

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

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2018

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

For the transition period from _____ to _____

Commission file number 001-15757

IMAGEWARE SYSTEMS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or
Organization)

33-0224167

(IRS Employer Identification No.)

10815 Rancho Bernardo Rd., Suite 310

San Diego, CA 92127

(Address of Principal Executive Offices)

(858) 673-8600

(Registrant's Telephone Number, Including Area Code)

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company or emerging growth company. See 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	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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-12 of the Exchange Act). Yes No

The number of shares of common stock, with \$0.01 par value, outstanding on August 6, 2018 was 95,829,155.

IMAGEWARE SYSTEMS, INC.
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PART I

ITEM 1. FINANCIAL STATEMENTS

IMAGEWARE SYSTEMS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(In Thousands, except for share and per share data)

	<u>June 30, 2018</u>	<u>December 31, 2017</u>
	(Unaudited)	
ASSETS		
Current Assets:		
Cash	\$ 2,213	\$ 7,317
Accounts receivable, net of allowance for doubtful accounts of \$15 at June 30, 2018 and December 31, 2017.	672	458
Inventory, net	19	79
Other current assets	203	163
Total Current Assets	<u>3,107</u>	<u>8,017</u>
Property and equipment, net	31	43
Other assets	35	35
Intangible assets, net of accumulated amortization	87	93
Goodwill	3,416	3,416
Total Assets	<u>\$ 6,676</u>	<u>\$ 11,604</u>
LIABILITIES AND SHAREHOLDERS' EQUITY (DEFICIT)		
Current Liabilities:		
Accounts payable	\$ 390	\$ 457
Deferred revenue	552	1,016
Accrued expense	781	658
Accrued interest payable to related parties	791	527
Convertible lines of credit to related parties, net of discount	5,871	5,774
Total Current Liabilities	<u>8,385</u>	<u>8,432</u>
Pension obligation	2,039	2,024
Total Liabilities	<u>10,424</u>	<u>10,456</u>
Shareholders' Equity (Deficit):		
Preferred stock, authorized 4,000,000 shares:		
Series A Convertible Redeemable Preferred Stock, \$0.01 par value; designated 31,021 shares, 30,571 shares and 31,021 shares issued and outstanding at June 30, 2018 and December 31, 2017, respectively; liquidation preference \$30,571 and \$31,021 at June 30, 2018 and December 31, 2017, respectively.	—	—
Series B Convertible Redeemable Preferred Stock, \$0.01 par value; designated 750,000 shares, 389,400 shares issued and 239,400 shares outstanding at June 30, 2018 and December 31, 2017; liquidation preference \$620 at June 30, 2018 and at December 31, 2017.	2	2
Common Stock, \$0.01 par value, 175,000,000 shares authorized; 95,835,859 and 94,174,540 shares issued at June 30, 2018 and December 31, 2017, respectively, and 95,829,155 and 94,167,836 shares outstanding at June 30, 2018 and December 31, 2017, respectively.	957	941
Additional paid-in capital	174,749	172,414
Treasury stock, at cost 6,704 shares	(64)	(64)
Accumulated other comprehensive loss	(1,649)	(1,664)
Accumulated deficit	(177,743)	(170,481)
Total Shareholders' Equity (Deficit)	<u>(3,748)</u>	<u>1,148</u>
Total Liabilities and Shareholders' Equity (Deficit)	<u>\$ 6,676</u>	<u>\$ 11,604</u>

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

IMAGEWARE SYSTEMS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(In Thousands, except share and per share amounts)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Revenue:				
Product	\$ 1,182	\$ 407	\$ 1,279	\$ 680
Maintenance	703	653	1,322	1,309
	<u>1,885</u>	<u>1,060</u>	<u>2,601</u>	<u>1,989</u>
Cost of revenue:				
Product	139	36	165	90
Maintenance	167	214	390	423
Gross profit	<u>1,579</u>	<u>810</u>	<u>2,046</u>	<u>1,476</u>
Operating expense:				
General and administrative	987	965	2,190	1,934
Sales and marketing	816	702	1,680	1,463
Research and development	1,865	1,556	3,664	3,096
Depreciation and amortization	11	17	24	38
	<u>3,679</u>	<u>3,240</u>	<u>7,558</u>	<u>6,531</u>
Loss from operations	<u>(2,100)</u>	<u>(2,430)</u>	<u>(5,512)</u>	<u>(5,055)</u>
Interest expense, net	184	164	356	264
Other income, net	—	(50)	—	(50)
Loss before income taxes	<u>(2,284)</u>	<u>(2,544)</u>	<u>(5,868)</u>	<u>(5,269)</u>
Income tax expense	—	3	1	7
Net loss	<u>(2,284)</u>	<u>(2,547)</u>	<u>(5,869)</u>	<u>(5,276)</u>
Preferred dividends	(720)	(514)	(1,489)	(1,021)
Net loss available to common shareholders	<u>\$ (3,004)</u>	<u>\$ (3,061)</u>	<u>\$ (7,358)</u>	<u>\$ (6,297)</u>
Basic and diluted loss per common share - see Note 3:				
Net loss	\$ (0.02)	\$ (0.03)	\$ (0.06)	\$ (0.06)
Preferred dividends	(0.01)	(0.00)	(0.02)	(0.01)
Basic and diluted loss per share available to common shareholders	<u>\$ (0.03)</u>	<u>\$ (0.03)</u>	<u>\$ (0.08)</u>	<u>\$ (0.07)</u>
Basic and diluted weighted-average shares outstanding	<u>95,161,570</u>	<u>92,539,230</u>	<u>94,749,904</u>	<u>92,203,567</u>

