 \$240,000
 \$90,000
 \$150,000

 Amortization of hosting costs
 786,000
 786,000

 Deferred hosting costs
 (936,000
) (936,000
)

Cash, cash equivalents and restricted cash

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the condensed consolidated balance sheet that sum to the total of the same such amounts presented on the condensed consolidated statement of cash flows:

	September 30, 2018	
Cash and cash equivalents Restricted cash	\$1,342,000 74,000	\$1,924,000 77,000
Total cash, cash equivalents, and restricted cash reported on the consolidated statement of cash flows	\$1,416,000	\$2,001,000

Amounts included in restricted cash represent funds required to be set aside by a contractual agreement with the office leasing companies in Europe. The restrictions will lapse when the building leases expires.

Operating Matters and Liquidity

The Company has a history of net losses and an accumulated deficit of \$34,468,000 as of September 30, 2018. In the first nine months of 2018, the Company generated net income of \$240,000 compared to a net loss of \$720,000 generated in the first nine months of 2017. Further, at September 30, 2018, the Company had a working capital ratio of .65:1, with cash and cash equivalents of \$1,342,000 compared to December 31, 2017 when the Company had cash and cash equivalents of \$1,924,000. The decrease in cash and cash equivalents for the first nine months of 2018 was primarily driven by a decrease of cash provided by operations in 2018 compared to 2017, the repayment of the Company's term loan for \$225,000 and an increase in capitalized software development costs of \$443,000 in the first nine months of 2018.

As of September 30, 2018, the Company owed \$2,697,000 against the line of credit from Western Alliance Bank ("WAB"). As of September 30, 2018, there was \$153,000 available under the line of credit. The Company had a \$400,000 term loan with WAB through April 2018. As of April 2018 the Company repaid the term loan in full. The Company has projected revenues that management believes will provide sufficient funds along with the additional borrowings available under its lines of credit to sustain its continuing operations through at least November 14, 2019. The Second Loan Agreement modified the availability under the line of credit from \$2,400,000 to \$2,850,000 (see footnote #9).

The Company was in compliance with the WAB financial and liquidity covenant as of September 30, 2018 and expects to be able to continue to comply with the required covenants under the modified agreement with WAB for at least the next year. As a result, the amounts due to WAB under the line of credit and term loan as of September 30, 2018 were classified in the accompanying consolidated balance sheet in accordance with the repayment terms stipulated in the agreement with WAB.

Our primary cash requirements are to fund operations which mainly include personnel-related costs, marketing costs, third party costs related to hosting and software, general and administrative costs associated with being a public company, travel costs, and quarterly preferred stock dividends. The Company expects to continue to incur 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 results of operations. However, projections of future cash needs and cash flows are subject to risks and

uncertainty.

Management's current operating plan is to maintain and/or reduce operating expenses in order to be aligned with expected revenues. The primary area of focus will continue to be headcount and costs from outside consultants. The Company remains focused on maximizing revenue from its revenue generating resources and will continue to repurpose, if necessary, certain personnel to become billable so the Company can continue to improve its liquidity. The Company has a substantial professional services backlog that resulted from new customers added in 2018 as well as upgrade projects from our existing customers as they move to the latest version of Astea Alliance. In 2018, the Company continues to consider ways to reduce operating expenses in certain areas of the Company in order to maintain our liquidity. However, management has implemented new marketing initiatives which have increased our spending in this area in 2018. We believe the new initiatives will directly contribute to increasing new business, which is essential to our growth. Operations will generate enough cash to meet obligations at least through November 14, 2019. As noted above, if the Company's actual results fall short of expectations, the Company will make cost adjustments to improve the Company's operating cash flows. In addition, we plan to maintain the same level of investment in software development and we do not expect to increase capital expenditures.

Our operations are subject to certain risks and uncertainties including, among others, current and potential competitors with greater resources, dependence on our significant and existing customer base, closing license and subscription sales in a timely manner, lack of a history of consistently generating net income and uncertainty of future profitability, and possible fluctuations in financial results.

2. NEW ACCOUNTING PRONOUNCEMENTS

In February 2016 as amended, the FASB issued guidance for accounting for leases. The guidance requires lessees to recognize assets and liabilities related to long-term leases on the balance sheet and expands disclosure requirements regarding leasing arrangements. The guidance is effective for reporting periods beginning after December 15, 2018 and early adoption is permitted. The guidance must be adopted on a modified retrospective basis and provides for certain practical expedients. The Company is required to adopt this guidance in the first quarter of 2019 and we currently expect that the adoption of this guidance will change the way we account for our operating leases and will result in recording the future benefits of those leases as an asset and the related minimum lease payments as a liability on our consolidated balance sheets. The Company anticipates a significant balance sheet gross-up for the right-of-use assets and corresponding liabilities, with no impact to its debt covenant. The Company does not finance purchases on equipment, but it does have operating leases for office space and equipment in all locations. The Company has identified all material operating lease agreements. Changes to processes and internal controls to meet the standard's reporting and disclosure requirements have been identified and are being implemented. The Company is in the process of evaluating the effect that this guidance will have on its financial statements and related disclosures as the majority of our operating leases will be recorded on the balance sheet under the new guidance. While we do not anticipate the adoption of this accounting standard to have a material impact on our condensed consolidated statements of operations at this time, this conclusion may change as we finalize our assessment.

In January 2018, the FASB released guidance on the accounting for tax on the global intangible low-taxed income ("GILTI") provisions of the Tax Cuts and Jobs Act (the "Act"). The GILTI provisions impose a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. The guidance indicates that either accounting for deferred taxes related to GILTI inclusions or to treat any taxes on GILTI inclusions as a period cost are both acceptable methods subject to an accounting policy election. Effective the first quarter of 2018, the Company elected to treat any potential GILTI inclusions as a period cost since we are not projecting any material impact from GILTI inclusions and any deferred taxes related to any inclusion would be immaterial.

3. 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 funds which are exposed to minimal interest rate and credit risk. Cash balances are maintained with several banks. Certain operating accounts may exceed insured 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. While the Company does not require collateral from its customers, it does perform continuing credit evaluations of its customers' financial condition.

4. LINES OF CREDIT AND TERM NOTE

Line of Credit and Term Loan with Western Alliance Bank

On August 11, 2017, the Company entered in to a Business Financing Agreement (the "Financing Agreement") with Bridge Bank, a division of WAB, which included a revolving line of credit and a term loan. The agreement was to

mature on September 1, 2019.