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

IMAGEWARE SYSTEMS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(In Thousands)
(Unaudited)

	<u>Three Months Ended</u> <u>June 30,</u>		<u>Six Months Ended</u> <u>June 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Net loss	\$ (2,284)	\$ (2,547)	\$ (5,869)	\$ (5,276)
Other comprehensive income (loss):				
Foreign currency translation adjustment	43	(61)	15	(78)
Comprehensive loss	<u>\$ (2,241)</u>	<u>\$ (2,608)</u>	<u>\$ (5,854)</u>	<u>\$ (5,354)</u>

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

IMAGEWARE SYSTEMS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In Thousands)
(Unaudited)

	Six Months Ended June 30,	
	2018	2017
Cash flows from operating activities		
Net loss	\$ (5,869)	\$ (5,276)
Adjustments to reconcile net loss to net cash used by operating activities:		
Depreciation and amortization	24	38
Amortization of debt issuance costs and beneficial conversion feature	122	97
Provision for losses on accounts receivable	—	15
Stock-based compensation	708	550
Warrants issued in lieu of cash as compensation for services	9	—
Gain from sale of trademark	—	(50)
Change in assets and liabilities		
Accounts receivable	(118)	(60)
Inventory	60	(30)
Other assets	(44)	(21)
Accounts payable	(67)	(82)
Deferred revenue	(464)	(438)
Accrued expense	389	192
Pension obligation	14	60
Total adjustments	633	271
Net cash used in operating activities	(5,236)	(5,005)
Cash flows from investing activities		
Purchase of property and equipment	(7)	(1)
Proceeds received from sale of trademark	—	50
Net cash provided by (used in) investing activities	(7)	49
Cash flows from financing activities		
Proceeds from exercised stock options	149	227
Proceeds from lines of credit, net	—	3,350
Dividends paid	(25)	(25)
Net cash provided by financing activities	124	3,552
Effect of exchange rate changes on cash	15	(78)
Net decrease in cash	(5,104)	(1,482)
Cash at beginning of period	7,317	1,586
Cash at end of period	\$ 2,213	\$ 104
Supplemental disclosure of cash flow information:		
Cash paid for interest	\$ —	\$ —
Cash paid for income taxes	\$ —	\$ —
Summary of non-cash investing and financing activities:		
Beneficial conversion feature on convertible related party lines of credit	\$ 21	\$ 281
Stock dividend on Convertible Redeemable Preferred Stock	\$ 1,464	\$ 996
Conversion of Convertible Preferred Stock into Common Stock	\$ 4	\$ —

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

**IMAGEWARE SYSTEMS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)**

NOTE 1. ORGANIZATION AND DESCRIPTION OF BUSINESS

Overview

As used in this Quarterly Report, “we,” “us,” “our,” “ImageWare,” “ImageWare Systems,” “Company” or “our Company” refers to ImageWare Systems, Inc. and all of its subsidiaries. ImageWare Systems, Inc. is incorporated in the state of Delaware. The Company is a pioneer and leader in the emerging market for biometrically enabled software-based identity management solutions. Using those human characteristics that are unique to us all, the Company creates software that provides a highly reliable indication of a person’s identity. The Company’s “flagship” product is the patented IWS Biometric Engine®. The Company’s products are used to manage and issue secure credentials, including national IDs, passports, driver licenses and access control credentials. The Company’s products also provide law enforcement with integrated mug shot, fingerprint LiveScan and investigative capabilities. The Company also provides comprehensive authentication security software using biometrics to secure physical and logical access to facilities or computer networks or internet sites. Biometric technology is now an integral part of all markets the Company addresses, and all the products are integrated into the IWS Biometric Engine.

Liquidity, Going Concern and Management’s Plan

Historically, our principal sources of cash have included customer payments from the sale of our products, proceeds from the issuance of common and preferred stock and proceeds from the issuance of debt, including our Lines of Credit (defined below). Our principal uses of cash have included cash used in operations, product development, and payments relating to purchases of property and equipment. We expect that our principal uses of cash in the future will be for product development, including customization of identity management products for enterprise and consumer applications, further development of intellectual property, development of Software-as-a-Service (“SaaS”) capabilities for existing products as well as general working capital and capital expenditure requirements. Management expects that, as our revenue grows, our sales and marketing and research and development expense will continue to grow, albeit at a slower rate and, as a result, we will need to generate significant net revenue to achieve and sustain income from operations.

Going Concern

At June 30, 2018, we had a working capital deficit of approximately \$5,278,000. Our principal sources of liquidity at June 30, 2018 consisted of approximately \$2,213,000 of cash and \$672,000 of trade accounts receivable.

Considering our projected cash requirements, and assuming we are unable to generate incremental revenue, our available cash will be insufficient to satisfy our cash requirements for the next twelve months from the date of this filing. These factors raise substantial doubt about our ability to continue as a going concern. To address our working capital requirements, management intends to seek additional equity and/or debt financing through the issuance of additional debt and/or equity securities, or may seek strategic or other transactions intended to increase shareholder value. There are currently no formal committed financing arrangements to support our projected cash shortfall, including commitments to purchase additional debt and/or equity securities, or other agreements, and no assurances can be given that we will be successful in raising additional debt and/or equity securities, or entering into any other transaction that addresses our ability to continue as a going concern.

In view of the matters described in the preceding paragraph, recoverability of a major portion of the recorded asset amounts shown in the accompanying consolidated balance sheet is dependent upon continued operations of the Company, which, in turn, is dependent upon the Company's ability to continue to raise capital and generate positive cash flows from operations. However, the Company operates in markets that are emerging and highly competitive. There is no assurance that the Company will be able to obtain additional capital, operate at a profit or generate positive cash flows in the future.

These condensed consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts and classifications of liabilities that might be necessary should the Company be unable to continue as a going concern.

NOTE 2. SIGNIFICANT ACCOUNTING POLICIES AND BASIS OF PRESENTATION

Basis of Presentation

The accompanying condensed consolidated balance sheet as of December 31, 2017, which has been derived from audited financial statements, and the unaudited interim condensed consolidated financial statements have been prepared by the Company in accordance with accounting principles generally accepted in the United States of America ("GAAP") and the rules and regulations of the Securities and Exchange Commission ("SEC") related to a quarterly report on Form 10-Q. Certain information and note disclosures normally included in annual financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to those rules and regulations, although the Company believes that the disclosures made are adequate to make the information not misleading. The interim financial statements reflect all adjustments, which, in the opinion of management, are necessary for a fair statement of the results for the periods presented. All such adjustments are of a normal and recurring nature. These unaudited condensed consolidated financial statements should be read in conjunction with the Company's audited financial statements for the year ended December 31, 2017, which are included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017 that was filed with the SEC on March 19, 2018.

Operating results for the three and six months ended June 30, 2018 are not necessarily indicative of the results that may be expected for the year ended December 31, 2018, or any other future periods.

Certain prior period amounts have been reclassified to conform with current period presentation. These reclassifications have no impact on net loss.

Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. The Company's wholly-owned subsidiaries are: XImage Corporation, a California Corporation; ImageWare Systems ID Group, Inc., a Delaware corporation (formerly Imaging Technology Corporation); I.W. Systems Canada Company, a Nova Scotia unlimited liability company; ImageWare Digital Photography Systems, LLC, a Nevada limited liability company (formerly Castleworks LLC); Digital Imaging International GmbH, a company formed under German laws; and Image Ware Mexico S de RL de CV, a company formed under Mexican laws. All significant intercompany transactions and balances have been eliminated.

Use of Estimates

The preparation of the consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenue and expense during the reporting period. Significant estimates include the evaluation of our ability to continue as a going concern, the allowance for doubtful accounts receivable, deferred tax asset valuation allowances, recoverability of goodwill, assumptions used in the Black-Scholes model to calculate the fair value of share based payments, fair value of Exchanged Preferred (defined below), assumptions used in the application of revenue recognition policies and assumptions used in the application of fair value methodologies to calculate the fair value of pension assets and obligations. Actual results could differ from estimates.

Accounts Receivable

In the normal course of business, the Company extends credit without collateral requirements to its customers that satisfy pre-defined credit criteria. Accounts receivable are recorded net of an allowance for doubtful accounts. Accounts receivable are considered delinquent when the due date on the invoice has passed. The Company records its allowance for doubtful accounts based upon its assessment of various factors. The Company considers historical experience, the age of the accounts receivable balances, the credit quality of its customers, current economic conditions and other factors that may affect customers' ability to pay to determine the level of allowance required. Accounts receivable are written off against the allowance for doubtful accounts when all collection efforts by the Company have been unsuccessful.

Inventories

Finished goods inventories are stated at the lower of cost, determined using the average cost method, or net realizable value. See Note 4, "Inventory," below.

Fair Value of Financial Instruments

For certain of the Company's financial instruments, including accounts receivable, accounts payable, accrued expense, deferred revenue and lines of credit payable to related parties, the carrying amounts approximate fair value due to their relatively short maturities.

Revenue Recognition

Effective January 1, 2018, we adopted Accounting Standards Codification ("ASC"), Topic 606, Revenue from Contracts with Customers ("ASC 606"), using the modified retrospective transition method.

In accordance with ASC 606, revenue is recognized when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services.

The core principle of the standard is that we should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which we expect to be entitled in exchange for those goods or services. To achieve that core principle, we apply the following five step model:

1. Identify the contract with the customer;
2. Identify the performance obligation in the contract;
3. Determine the transaction price;
4. Allocate the transaction price to the performance obligations in the contract; and
5. Recognize revenue when (or as) each performance obligation is satisfied.

At contract inception, we assess the goods and services promised in a contract with a customer and identify as a performance obligation each promise to transfer to the customer either: (i) a good or service (or a bundle of goods or services) that is distinct or (ii) a series of distinct goods or services that are substantially the same and that have the same pattern of transfer to the customer. We recognize revenue only when we satisfy a performance obligation by transferring a promised good or service to a customer.

Determining the timing of the satisfaction of performance obligations as well as the transaction price and the amounts allocated to performance obligations requires judgement.

We disclose disaggregation of our customer revenue by classes of similar products and services as follows:

- Software licensing and royalties;
- Sales of computer hardware and identification media;
- Services; and
- Post-contract customer support.

Software licensing and royalties

Software licenses consist of revenue from the sale of software for identity management applications. Our software licenses are functional intellectual property and typically provide customers with the right to use our software in perpetuity as it exists when made available to the customer. We recognize revenue from software licensing at a point in time upon delivery, provided all other revenue recognition criteria are met.

Royalties consist of revenue from usage-based arrangements and guaranteed minimum-based arrangements. We recognize revenue for royalty arrangements at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied.

Computer hardware and identification media

We generate revenue from the sale of computer hardware and identification media. Revenue for these items is recognized upon delivery of these products to the customer, provided all other revenue recognition criteria are met.