The Financing Agreement with WAB, established a revolving credit line for the Company in the principal amount of up to \$2,400,000 (the "Revolving Credit Line") and a Term Loan of \$400,000 (the "Term Loan"). Availability under the Revolving Credit Line is tied to a borrowing base formula that is based on 80% of the Company's eligible domestic accounts receivable. Advances under the Revolving Credit Line (the "Advances") may be repaid and reborrowed in accordance with the Loan Agreement. Pursuant to the Financing Agreement, the Company agreed to pay to WAB the outstanding principal amount of all Advances, the unpaid interest thereon, and all other obligations incurred with respect to the Loan Agreement on September 1, 2019. Interest accrues and is paid monthly at the Wall Street Journal Prime Rate plus 1.5%.

The original Term Loan provided \$400,000 to the Company. Beginning in August 2017, for the first six months of the term loan the Company was only required to pay interest. Then for the next 18 months, the Term Loan was to be amortized into monthly payments of principal and interest. The interest rate on the original Term Loan was the Wall Street Journal Prime Rate plus 1.75%, or 6.50%. The Term Loan was modified in December 2017, and as a result, the Company fully repaid the Term Loan by April 30, 2018. The Company repaid \$150,000 of the Term Loan in December 2017, \$125,000 in January 2018 and the balance of \$125,000 in April 2018.

On July 24, 2018, the Company entered into a Second Modification to the Business Financing Agreement ("Loan Modification") with WAB which amended the First Modification, dated November 22, 2017. This Loan Modification increased the credit limit under Company's credit facility to \$2,850,000, extended the maturity date of the credit facility through November 15, 2020 and revised and clarified certain covenants and other terms of the credit facility. No other terms or conditions were modified.

The Company expects to be able to continue to comply with the required covenants contained in the agreement with WAB for at least the next year. As a result, the amounts due to WAB under the line of credit and term loan as of September 30, 2018 are classified in the accompanying consolidated balance sheet in accordance with the repayment terms stipulated in the agreement. In the event the Company does not meet its covenants after September 30, 2018 and WAB does not grant 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.

As of September 30, 2018 the Company owed \$2,697,000 under the revolving line of credit. The Company incurred \$119,000 of interest expense to WAB in the first nine months of 2018. As of September 30, 2018, there was availability of \$153,000 under the line of credit. The Company was in compliance with the financial and liquidity covenants of the modified Loan Agreement as of September 30, 2018.

Subject to certain exceptions, the modified Financing 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. In addition, actual EBITDA, as defined in the Financing Agreement for the trailing 6-month period must be at least \$1 as tested quarterly.

The Financing Agreement 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 Financing Agreement contains a negative covenant prohibiting the Company from granting a security interest in their intellectual property to any party.

Line of Credit with Silicon Valley Bank (SVB)

In August 2017 at the closing of the WAB Financing Agreement, the Company repaid all outstanding amounts owed to SVB under the Revolving Facility and terminated the Revolving Facility. The Company incurred \$74,000 of interest expense to SVB for the nine months ended September 30, 2017.

Line of Credit with Chief Executive Officer/Director

In April 2017, the Company extended its Revolving Loan Agreement and associated Revolving Promissory Note with its Chief Executive Officer/Director. This loan agreement provided an unsecured \$1,000,000 revolving line of credit

to the Company. The line of credit matured on May 1, 2018.

5. 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 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 2014 and subsequent years, 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 condensed consolidated statement of operations. For the nine months ended September 30, 2018 and 2017, there were no interest or penalties related to uncertain tax positions.

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 (the "Act") was signed into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a federal corporate tax rate decrease from 35% to 21% for tax years beginning after December 31, 2017, the transition of U.S international taxation from a worldwide tax system to a territorial system, and a one-time transition tax on the mandatory deemed repatriation of foreign earnings. The Act repeals the Alternative Minimum Tax ("AMT") for years beginning after December 31, 2017 and allows Companies with existing AMT credit carryforwards to receive future refunds of the credit. As a result, the Company recorded an AMT credit benefit of \$362,000 in 2017 and as a result has a long term receivable as of September 30, 2018. The Company believes that the most significant impact on its consolidated financial statements will be a reduction of approximately \$3,900,000 for the deferred tax assets related to net operating losses and other assets. Such reduction is offset by changes to the Company's valuation allowance. Additionally, the Company has investments in various foreign subsidiaries for which at December 31, 2017 and November 2, 2017, the cumulative earnings and profits of these entities was estimated to be negative. Accordingly, the Company has not recorded a provisional amount for the transition tax enacted under the Act.

On December 22, 2017, the Securities and Exchange Commission issued Staff Accounting Bulletin 118, which allows a measurement period, not to exceed one year, to finalize the accounting for the income tax impacts of the Tax Act. The Company has determined that there were no changes to its tax accounts required due to the Tax Act.

At September 30, 2018, the Company maintained a 100% valuation allowance for its remaining deferred tax assets, based on the uncertainty of the realization of the deferred tax assets due to the uncertainty of future taxable income.

6. EQUITY

Share-Based Awards

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.

As of September 30, 2018, the total unrecognized compensation cost related to non-vested options amounted to \$305,000, which is expected to be recognized over the options' average remaining vesting period of 2.87 years.

Activity under the Company's stock option plans for the nine months ended September 30, 2018 is as follows:

	OPTIONS		
	OUTSTANDING		
		Weighted	
		Average	
	Chamaa	Exercise	
	Shares	Price Per	
		Share	
Balance, December 31, 2017	703,000	\$ 2.39	
Granted	125,000	\$ 3.90	
Exercised	(23,000)\$ 3.65	
Expired	(26,000)\$ 4.10	
Balance, September 30, 2018	779,000	\$ 2.53	

The following table summarizes outstanding options under the Company's stock option plans as of September 30, 2018:

	Number of Shares	Weighted Average f Exercise Price Per Share	e Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding Options	779,000	\$2.53	6.15	\$2,311,000
Ending Vested and Exercisable	478,000	\$2.45	4.64	\$1,457,000
Options Vested and Expected to Vest	702,000	\$2.50	5.89	\$2,106,000

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 at a rate of 10% and are payable only when, and if, declared by the Company's Board of Directors, quarterly in arrears. At September 30, 2018, there were accrued dividends of \$465,000.

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. The Company has rights to cause conversion of all of the shares of Series A Preferred Stock outstanding. 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.

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

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.

The Series B Preferred Stock may be converted into shares of common stock on a one-to-one ratio, subject to customary anti-dilution provisions. The Series B Preferred Stock will pay a quarterly dividend, which will accrue at an annual rate of 10%. The Company's Chief Executive Officer may convert 100% of his shares of the Series B Preferred Stock into shares of common stock. Each and every 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 September 30, 2018, there were accrued dividends of \$305,000.

The Company reports the Series B Preferred Stock on the Company's condensed consolidated balance sheet within stockholders' deficit.

7. INCOME (LOSS) PER SHARE

Income (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 income (loss) per share, weighted average numbers of shares outstanding are used as the denominator.

The Company had net losses allocable to the common stockholders for the three and nine months ended September 30, 2018 and for the nine months ended September 30, 2017. There was net income available to stockholders for the three months ended September 30, 2017. In the three months ended September 30, 2017, there were 20,000 of net additional dilutive stock options assumed to be converted into common stock shares and in the three and nine months ended September 30, 2018 and the nine months ended September 30, 2017, the outstanding stock options would have been antidilutive due to the net loss incurred during those periods. In addition, 100% of the outstanding convertible preferred stock, 1,623,000 shares, were eligible to be converted into common stock. For purpose of this calculation, if converted, it was assumed that upon conversion, the related dividends were not paid. However, as of the three and nine months ended September 30, 2018 and 2017 shares of common stock issuable on the assumed conversion of the eligible preferred stock were excluded from the diluted income (loss) per common shares calculation as the inclusion of these shares would have been antidilutive.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Numerator:				
Net (loss) income	\$(70,000)	\$186,000	\$240,000	\$(720,000)
Preferred dividend	125,000	125,000	375,000	375,000
Net (loss allocable) income available to common stockholders	\$(195,000)	\$61,000	\$(135,000)	\$(1,095,000)
Denominator:				
Basic weighted average number of common shares				
outstanding	3,607,000	3,594,000	3,600,000	3,594,000
Effect of dilutive stock options	-	20,000	-	-
Diluted weighted average number of common shares	3,607,000	3,614,000	3,600,000	3,594,000

Basic income (loss) per common share	\$(0.05) \$0.02	\$(0.04) \$(0.30)
Diluted income (loss) per common share	\$(0.05) \$0.02	\$(0.04) \$(0.30)

8. 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:

	Three Months		Nine Months	
	Ended September 30, 2018 2017		Ended Septen 2018	nber 30, 2017
Revenues	2018	2017	2018	2017
Software license fees				
United States	\$504,000	\$510,000	\$951,000	\$922,000
Europe	176,000	122,000	328,000	169,000
Asia Pacific	85,000	301,000	797,000	487,000
Total foreign software license fees revenue	261,000	423,000	1,125,000	656,000
Total software license fees	765,000	933,000	2,076,000	1,578,000
Subscriptions	702,000	755,000	2,070,000	1,570,000
United States	443,000	270,000	1,268,000	1,024,000
Europe	327,000	227,000	914,000	560,000
Asia Pacific	642,000	95,000	922,000	279,000
Total foreign subscriptions	969,000	322,000	1,836,000	839,000
Total subscription revenue	1,412,000	592,000	3,104,000	1,863,000
Services and maintenance	, ,	•	, ,	
United States	2,649,000	2,650,000	9,030,000	8,265,000
Europe	591,000	787,000	1,776,000	2,806,000
Asia Pacific	1,708,000	1,520,000	4,467,000	3,927,000
Total foreign services and				
maintenance revenue	2,299,000	2,307,000	6,243,000	6,733,000
Total services and maintenance revenue	4,948,000	4,957,000	15,273,000	14,998,000
Total revenue	\$7,125,000	\$6,482,000	\$20,453,000	\$18,439,000
Net (loss) income				
United States	\$(437,000)	\$164,000	\$(328,000)	\$(780,000)
Europe	(60,000)	17,000	(275,000)	198,000
Asia Pacific	427,000	5,000	843,000	(138,000)
Net (loss) income	\$(70,000)	\$186,000	\$240,000	\$(720,000)

<u>Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS</u>

Overview

This document contains various forward-looking statements and information that are based on management's beliefs, assumptions made by management and information currently available to management. Such statements are subject to various risks and uncertainties, which could cause actual results to vary materially from those contained in such forward-looking statements. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, estimated, expected or projected. Certain of these, as well as other risks and uncertainties are described in more detail herein and in Astea International Inc.'s ("Astea or the Company") Annual Report on Form 10-K for the fiscal year ended December 31, 2017.

Astea is 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. 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.

Astea Alliance, the Company's service management suite of solutions, supports 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, Astea also offers infrastructure tools and services. Astea Alliance provides service organizations with technology-enabled business solutions that improve profitability, stabilize cash-flows, and reduce operational costs through automating and integrating key service, sales and marketing processes.

The FieldCentrix Enterprise is a service management solution that runs on a wide range of mobile devices (handheld computers, laptops and PCs, and Pocket PC 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 optimization 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 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.

Critical Accounting Policies and Estimates

The Company's significant accounting policies are described in its "Summary of Accounting Policies," Note 2, in the Company's 2017 Annual Report on Form 10-K. The preparation of financial statements in conformity with accounting principles generally accepted within the United States 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.

In May 2014, the Financial Accounting Standards Board (FASB) issued Revenue from Contracts with Customers which modifies how all entities recognize revenue, and consolidates revenue recognition guidance into one, Revenue from Contracts with Customers ("new guidance"). The Company adopted the new guidance on January 1, 2018 and applied the modified retrospective method of adoption with a cumulative catch-up adjustment to the opening balance of accumulated deficit at January 1, 2018. Under this method, the Company applied the revised guidance in the year of adoption and applied the old guidance, Revenue Recognition ("old guidance"), in the prior years. As a result, the Company applied the new guidance only to contracts that were not yet completed as of January 1, 2018. The Company recognized a cumulative catch-up adjustment to the opening balance of accumulated deficit at the effective date for contracts that still required performance by the Company at the date of adoption. The new guidance outlines a comprehensive five-step revenue recognition model based on the principle that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The five steps are:

- 1) Identify the contract with a customer
- 2) Identify the performance obligations in the contract
- 3) Determine the transaction price
- 4) Allocate the transaction price to performance obligations in the contract
- 5) Recognize revenue when or as the Company satisfies a performance obligation
 The Company satisfies performance obligations as discussed in further detail below. Revenue is recognized at the time the related performance obligation is satisfied by transferring a promised service to a customer.

The Company recognizes revenue from license sales when the above criteria are met. The Company generally uses written contracts as a means to establish the terms and conditions by which our products, services and maintenance support are sold to our customers. The Company satisfies the performance obligation when the license key has been delivered electronically to the customer. If these criteria are not met, then revenue is deferred until such criteria are met or until the period(s) over which the last performance obligation is delivered.

The Company recognizes revenues from maintenance ratably over the term of the underlying maintenance contract term. The term of the maintenance contract is usually one year. Renewals of maintenance contracts create new performance obligations that are satisfied over the contract term.

Revenues from professional services mostly consist of time and material services. The performance obligations are satisfied, and revenues are recognized, when the services are provided or when the service term has expired.