Services

Services revenue is comprised primarily of software customization services, software integration services, system installation services and customer training. Revenue is generally recognized upon completion of services and customer acceptance provided all other revenue recognition criteria are met.

Post-contract customer support (“PCS”)

Post contract customer support consists of maintenance on software and hardware for our identity management solutions. We recognize PCS revenue from periodic maintenance agreements. Revenue is generally recognized ratably over the respective maintenance periods provided no significant obligations remain. Costs related to such contracts are expensed as incurred.

Arrangements with multiple performance obligations

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer. In addition to selling software licenses, hardware and identification media, services and post-contract customer support on a standalone basis, certain contracts include multiple performance obligations. For such arrangements, we allocate revenue to each performance obligation based on our best estimate of the relative standalone selling price. The standalone selling price for a performance obligation is the price at which we would sell a promised good or service separately to a customer. The primary methods used to estimate standalone selling price are as follows: (i) the expected cost-plus margin approach, under which we forecast our expected costs of satisfying a performance obligation and then add an appropriate margin for that distinct good or service and (ii) the percent discount off of list price approach.

Contract costs

We recognize an asset for the incremental costs of obtaining a contract with a customer if we expect the benefit of those costs to be longer than one year. We apply a practical expedient to expense costs as incurred for costs to obtain a contract when the amortization period is one year or less.

Other items

We do not offer rights of return for our products and services in the normal course of business.

Sales tax collected from customers is excluded from revenue.

The adoption of ASC 606 as of January 1, 2018 resulted in a cumulative positive adjustment to beginning accumulated deficit and accounts receivable of approximately \$95,000. For the three and six months ended June 30, 2018, the adoption of ASC 606 resulted in a reduction in royalty revenue of approximately \$28,000 and \$56,000, respectively. The following table sets forth our disaggregated revenue for the three months and six months ended June 30, 2018 and 2017:

Net Revenue (dollars in thousands)	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Software and royalties	\$ 871	\$ 319	\$ 955	\$ 508
Hardware and consumables	122	39	122	86
Services	189	49	202	86
Maintenance	703	653	1,322	1,309
Total revenue	<u>\$ 1,885</u>	<u>\$ 1,060</u>	<u>\$ 2,601</u>	<u>\$ 1,989</u>

Customer Concentration

For the three months ended June 30, 2018, two customers accounted for approximately 60% or \$1,133,000 of our total revenue and had trade receivables at June 30, 2018 of \$213,000. For the six months ended June 30, 2018, one customer accounted for approximately 43% or \$1,121,000 of our total revenue and had trade receivables at June 30, 2018 of \$0.

For the three months ended June 30, 2017, one customer accounted for approximately 17% or \$184,000 of our total revenue and had trade receivables at June 30, 2017 of \$0. For the six months ended June 30, 2017, one customer accounted for approximately 19% or \$368,000 of our total revenue and had trade receivables at June 30, 2017 of \$0.

Recently Issued Accounting Standards

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (“FASB”), or other standard setting bodies, which are adopted by us as of the specified effective date. Unless otherwise discussed, the Company’s management believes the impact of recently issued standards not yet effective will not have a material impact on the Company’s consolidated financial statements upon adoption.

FASB ASU No. 2016-02. In February 2016, the FASB issued ASU No. 2016-02, “Leases.” This guidance will result in key changes to lease accounting and will aim to bring leases onto balance sheets to give investors, lenders, and other financial statement users a more comprehensive view of a company’s long-term financial obligations as well as the assets it owns versus leases. The new leasing standard will be effective for fiscal years beginning after December 15, 2018, and for interim periods within those fiscal years. The Company is currently evaluating the impact this guidance will have on our consolidated financial statements and anticipates commencement of adoption planning in the third fiscal quarter of 2018.

FASB ASU No. 2016-13. In June 2016, the FASB issued Accounting Standard Update No. 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. ASU No. 2016-13 changes the impairment model for most financial assets and certain other instruments. For trade and other receivables, held-to-maturity debt securities, loans and other instruments, entities will be required to use a new forward-looking “expected loss” model that will replace today’s “incurred loss” model and generally will result in the earlier recognition of allowances for losses. For available-for-sale debt securities with unrealized losses, entities will measure credit losses in a manner similar to current practice, except that the losses will be recognized as an allowance. This guidance is effective for fiscal years beginning after December 15, 2019 including interim periods within those fiscal years. The Company is currently evaluating the potential impact of adoption of this standard on its consolidated financial statements.

FASB ASU No. 2017-04. In January 2017, the FASB issued ASU No. 2017-04, *Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*. The amendments of this ASU eliminate step 2 from the goodwill impairment test. The annual, or interim test is performed by comparing the fair value of a reporting unit with its carrying amount. The amendments of this ASU also eliminate the requirements for any reporting unit with a zero or negative carrying amount to perform a qualitative assessment and if it fails that qualitative test, to perform step 2 of the goodwill impairment test. ASU No. 2017-04 is effective for fiscal years beginning after December 15, 2019. The Company is currently evaluating the potential impact of adoption of this standard on its consolidated financial statements.

FASB ASU No. 2017-07. Effective January 1, 2018, we adopted ASU No. 2017-07, *Compensation – Retirement Benefits (Topic 715): Improving the Presentation of Periodic Pension Cost and Net Periodic Postretirement Benefit Cost* issued by the FASB, which requires employers to present the service cost component of net periodic benefit cost in the same income statement line item(s) as other employee compensation costs arising from services rendered during the period. The adoption of this standard did not have a material effect on our consolidated financial statements.