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 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 subscription revenue is recognized on a straight-line basis over the performance obligation. The Company recognize subscription revenue once a customer goes-live ratably over the remaining contract period or customer life whichever is longer. The contract period is typically 1 to 3 years. The average expected life of a customer is 2 years. The average customer takes about 8 to 10 months to go live. The Company expects the average life of a customer to increase as more customers begin to renew their subscription contracts. When implementation, consulting and training services are bundled with the subscription based arrangement, these services are recognized over the life of the initial contract

(performance obligation), once the project goes live.

In contracts with multiple performance obligations, the Company accounts for individual performance obligations separately, if they are distinct. The Company allocates the transaction price to each performance obligation based on its relative standalone selling price out of total consideration of the contract. For maintenance and support, the Company determines the standalone selling price based on the price at which the Company separately sells a renewal contract. The Company determines the standalone selling price for sales of licenses using the residual approach. For professional services, the Company determines the standalone selling prices based on the price at which the Company separately sells those services.

The new guidance prefers that revenue in a contract with multiple performance obligations use the adjusted market approach which includes standalone selling price (SSP) or third part evidence (TPE) or expected cost plus margin approach as the methodology for allocating revenues to software. The Company uses the Residual Method for allocating the revenues from a contract to the license component of the sale. Due to competition, highly variable pricing, customer demographics, varying size of our customers, and other such factors, the Company's selling prices are considered uncertain for each perpetual license sale. Therefore, SSP is not an appropriate methodology as it relates to our license revenue. In terms of TPE as a basis to price our software, our product is unique and expansive in terms of the system's inherent functionality. There are no directly comparable products in the marketplace today, which we could use as the basis to set our standard license pricing based on a comparison with other vendors. In addition, most of the companies with whom we compete, are privately owned, which prevents us from obtaining reliable TPE. Accordingly, the new guidance permits the Company to use the Residual Method for allocating selling price if the first two preferable choices cannot be used. The residual between the total transaction price and the observable standalone selling prices of those performance obligations with observable standalone selling prices is considered to be the estimated standalone selling price of the goods or services underlying the performance obligation.

Astea commonly sells its software products bundled with other products (maintenance) and professional services. As noted above, the new standard requires an entity to allocate the transaction price to the distinct performance obligations in a contract on a relative SSP basis. Under the new guidance, "...an entity shall determine the standalone selling price at contract inception of the distinct good or service underlying each performance obligation in the contract and allocate the transaction price in proportion to those standalone selling prices." SSP is defined as the price at which an entity would sell a promised good or service separately to a customer. Astea has a history of selling maintenance renewals and professional services on a standalone basis. Therefore, the Company will utilize SSP for its performance obligations as it relates to service and maintenance revenue. In addition, due to the Company having different maintenance and service rates in other parts of the world in which it operates, the Company has developed a reasonable range for its SSP for maintenance and services rather than a single point.

The incremental costs of obtaining a customer contract (i.e., those costs related to obtaining the customer contract that would not have been incurred if the customer contract was not obtained), such as a sales commission, should be capitalized if the Company expects to recover those costs (based on net future cash flows from the contract and expected contract renewals). The Company may expense the incremental costs of obtaining a contract if the amortization period would otherwise be one year or less. Since sales commissions are costs that are incremental and the amortization of sales commissions would be one year or less, the Company will continue to expense these items as incurred. Costs of obtaining a customer contract that are not incremental (i.e., costs related to obtaining the customer contract that would have been incurred regardless of whether the customer contract had been obtained), such as travel costs incurred to present the customer proposal, should only be capitalized if those costs are explicitly chargeable to the customer regardless of whether the entity enters into a contract with the customer. Otherwise, such costs are expensed as incurred. The Company will continue to expense these costs as they are incurred.

The primary change in how we report revenues and expenses under the new guidance will be in the way we report expenses related to our subscription business. In the past, we deferred all hosting revenue until the customer went live. This practice will continue. The purpose of this practice is to only recognize subscription revenue over the period in which the customer receives the benefit of using the system (performance obligation is satisfied). The major change resulting from the adoption of the new guidance will relate to costs incurred in getting a hosted customer live. Through the end of 2017, the Company charged all implementation costs to expense in the period incurred. Starting January 1, 2018, we will defer all implementation related costs on the balance sheet (primarily labor costs and hosting costs) until the customer goes live. Once live, we will recognize the deferred implementation costs related to that customer ratably over the remaining expected life of the customer contract or two years, whichever is longer.. At this point, based on the Company's relatively short time-span as a provider of a hosted solution, our analysis shows that the average lifespan of an Astea hosted customer is 2 years. Therefore, we will amortize the deferred cost over 2 years or

the remaining life of the contract, whichever is longer. This is consistent with the revenue recognition methodology used for the subscription service revenue for that customer. The Company satisfies performance obligations as discussed in further detail below. Revenue is recognized at the time the related performance obligation is satisfied by transferring a promised service to a customer.

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 and includes credit risk;

determining the performance obligations and transaction price to certain elements in multiple-element arrangements is complex; and

the determination of whether a service is essential to the functionality of the software is complex and could potentially create a new performance obligation.

Changes in the aforementioned items could have a material effect on the type and timing of revenue recognized. In addition, Company's payment terms and conditions vary by contract and size of customer, although terms generally include a requirement of payment within 30 to 60 days. In instances where the timing of revenue recognition differs from the timing of invoicing, the Company has determined that its contracts generally do not include a significant financing component. The primary purpose of invoicing terms is to provide customers with simplified and predictable ways of purchasing our products and services, and not to facilitate financing arrangements. The Company generally has not experienced any material losses related to receivables from individual customers, or groups of customers. Due to these factors, no additional credit risk beyond amounts provided by the allowance for doubtful accounts is believed by management to be probable in the Company's accounts receivable. The Company has not adjusted revenues for customers related to credit risk.

At September 30, 2018 there were two customers that accounted for 10% or more of accounts receivable, net and at December 31, 2017, no individual customer accounted for 10% or more of accounts receivable, net. For the nine months ended September 30, 2018, one customer accounted for 10% of total revenue. For the nine months ended September 30, 2017, no individual customer accounted for 10% or more of total revenue. For the three months ended September 30, 2018 and 2017 no individual customer accounted for 10% or more of total revenue.

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.

Capitalized Software 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 September 30, 2018, management believes that no revisions to the remaining useful lives or write-downs of capitalized software development costs are required.

Currency Translation

The international subsidiaries and foreign branch operations translate their assets and liabilities from 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' deficit. Foreign exchange transaction gains and losses are included in general and administrative expenses in the

consolidated statements of operations. General and administrative expenses include a foreign exchange transaction gain of \$15,000 for the nine months ended September 30, 2018 and a \$25,000 loss for the nine months ended September 30, 2017.

Results of Operations

Financial results for the three and nine months ended September 30, 2018, as compared to the three and nine months ended September 30, 2017 reflect the effects of adopting Revenue from Contracts with Customers, which provided a new basis of accounting for our revenue arrangements beginning upon adoption on January 1, 2018. The adoption of Revenue from Contracts with Customers limits the comparability of certain expenses, including cost of subscriptions, services and maintenance, presented in the results of operations for the three and nine months ended September 30, 2018, when compared to the three and nine months ended September 30, 2017. For additional information regarding the adoption of this accounting standard, refer to Note 1 in the notes to consolidated financial statements under the heading "Recently Adopted Accounting Standards."

Comparison of Three Months Ended September 30, 2018 and 2017

Revenues

Total revenues increased by \$643,000 or 10%, to \$7,125,000 for the three months ended September 30, 2018 from \$6,482,000 for the three months ended September 30, 2017. Software license fee revenues decreased \$168,000, or 18%, from the same quarter in 2017. Subscription revenues increased \$820,000 or 139% to \$1,412,000 from \$592,000 for the same period last year. Services and maintenance revenues for the three months ended September 30, 2018 decreased \$9,000 or less than 1% from the same quarter in 2017.

Software license fee revenue decreased 18% to \$765,000 in the third quarter of 2018 from \$933,000 in the third quarter of 2017. Astea Alliance license revenues decreased \$346,000 or 37%, to \$587,000 in the third quarter of 2018 from \$933,000 in the third quarter of 2017. The decrease was primarily due to lower perpetual license sales in Japan, partially offset by higher sales in EMEA. FieldCentrix license sales were \$178,000 in the third quarter of 2018 compared to no license sales in the third quarter of 2017. The increase was due to the sale of additional licenses to existing customers.

Subscription revenue increased 139% to \$1,412,000 in the third quarter of 2018 from \$592,000 in the third quarter of 2017. The primary reason for the increase resulted from a hosted customer in Japan who went live in the third quarter of 2018 for which hosting revenue of \$424,000 had been deferred since 2016. The extended implementation period was due to certain functionality requirements of the customer that lengthened the implementation time required for this customer to go-live. Future subscription revenue will not continue at this same level for this customer because we will only recognize revenue on a monthly basis. The previously deferred annual hosting revenues were recognized as the 2-year service period for those hosting services had lapsed. This implementation was more complex than most, as typically most customers go live in 6 to 10 months. The Company sells Software as a Service (SaaS) for which hosting revenue is not recognized until the customers go-live and the performance obligation is completed.

Services and maintenance revenues decreased by less than 1% to \$4,948,000 in the third quarter of 2018 compared to \$4,957,000 in the third quarter of 2017. Astea Alliance service and maintenance revenues decreased by \$23,000 or 1% compared to the third quarter of 2018. Service and maintenance revenues generated by FieldCentrix increased by \$13,000 or 2% to \$551,000 in the third quarter of 2018 compared to \$538,000 during the same period in 2017. The increase is primarily due to increased maintenance revenue resulting from the sale of licenses to existing customers over the year.

Costs of Revenues

Cost of software license fees increased 43% to \$750,000 in the third quarter of 2018 from \$526,000 in the third quarter of 2017. Included in the cost of software license fees is capitalized software amortization and the third party software embedded in the Company's software licenses sold to customers. Amortization of capitalized software

development costs was \$739,000 for the quarter ended September 30, 2018 compared to \$525,000 for the same quarter in 2017. The increase resulted from the release of Astea Alliance Version 14.5 in September 2017 and Astea Alliance Enterprise Version 15 in September 2018. The gross margin percentage on software license sales was 2% in the third quarter of 2018 compared to 44% in the third quarter of 2017. The decline in the third quarter 2018 license margin resulted primarily from the decrease in software license fees revenue and the increase in cost of software license fees.

Cost of subscriptions increased 91% to \$369,000 in the third quarter of 2018 from \$193,000 in the third quarter of 2017. The Company defers the cost of subscriptions for hosting customers who are in the implementation process during each quarter until they go live, then the related deferred hosting costs are recognized ratably with the subscription revenue. Because the 2 year service period had lapsed on the customer who went live during the quarter, all deferred costs that had previously been deferred for that customer, were recognized in the quarter ended September 30, 2018, causing the large cost increase compared to the same period last year when the customer went live. Third quarter 2018 hosting costs would have been \$175,000 lower under the previous revenue recognition rules, because the costs would have previously been expensed. However, under the new revenue guidance, the Company deferred certain hosting costs which are amortized over the hosting period once the customer goes live. Under the old guidance, as presented for the third quarter of 2017, the Company expensed these costs as incurred. These increases were partially offset by increased costs from a growing base of hosted customers from sales in the first three quarters of 2018. The gross margin percentage on hosting was 74% in the third quarter of 2018 compared to 67% in the third quarter of 2017. The growth in the gross margin is mainly due to the increase in subscription revenue from customers going live and the deferral of hosting costs until the customer goes live in 2018.

Cost of services and maintenance decreased 2% to \$3,696,000 in the third quarter of 2018 from \$3,760,000 in the third quarter of 2017. The decrease was due to a slightly reduced headcount in 2018 compared to 2017 as well as weaker currency rates in Europe compared to the U.S. dollar, which reduced the costs when converted to U.S. dollars. Partially offsetting the cost decreases were the recognition of \$474,000 of previously deferred implementation costs offset by the deferral of \$295,000 in costs related to SaaS implementation projects during the quarter. The gross margin percentage was 25% in the third quarter of 2018 compared to 24% in the third quarter of 2017.

Gross Profit

Total gross profit increased 15% to \$2,310,000 in the third quarter of 2018 from \$2,003,000 in the third quarter of 2017 primarily due to an increase in subscription revenues due to a Japanese customer that went live in the third quarter of 2018, partially offset by the increase in cost of software license fees. As a percentage of revenue, gross profit in the third quarter of 2018 was 32% compared to 31% in the third quarter of 2017.

Operating Expenses

Product Development

Product development expenses increased 120% to \$330,000 in the third quarter of 2018 from \$150,000 in the third quarter of 2017. Fluctuations in product development expense from period to period result from the amount of product development expense that is capitalized. Development costs of \$645,000 were capitalized in the third quarter of 2018 compared to \$741,000 during the same period in 2017. Gross product development expense was \$975,000 in the third quarter of 2018 which is 10% higher than \$891,000 during the same quarter in 2017. The increase was due to increases in salary and benefits and an unfavorable exchange rate on the Israeli shekel relative to the U.S. dollar, as the majority of development work is performed in Israel. Product development expense as a percentage of revenues was 5% in the third quarter of 2018 and 2% in the third quarter of 2017.