FASB ASU No. 2017-11. In July 2017, the FASB issued ASU No 2017-11, “*Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral.*” The ASU applies to issuers of financial instruments with down-round features. It amends (1) the classification of such instruments as liabilities or equity by revising the guidance in ASC 815 on the evaluation of whether instruments or embedded features with down-round provisions must be accounted for as derivative instruments and (2) the guidance on recognition and measurement of the value transferred upon the trigger of a down-round feature for equity-classified instruments by revising ASC 260. The ASU is effective for public business entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. For all other organizations, the amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted. The Company is currently evaluating the potential impact of this updated guidance on its consolidated financial statements.

FASB ASU No. 2018-07. In June 2018, the FASB issued ASU 2018-07, “*Shared-Based Payment Arrangements with Nonemployees*” (*Topic 505*), which simplifies the accounting for share-based payments granted to nonemployees for goods and services. Under the ASU, most of the guidance on such payments to nonemployees will be aligned with the requirements for share-based payments granted to employees. Under the ASU 2018-07, the measurement of equity-classified nonemployee share-based payments will be fixed on the grant date, as defined in ASC 718, and will use the term nonemployee vesting period, rather than requisite service period. The amendments in this update are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted if financial statements have not yet been issued. The Company is currently evaluating the impact of the adoption of ASU 2018-07 on the Company’s financial statements.

NOTE 3. NET LOSS PER COMMON SHARE

Basic loss per common share is calculated by dividing net loss available to common shareholders for the period by the weighted-average number of common shares outstanding during the period. Diluted loss per common share is calculated by dividing net loss available to common shareholders for the period by the weighted-average number of common shares outstanding during the period, adjusted to include, if dilutive, potential dilutive shares consisting of convertible preferred stock, convertible related party lines of credit, stock options and warrants, calculated using the treasury stock and if-converted methods. For diluted loss per share calculation purposes, the net loss available to common shareholders is adjusted to add back any preferred stock dividends and any interest on convertible debt reflected in the condensed consolidated statement of operations for the respective periods.

The table below presents the computation of basic and diluted loss per share:

(Amounts in thousands except share and per share amounts)	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Numerator for basic and diluted loss per share:				
Net loss	\$ (2,284)	\$ (2,547)	\$ (5,869)	\$ (5,276)
Preferred dividends	(720)	(514)	(1,489)	(1,021)
Net loss available to common shareholders	\$ (3,004)	\$ (3,061)	\$ (7,358)	\$ (6,297)
Denominator for basic and dilutive loss per share – weighted-average shares outstanding				
	95,161,570	92,539,230	94,749,904	92,203,567
Net loss	\$ (0.02)	\$ (0.03)	\$ (0.06)	\$ (0.06)
Preferred dividends	(0.01)	(0.00)	(0.02)	(0.01)
Basic and diluted loss per share available to common shareholders	\$ (0.03)	\$ (0.03)	\$ (0.08)	\$ (0.07)

The following potential dilutive securities have been excluded from the computations of diluted weighted-average shares outstanding, as their effect would have been antidilutive:

Potential Dilutive securities	Three and Six Months Ended June 30,	
	2018	2017
Related party lines of credit	5,432,579	5,016,236
Convertible redeemable preferred stock	26,629,507	11,709,151
Stock options	7,341,093	6,171,555
Warrants	270,000	175,000
Total potential dilutive securities	39,673,179	23,071,942

NOTE 4. SELECT BALANCE SHEET DETAILS

Inventory

Inventories of \$19,000 as of June 30, 2018 were comprised of work in process of \$1,000 representing direct labor costs on in-process projects and finished goods of \$18,000 net of reserves for obsolete and slow-moving items of \$3,000.

Inventories of \$53,000 as of June 30, 2017 were comprised of work in process of \$47,000 representing direct labor costs on in-process projects and finished goods of \$6,000 net of reserves for obsolete and slow-moving items of \$3,000.

Intangible Assets

The carrying amounts of the Company's patent intangible assets were \$87,000 and \$93,000 as of June 30, 2018 and December 31, 2017, respectively, which includes accumulated amortization of \$572,000 and \$566,000 as of June 30, 2018 and December 31, 2017, respectively. Amortization expense for patent intangible assets was \$2,000 and \$7,000 for the three and six months ended June 30, 2018 and 2017, respectively. Patent intangible assets are being amortized on a straight-line basis over their remaining life of approximately 7.7 years.

The estimated acquired intangible amortization expense for the next five fiscal years is as follows:

Fiscal Year Ended December 31,	Estimated Amortization Expense (\$ in thousands)
2018 (six months)	\$ 6
2019	12
2020	12
2021	12
2022	12
Thereafter	33
Totals	\$ 87

Goodwill

The Company annually, or more frequently if events or circumstances indicate a need, tests the carrying amount of goodwill for impairment. A two-step impairment test is used to first identify potential goodwill impairment and then measure the amount of goodwill impairment loss, if any. The first step was conducted by determining and comparing the fair value, employing the market approach, of the Company's reporting unit to the carrying value of the reporting unit. The Company continues to have only one reporting unit, Identity Management. Based on the results of this impairment test, the Company determined that its goodwill was not impaired as of June 30, 2018 and December 31, 2017.