Sales and Marketing

Sales and marketing expense increased 19% to \$1,013,000 in the third quarter of 2018 from \$853,000 in the third quarter of 2017. The increase in sales and marketing expense resulted from increased travel costs and higher commissions due to an increase in license revenue and subscriptions sales and an increase in third party marketing costs. These increases were partially offset by a decrease in salary expense due to decreased headcount and decreased commissions resulting from reduced sales compared to the same quarter of 2017. The increase in third party marketing costs is due to the Company expanding its marketing presence through additional efforts to increase awareness of our products in order to improve lead generation and sales opportunities. Increased awareness occurs through additional webinars in all regions focused on the vertical industries in which the Company operates, attendance at more trade shows, and new strategies to improve lead generation for the Company's sales force. As a percentage of revenues, sales and marketing expense was 14% in the third quarter of 2018 compared to 13% in the same period of 2017.

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 increased 32% to \$972,000 during the third quarter of 2018 from \$737,000 in the third quarter of 2017 due to increases in legal fees, bad debt expense, investor relation cost, travel expenses, salary and benefit, and recruiting costs which we did not incur during the same period in 2017. As a percentage of revenue, general and administrative expenses were 14% in

the third quarter of 2018 compared to 11% in the third quarter of 2017.

Net Interest Expense

Net interest expense was \$64,000 in the third quarter of 2018 compared to \$70,000 in the third quarter of 2017. The decrease in interest expense is mainly due payoff of the term loan and SVB line of credit and lower deferred financing cost, partially offset by interest paid on accrued preferred dividends compared to the same period in 2017. Per the preferred stock agreements, any unpaid accrued preferred dividends will incur an interest charge at 10% per annum.

Income Tax Expense

The Company reported a provision for income tax of \$1,000 for the third quarter of 2018 compared to \$7,000 during the third quarter of 2017. The tax expense results from a tax provision in Israel. The parent company purchases all work performed by the Israeli development team under a cost plus agreement. This means the parent company pays all expenses incurred in Israel plus a mark-up rate established by the Israeli Tax Authority. The mark-up rate results in the Israeli operation generating a profit as a stand-alone entity, which results in a tax expense every quarter. Because the rate was reduced in the third quarter, the cumulative tax expense for the year was reduced which is reflected in the tax accrual for the quarter ended September 30, 2018.

International Operations

The Company's international operations generated revenues of \$3,530,000 in the third quarter of 2018, an increase of 16% over the same quarter in 2017. Revenues from international operations comprised 50% of the Company's total revenue for the third quarter in 2018, compared to 47% of total revenues for the same quarter in 2017. The increase in international revenues compared to the same period in 2017 is primarily due to increases in subscription revenue generated by Japan due to a customer going live in the third quarter of 2018.

Comparison of Nine Months Ended September 30, 2018 and 2017

Revenues

Total revenues increased by \$2,014,000 or 11%, to \$20,453,000 for the nine months ended September 30, 2018 from \$18,439,000 for the nine months ended September 30, 2017. Software license fee revenues increased \$498,000, or 32%, from the same period in 2017. Subscription revenues increased \$1,241,000 or 67% to \$3,104,000 from the same period last year. Services and maintenance revenue for the nine months ended September 30, 2018 increased \$275,000 or 2% from the same period in 2017.

Software license fee revenues increased 32% to \$2,076,000 in the first nine months of 2018 from \$1,578,000 in the first nine months of 2017. Astea Alliance license revenues increased \$467,000 or 34%, to \$1,832,000 in the first nine months of 2018 from \$1,365,000 in the first nine months of 2017. The increase was primarily due to higher perpetual license sales in the U.S. and Europe. FieldCentrix license sales were \$244,000 in the first nine months of 2018 compared to \$213,000 in the first nine months of 2017. The increase was due to additional license sold to existing customers that are expanding their users during the first nine months of 2018.

Subscription revenue increased 67% to \$3,104,000 in the first nine months of 2018 from \$1,863,000 in the first nine months of 2017. The increase resulted from increases in users which generated more revenue as we charge hosted customers a fee for each user and a number of hosted customers who went live in 2018 compared to the same period in 2017. One Japanese customer went live in the third quarter of 2018 and generated hosting revenue of \$424,000 which had been deferred since 2016. The extended implementation period was due to certain functional requirements of the customer that lengthened the time required for this customer to go-live. Future subscription revenue from this customer will not continue at this same level, because the previously deferred annual hosting revenues were recognized as the 2 year service period for those hosting services had lapsed. This implementation was more complex than most, as typically most customers go live in 6 to 10 months. Even though the Company signed several new

Software as a Service (SaaS) customers in the first nine months of 2018, the associated hosting revenue has been deferred until the new customers go-live.

Services and maintenance revenues increased by 2% to \$15,273,000 in the first nine months of 2018 compared to \$14,998,000 in the first nine months of 2017. Astea Alliance service and maintenance revenues increased by \$152,000 or 1% compared to the first nine months of 2017. The increase was mainly attributable to an increase in services and maintenance revenues in the U.S. and Japan. Japan service and maintenance revenue increased 50% or \$1,175,000 compared to the first nine months of 2017 which resulted from a significant hosted customer that went live in the third quarter of 2018 for which the hosting implementation services were previously deferred. The service revenue was recognized when the customer went live as the contracted service period of 2 years had lapsed. Service and maintenance revenues generated by FieldCentrix increased by \$122,000 or 8% to \$1,722,000 in the first nine months of 2018 compared to \$1,600,000 during the same period in 2017. The increase is due to an increase in upgrade projects for several existing customers and increase in maintenance revenue from existing customers who purchased additional licenses.

Costs of Revenues

Cost of software license fees increased by 9% to \$1,976,000 in the first nine months of 2018 from \$1,816,000 in the first nine months of 2017. Included in the cost of software license fees are the costs of capitalized software amortization and the cost of all third party software embedded in the Company's software licenses sold to customers. Amortization of capitalized software development costs was \$1,940,000 for the first nine months in 2018 compared to \$1,796,000 for the same period in 2017. The increase is from Astea Alliance Version 14.5 being released in September 2017 which generated 9 months of amortization in 2018 and Astea Alliance Enterprise Version 15 being released in the third quarter of 2018 with the start of its amortization in September. The Company expects amortization costs to increase over the next two years due to the significant investment needed for the release of Version 15 in September of 2018. The gross margin percentage on software license sales was 5% in the first nine months of 2018 compared to (15%) in the first nine months of 2017. The improvement in the license margin resulted primarily from the increase in software license fees revenue in the first nine months of 2018.

Cost of subscriptions increased 27% to \$794,000 in the first nine months of 2018 from \$626,000 in the first nine months of 2017. The Company defers the costs of subscriptions for hosting customers who are in the implementation process during each quarter until they go live. Then the costs are recognized ratably along with the deferred subscription revenue. Because a hosted customer went live in the third quarter of 2018, the implementation costs that had previously been deferred, were recognized because the 2 year service period had lapsed. Under the new revenue guidance, the Company deferred certain hosting costs, which are now amortized over the hosting period once the customer goes live. Under the old guidance, as presented for the third quarter of 2017, the Company expensed these costs as incurred. The cost increases resulted from additional costs from a growing base of hosted customers from sales in the first nine months of 2018. The gross margin percentage on hosting was 74% in the first nine months of 2018 compared to 66% in the first nine months of 2017. Had the Company not deferred any hosting costs in 2018, the gross profit percentage would have been 56%.

Cost of services and maintenance decreased 2% to \$10,705,000 in the first nine months of 2018 from \$10,913,000 in the first nine months of 2017. Part of the decrease was due to the net impact of the new revenue recognition rules in which the Company deferred \$823,000 in costs offset by the recognition of \$774,000 in costs. Additional factors causing the increase in cost of service and maintenance is mainly attributed to a decrease in contracted service work in Japan and decreased travel expense in all regions. The gross margin percentage was 30% in the first nine months of 2018 compared to 27% in the first nine months of 2017. Had the Company expensed all service and maintenance costs incurred in 2018, the gross margin as a percentage of total revenue would have been 25%.

Gross Profit

Gross profit increased 37% to \$6,978,000 in the first nine months of 2018 from \$5,084,000 in the first nine months of 2017 primarily due to an 11% increase of total revenue only and a 1% in costs of revenues. As a percentage of revenue, gross profit in the first nine months of 2018 was 34% compared to 28% in the first nine months of 2017. In addition, due to the adoption of revenue from contract with customers the Company deferred \$708,000 of costs that under the previous guidance would have been expensed as incurred. Had the Company expensed these costs in 2018, the gross profit as a percentage of revenue would have been 34%.

Operating Expenses

Product Development

Product development expenses decreased 26% to \$697,000 in the first nine months of 2018 from \$947,000 in the first nine months of 2017. Fluctuations in product development expense from period to period result from the amount of

product development expense that is capitalized. Development costs of \$2,430,000 were capitalized in the first nine months of 2018 compared to \$1,987,000 during the same period in 2017 due to additional resources working on Astea Alliance Enterprise Version 15. There has been extra time and resources allocated to Astea Alliance Enterprise Version 15 due to all the additional functionality and upgrades made to this version. Gross product development expense was \$3,127,000 in the first nine months of 2018 compared to \$2,934,000 during the same period in 2017. The increase was primarily due to salary increases and an unfavorable exchange rate on the Israeli shekel relative to the U.S. dollar, as the majority of development work is performed in Israel. Product development expense as a percentage of revenues was 3% in the first nine months of 2018 and 5% in the first nine months of 2017.

Sales and Marketing

Sales and marketing expense increased 16% to \$2,991,000 in the first nine months of 2018 from \$2,587,000 in the first nine months of 2017. The increase in sales and marketing expense resulted from higher commissions and travel costs due to an increase in license revenue and subscriptions sales and an increase in third party marketing costs. These increases were partially offset by decrease in sales headcount. The increase in third party marketing costs is due to the Company expanding its marketing presence through additional efforts to increase awareness of our products in order to improve lead generation and sales opportunities. Increased awareness occurs through additional webinars in all regions focused on the vertical industries in which the Company operates, attendance at more trade shows, and new strategies to improve lead generation for the Company's sales force. As a percentage of revenues, sales and marketing expense was 15% in the first nine months of 2018 and 14% in the first nine months of 2017.

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, and various costs associated with the Company's status as a public company. General and administrative expenses increased 36% to \$2,868,000 during the first nine months of 2018 from \$2,105,000 in the first nine months of 2017 mainly due to the timing of accounting fees being invoiced to Astea, increased legal fees, investor relations cost, bad debt expense, travel expenses, salary and benefit, and recruiting costs which we did not incur during the same period in 2017. As a percentage of revenue, general and administrative expenses were 14% in the first nine months of 2018 compared to 11% in the first nine months of 2017.

Net Interest Expense

Net interest expense was \$163,000 in the first nine months of 2018 compared to \$144,000 in the first nine months of 2017. The increase in interest expense is mainly due to interest paid on accrued, but unpaid preferred dividends compared to the same period in 2017. Per the preferred stock agreements, unpaid accrued preferred dividends incur an interest charge calculated at 10% per annum. In addition, the interest rate charged by Bridge Bank to the Company increased.

Income Tax Expense

The Company reported a provision for income tax of \$19,000 for first nine months of 2018 compared to \$21,000 income expense for the same quarter in 2017. The tax provision results from operations in Israel.

International Operations

The Company's international operations generated revenues of \$9,204,000 in the first nine months of 2018, an increase of 12% over the same quarter in 2017. Revenues from international operations comprised 45% of the Company's total revenue for the first nine months in 2018 and 2017. The increase in international revenues compared to the same period in 2017 is primarily due to increases in all Japan revenues partially offset by a decline in Europe and APAC service and maintenance revenues.

Liquidity and Capital Resources

Operating Activities

The Company generated \$1,722,000 of cash from operating activities in the first nine months of 2018 compared to \$2,051,000 for the first nine months of 2017. The decrease in operating cash flows of \$329,000 resulted from an

increased use of \$408,000 to reduce accounts payable and accrued expenses, reduced cash generated from deferred revenues of \$1,157,000, the use of \$936,000 for deferred hosting costs and an increase in cash used to prepay expenses of \$18,000. Partially offsetting the increased uses of cash was an increase in cash generated by net income of \$960,000, an increase in cash generated by the collection of accounts receivable of \$481,000, \$786,000 of non-cash changes due to amortization of deferred hosting costs and an increase in cash provided by other long-term assets of \$4,000.

Investing Activities

The Company used \$2,472,000 for investing activities in the first nine months of 2018 compared to \$1,991,000 for the first nine months of 2017. The increase in cash used for investing activities is primarily attributable to an increase of \$443,000 in capitalized software development costs and an increase of \$38,000 for purchases of property and equipment.

Financing Activities

The Company generated \$146,000 of cash from financing activities in the first nine months of 2018, which is a decrease of \$476,000 compared to the same period in 2017. The Company paid \$105,000 in preferred stock dividends in the first nine months of 2018 compared to \$125,000 in the first nine months of 2017. In the first nine months of 2018, the Company borrowed \$400,000 on the term loan with WAB. In the first nine months of 2018, the Company paid \$225,000 to eliminate its term loan with WAB. The term loan expired in April 2018. In addition, the Company borrowed \$8,367,000 and repaid \$7,975,000 on its line of credit from WAB in the first nine months of 2018. During the same period in 2017, the Company borrowed \$6,734,000 and repaid \$8,661,000 on its line of credit from SVB. The line of credit with SVB was cancelled and fully repaid in August of 2017. The Company repaid \$350,000 on its line of credit with the CEO/Director during the first nine months ended September 30, 2017. The Company also generated cash of \$84,000 from the exercise of stock options in the first nine months of 2018.