NOTE 5. LINES OF CREDIT WITH RELATED PARTIES

Outstanding lines of credit consist of the following:

(\$ in thousands)	June 30, 2018	December 31, 2017
Lines of Credit with Related Parties		
8% convertible lines of credit. Face value of advances under lines of credit \$6,000 at June 30, 2018 and December 31, 2017. Discount on advances under lines of credit is \$129 at June 30, 2018 and \$226 at December 31, 2017. Maturity date is December 31, 2018.	\$ 5,871	\$ 5,774
Total lines of credit to related parties	5,871	5,774
Less current portion	(5,871)	(5,774)
Long-term lines of credit to related parties	\$ —	\$ —

Lines of Credit

In March 2013, the Company and Neal Goldman, a member of the Company's Board of Directors ("*Goldman*"), entered into a line of credit (the "*Goldman Line of Credit*") with available borrowings of up to \$2.5 million. In March 2014, the Goldman Line of Credit's borrowing was increased to an aggregate total of \$3.5 million (the "*Amendment*"). Pursuant to the terms and conditions of the Amendment, Goldman had the right to convert up to \$2.5 million of the outstanding balance of the Goldman Line of Credit into shares of the Company's Common Stock for \$0.95 per share. Any remaining outstanding balance was convertible into shares of the Company's Common Stock for \$2.25 per share.

As consideration for the initial Goldman Line of Credit, the Company issued a warrant to Goldman, exercisable for 1,052,632 shares of the Company's Common Stock (the "*Line of Credit Warrant*"). The Line of Credit Warrant had a term of two years from the date of issuance and an exercise price of \$0.95 per share. As consideration for entering into the Amendment, the Company issued to Goldman a second warrant, exercisable for 177,778 shares of the Company's Common Stock (the "*Amendment Warrant*"). The Amendment Warrant expired on March 27, 2015 and had an exercise price of \$2.25 per share.

The Company estimated the fair value of the Line of Credit Warrant using the Black-Scholes option pricing model using the following assumptions: term of two years, a risk-free interest rate of 2.58%, a dividend yield of 0%, and volatility of 79%. The Company recorded the fair value of the Line of Credit Warrant as a deferred financing fee of approximately \$580,000 to be amortized over the life of the Goldman Line of Credit. The Company estimated the fair value of the Amendment Warrant using the Black-Scholes option pricing model using the following assumptions: term of one year, a risk-free interest rate of 2.58%, a dividend yield of 0% and volatility of 74%. The Company recorded the fair value of the Amendment Warrant as an additional deferred financing fee of approximately \$127,000 to be amortized over the life of the Goldman Line of Credit.

During the three and six months ended June 30, 2018, the Company recorded an aggregate of approximately \$2,000 and \$4,000 in deferred financing fee amortization expense, respectively. During the three and six months ended June 30, 2017, the Company recorded an aggregate of approximately \$3,000 and \$8,000 in deferred financing fee amortization expense, respectively. Such expense is recorded as a component of interest expense in the Company's condensed consolidated statements of operations.

In April 2014, the Company and Goldman entered into a further amendment to the Goldman Line of Credit to decrease the available borrowings to \$3.0 million (the "*Second Amendment*"). Contemporaneous with the execution of the Second Amendment, the Company entered into a new unsecured line of credit with Charles Crocker, a member of the Company's Board of Directors ("*Crocker*"), with available borrowings of up to \$500,000 (the "*Crocker LOC*"), which amount was convertible into shares of the Company's Common Stock for \$2.25 per share. As a result of these amendments, total available borrowings under the lines of credit available to the Company remained unchanged an aggregate of \$3.5 million. In connection with the Second Amendment, Goldman assigned and transferred to Crocker one-half of the Amendment Warrant.

In December 2014, the Company and Goldman entered into a further amendment to the Goldman Line of Credit to increase the available borrowing to \$5.0 million and extend the maturity date of the Goldman Line of Credit to March 27, 2017 (the "*Third Amendment*"). Also, as a result of the Third Amendment, Goldman had the right to convert up to \$2.5 million of outstanding principal, plus any accrued but unpaid interest ("*Outstanding Balance*") into shares of the Company's Common Stock for \$0.95 per share, the next \$500,000 Outstanding Balance into shares of Common Stock for \$2.25 per share, and any remaining outstanding balance thereafter into shares of Common Stock for \$2.30 per share. The Third Amendment also modified the definition of a "Qualified Financing" to mean a debt or equity financing resulting in gross proceeds to the Company of at least \$5.0 million.

In February 2015, as a result of the Series E Financing, the Company issued 1,978 shares of Series E Preferred to Goldman to satisfy \$1,950,000 in principal borrowings under the Goldman Line of Credit, plus approximately \$28,000 in accrued interest. As a result of the Series E Financing, the Company's borrowing capacity under the Goldman Line of Credit was reduced to \$3,050,000 with the maturity date unchanged and the Crocker LOC was terminated in accordance with its terms.

In March 2016, the Company and Goldman entered into a fourth amendment to the Goldman Line of Credit (the "*Fourth Amendment*") solely to (i) increase available borrowings to \$5.0 million; (ii) extend the maturity date to June 30, 2017, and (iii) provide for the conversion of the outstanding balance due under the terms of the Goldman Line of Credit into that number of fully paid and non-assessable shares of the Company's Common Stock as is equal to the quotient obtained by dividing the outstanding balance by \$1.25.

Contemporaneous with the execution of the Fourth Amendment, the Company entered into a new \$500,000 line of credit with Crocker (the "*New Crocker LOC*") with available borrowings of up to \$500,000, which replaced the original Crocker LOC that terminated as a result of the consummation of the Series E Financing. Similar to the Fourth Amendment, the New Crocker LOC originally matured on June 30, 2017, and provided for the conversion of the outstanding balance due under the terms of the New Crocker LOC into that number of fully paid and non-assessable shares of the Company's Common Stock as is equal to the quotient obtained by dividing the outstanding balance by \$1.25.

On December 27, 2016, in connection with the consummation of the Series G Financing, the Company and Goldman agreed to enter into the Fifth Amendment (the "*Line of Credit Amendment*") to the Goldman Line of Credit to provide the Company with the ability to borrow up to \$5.5 million under the terms of the Goldman Line of Credit. In addition, the Maturity Date, as defined in the Goldman Line of Credit, was amended to be December 31, 2017. The Line of Credit Amendment was executed on January 23, 2017.

In addition, on January 23, 2017, the Company and Crocker amended the New Crocker LOC to extend the maturity date thereof to December 31, 2017.

On May 10, 2017, Goldman and Crocker agreed to further extend the maturity dates of the Goldman Line of Credit and the New Crocker Line of Credit (collectively, the “*Lines of Credit*”) to December 31, 2018.

As the aforementioned amendments to the Lines of Credit resulted in an increase to the borrowing capacity of the Lines of Credit, the Company adjusted the amortization period of any remaining unamortized deferred costs and note discounts to the term of the new arrangement.

The Company evaluated the Lines of Credit and determined that the instruments contain a contingent beneficial conversion feature, i.e. an embedded conversion right that enables the holder to obtain the underlying Common Stock at a price below market value. The beneficial conversion feature is contingent, as the terms of the conversion do not permit the Company to compute the number of shares that the holder would receive if the contingent event occurs (i.e. future borrowings under the Line of Credit). The Company has considered the accounting for this contingent beneficial conversion feature using the guidance in ASC 470, Debt. The guidance in ASC 470 states that a contingent beneficial conversion feature in an instrument shall not be recognized in earnings until the contingency is resolved. The beneficial conversion features of future borrowings under the Line of Credit will be measured using the intrinsic value calculated at the date the contingency is resolved using the conversion price and trading value of the Company’s Common Stock at the date the Lines of Credit were issued (commitment date).

The Company incurred no additional borrowings under the Lines of Credit during the six months ended June 30, 2018. During the three and six months ended June 30, 2018, the Company incurred approximately \$130,000 and \$263,000, respectively, in accrued unpaid interest under the terms of the Lines of Credit. As a result of this interest accrual, during the three and six months ended June 30, 2018, the Company recorded an additional \$10,000 and \$21,000, respectively, in debt discount attributable to beneficial conversion feature. During the three and six months ended June 30, 2018, the Company accreted approximately \$59,000 and \$119,000, respectively, of debt discount. During the three and six months ended June 30, 2017, the Company recorded approximately \$156,000 and \$281,000, respectively in debt discount attributable to beneficial conversion feature and accreted approximately \$55,000 and \$90,000, respectively, of debt discount. Such expense is recorded as a component of interest expense in the Company’s condensed consolidated statements of operations.

NOTE 6. EQUITY

The Company’s Certificate of Incorporation, as amended, authorizes the issuance of two classes of stock to be designated “Common Stock” and “Preferred Stock.” The Preferred Stock may be divided into such number of series and with the rights, preferences, privileges and restrictions as the Board of Directors may determine.

Series A Convertible Preferred Stock

On September 15, 2017, the Company filed the Certificate of Designations of the Series A Preferred with the Delaware Secretary of State, designating 31,021 shares of the Company’s preferred stock, par value \$0.01 per share, as Series A Preferred. Shares of Series A Preferred accrue dividends at a rate of 8% per annum if the Company chooses to pay accrued dividends in cash, and 10% per annum if the Company chooses to pay accrued dividends in shares of Common Stock. Each share of Series A Preferred has a liquidation preference of \$1,000 per share and is convertible, at the option of the holder, into that number of shares of the Company’s Common Stock equal to the Liquidation Preference, divided by \$1.15 (“*Conversion Shares*”). Each holder of the Series A Preferred is entitled to vote on all matters, together with the holders of Common Stock, on an as converted basis.

Holders of Series A Preferred may elect to convert shares of Series A Preferred into Conversion Shares at any time. In the event the volume-weighted average price (“*VWAP*”) of the Company’s Common Stock is at least \$2.15 per share for at least 20 consecutive trading days, the Company may elect to convert one-half of the shares of Series A Preferred issued and outstanding, on a pro-rata basis, into Conversion Shares, or, if the VWAP of the Company’s Common Stock is at least \$2.15 for 80 consecutive trading days, the Company may convert all issued and outstanding shares of Series A Preferred into Conversion Shares. In addition, in the event of a Change of Control, the Company will have the option to redeem all issued and outstanding shares of Series A Preferred for 115% of the Liquidation Preference per share.

On September 18, 2017, the Company offered and sold a total of 11,000 shares of Series A Preferred at a purchase price of \$1,000 per share. The total net proceeds to the Company from the Series A Financing were approximately \$10.9 million.

Concurrently with the Series A Financing, the Company entered into Exchange Agreements with holders of all outstanding shares of the Company's Series E Convertible Preferred Stock, all outstanding shares of the Company's Series F Convertible Preferred Stock and all outstanding shares of the Company's Series G Convertible Preferred Stock (collectively, the "Exchanged Preferred"), pursuant to which the holders thereof agreed to cancel their respective shares of Exchanged Preferred in exchange for shares of Series A Preferred (the "Preferred Stock Exchange"). As a result of the Preferred Stock Exchange, the Company issued to the holders of the Exchanged Preferred an aggregate total of 20,021 shares of Series A Preferred.