The effect of exchange rates on cash related to the U.S. dollar exchange rates for most other currencies in which the Company operates, primarily the Australian dollar, Japanese yen, the Euro, the British pound sterling and Israel shekel, provided an inflow of \$19,000 in the first nine months of 2018 compared to an outflow of \$8,000 in the first nine months of 2017.

The Company has a history of net losses and an accumulated deficit of \$34,468,000 as of September 30, 2018. In the first nine months of 2018, the Company generated net income of \$240,000 compared to a net loss of \$720,000 generated in the first nine months of 2017. Further, at September 30, 2018, the Company had a working capital ratio of .65:1, with cash and cash equivalents of \$1,342,000 compared to December 31, 2017 when the Company had cash and cash equivalents of \$1,924,000. The decrease in cash and cash equivalents for the first nine months of 2018 was primarily driven by a decrease of cash provided by operations in 2018 compared to 2017, repayment of the Company's term loan for \$225,000 and an increase in capitalized software development cost of \$443,000 for the first nine months of 2018.

As of September 30, 2018, the Company owed \$2,697,000 against the line of credit from Western Alliance Bank ("WAB"). As of September 30, 2018, there was \$153,000 available under the line of credit. The Company has projected revenues that management believes will provide sufficient funds along with the additional borrowings available under its line of credit to sustain its continuing operations through at least November 14, 2019. The Second Loan Agreement increased the availability under the line of credit from \$2,400,000 to \$2,850,000 (see footnote #9).

The Company was in compliance with the WAB financial and liquidity covenant as of September 30, 2018 and expects to be able to continue to comply with the required covenants under the modified agreement with WAB for at least the next year. As a result, the amounts due to WAB under the line of credit and term loan as of September 30, 2018 were classified in the accompanying consolidated balance sheet in accordance with the repayment terms stipulated in the agreement with WAB.

Our primary cash requirements are to fund operations which mainly include personnel-related costs, marketing costs, third party costs related to hosting and software, general and administrative costs associated with being a public company, travel costs, and quarterly preferred stock dividends. The Company expects to continue to incur 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 results of operations. However, projections of future cash needs and cash flows are subject to risks and uncertainty.

Management's current operating plan is to maintain and/or reduce operating expenses in order to be aligned with expected revenues. The primary area of focus will continue to be headcount and costs from outside consultants. The Company remains focused on maximizing revenue from its revenue generating resources and will continue to repurpose, if necessary, certain personnel to become billable so the Company can continue to improve its liquidity. The Company has a substantial professional services backlog that resulted from new customers added in the first nine months of 2018 as well as upgrade projects from our existing customers as they move to the latest version of Astea Alliance. In 2018, the Company continues to consider ways to reduce operating expenses in certain areas of the Company in order to maintain our liquidity. However, management has implemented new marketing initiatives which has increased our spending in this area in 2018 that we believe will directly contribute to improving new business that is essential to our growth. Operations will generate enough cash to meet obligations at least through November 14, 2019. As noted above, if the Company's actual results fall short of expectations, the Company will make cost adjustments to improve the Company's operating cash flows. In addition, we plan to maintain the same level of investment in software development and we do not expect to increase capital expenditures.

Our operations are subject to certain risks and uncertainties including, among others, current and potential competitors with greater resources, dependence on our significant and existing customer base, closing license and subscription sales in a timely manner, lack of a history of consistently generating net income and uncertainty of future profitability, and possible fluctuations in financial results.

Off-Balance Sheet Arrangement Transactions

The Company is not involved in off-balance sheet arrangements that have or are reasonably likely to have a material current or future impact on our financial condition, changes in financial condition, revenues or expenses result in operations, liquidity, capital expenditures or capital resources.

Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE 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 and foreign currency.

Interest Rate Risk. Our exposure to market risk for changes in interest rates relates primarily to our balances outstanding on our revolving line of credit with WAB, as the interest rate is variable. At September 30, 2018, the outstanding balances on our line of credit under the revolving credit facility with WAB was \$2,697,000 and the term loan was fully repaid.

Foreign Currency Risk. 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. For the nine months ended September 30, 2018, approximately 45% 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 4. CONTROLS AND PROCEDURES

Our management has evaluated the effectiveness of our disclosure controls and procedures as required by Exchange Act Rules 13a-15 as of the end of the period covered by this report. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that these disclosure controls and procedures are effective.

Changes in Internal Control Over Financial Reporting

During the quarter ended March 31, 2018, we implemented internal controls for the new accounting standard adopted during the period, Revenue Contracts from Customers, but there were no changes in our internal control over financial reporting during the fiscal quarter ended September 30, 2018 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1A. RISK FACTORS

In addition to the risk factors set forth in this report, you should carefully consider the factors discussed in Part I, "Item 1A. Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2017, which could materially affect the Company's business, financial condition or future results. The risks described in this report and in the Company's Annual Report on Form 10-K for the year ended December 31, 2017 are not the only risks facing the Company. Additional risks and uncertainties not currently known to the Company or that the Company currently deems to be immaterial also may materially adversely affect the Company's business, financial condition and/or operating results.

Variability of Quarterly Results

Risks to the Company on a quarterly basis, and which may vary from quarter to quarter, include but are not limited to the following:

The Company's quarterly operating results have varied in the past, and may vary significantly in the future depending on factors such as the size, timing and recognition of revenue from significant orders, the timing of new product releases and product enhancements, and market acceptance of these new releases and enhancements, increases in operating expenses, and seasonality of its business.

The market price of the Company's common stock could 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, adverse earnings or other financial announcements of the Company's customers and general stock market conditions, as well as other factors.

Item 6. EXHIBITS

- Certification Chief Executive Officer required by Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 21.2 Certification Chief Financial Officer required by Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934 as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 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
- 22.2 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

SIGNATURES

Pursuant to the requirements 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.

Date: November 14, 2018 /s/Zack Bergreen

Zack Bergreen

Chief Executive Officer (Principal Executive Officer)

Date: November 14, 2018 /s/Rick Etskovitz

Rick Etskovitz

Chief Financial Officer

(Principal Financial and Chief Accounting Officer)

EXHIBIT INDEX

No. Description

31.1	Certification Chief Executive Officer required by Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification Chief Financial Officer required by Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934 as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
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