The Company evaluated the Preferred Stock Exchange and determined that the Preferred Stock Exchange was both an induced conversion and an extinguishment transaction. Using the guidance in ASC 260-10-S99-2, *Earnings Per Share – SEC Materials – SEC Staff Announcement: The Effect on the Calculations of Earnings Per Share for a Period That Includes the Redemption or Induced Conversion of Preferred Stock* and ASC 470-50, *Debt – Modifications and Extinguishments*, the Company recorded the fair value differential of the Exchanged Preferred as adjustments within Shareholders' Deficit and in the computation of Net Loss Available to Common Shareholders in the computation of basic and diluted loss per share. The Company utilized the services of an independent third-party valuation firm to perform the computation of the fair value of the Exchanged Preferred. Based on the fair value using these methodologies, the Company recorded approximately \$1,245,000 in fair value differential as adjustments within Shareholders' Deficit in the Company's Condensed Consolidated Balance Sheet for the year ended December 31, 2017.

The Company had 30,571 shares and 31,021 shares of Series A Preferred outstanding as of June 30, 2018 and December 31, 2017, respectively. At June 30, 2018 and December 31, 2017, the Company had cumulative undeclared dividends of \$0. During the six months ended June 30, 2018 certain holders of Series A Preferred converted 450 shares of Series A Preferred into 391,304 shares of the Company's Common Stock. The Company issued the holders of Series A Preferred 472,562 and 648,696 shares of Common Stock on March 31, 2018 and June 30, 2018, respectively, as payment of dividends due on that date.

Series B Convertible Preferred Stock

The Company had 239,400 shares of Series B Convertible Preferred stock ("*Series B Preferred*") outstanding as of June 30, 2018 and December 31, 2017. At June 30, 2018 and December 31, 2017, the Company had cumulative undeclared dividends of approximately \$8,000. There were no conversions of Series B Preferred into Common Stock during the six months ended June 30, 2018 and 2017.

Common Stock

On February 8, 2018, the Company filed with the Secretary of the State of Delaware a Certificate of Amendment to its Certificate of Incorporation, as amended, to increase the authorized number of shares of its Common Stock to 175,000,000 from 150,000,000 shares.

The following table summarizes Common Stock activity for the six months ended June 30, 2018:

	Common Stock
Shares outstanding at December 31, 2017	<u>94,167,836</u>
Shares issued as payment of stock dividend on Series A Preferred	1,121,258
Shares issued pursuant to conversion of Series A Preferred	391,304
Shares issued pursuant to option exercises	148,757
Shares outstanding at June 30, 2018	<u><u>95,829,155</u></u>

Warrants

The following table summarizes warrant activity for the following periods:

	Warrants	Weighted-Average Exercise Price
Balance at December 31, 2017	230,000	\$ 0.91
Granted	40,000	1.46
Expired/Canceled	—	—
Exercised	—	—
Balance at June 30, 2018	270,000	\$ 1.00

As of June 30, 2018, warrants to purchase 270,000 shares of Common Stock at an exercise prices ranging from \$0.80 to \$1.46 were outstanding. All warrants are exercisable as of June 30, 2018 except for an aggregate of 150,000 warrants, which become exercisable only upon the attainment of specified events and 20,000 warrants which become exercisable on June 7, 2019. Such warrants expire at various dates through June 6, 2020. The intrinsic value of warrants outstanding at June 30, 2018 was approximately \$44,000.

In June 2018, the Company issued warrants to purchase 40,000 shares of Common Stock at an exercise price of \$1.46 per share to a member of the Company's Advisory Board. Such warrants have a two-year term with 50% immediately exercisable and the remaining 50% exercisable after one-year. Pursuant to this issuance, the Company recorded compensation expense of approximately \$9,000 during the three months ended June 30, 2018 based on the grant-date fair value of the warrants determined using the Black-Scholes option-valuation model.

Stock-Based Compensation

The 1999 Plan was adopted by the Company's Board of Directors on December 17, 1999. Under the terms of the 1999 Plan, the Company could, originally, issue up to 350,000 non-qualified or incentive stock options to purchase Common Stock of the Company. During the year ended December 31, 2014, the Company subsequently amended and restated the 1999 Plan, whereby it increased the share reserve for issuance to approximately 7.0 million shares of the Company's Common Stock. Subsequently, in February 2018, the Company amended and restated the 1999 Plan, whereby it increased the share reserve for issuance by an additional 2.0 million shares. The 1999 Plan prohibits the grant of stock option or stock appreciation right awards with an exercise price less than fair market value of Common Stock on the date of grant. The 1999 Plan also generally prohibits the "re-pricing" of stock options or stock appreciation rights, although awards may be bought-out for a payment in cash or the Company's stock. The 1999 Plan permits the grant of stock-based awards other than stock options, including the grant of "full value" awards such as restricted stock, stock units and performance shares. The 1999 Plan permits the qualification of awards under the plan (payable in either stock or cash) as "performance-based compensation" within the meaning of Section 162(m) of the Internal Revenue Code. The number of options issued and outstanding and the number of options remaining available for future issuance are shown in the table below. The number of authorized shares available for issuance under the plan at June 30, 2018 was 703,927.

The Company estimates the fair value of its stock options using a Black-Scholes option-valuation model, consistent with the provisions of ASC No. 718, *Compensation – Stock Compensation*. The fair value of stock options granted is recognized to expense over the requisite service period. Stock-based compensation expense is reported in general and administrative, sales and marketing, engineering and customer service expense based upon the departments to which substantially all of the associated employees report and credited to additional paid-in capital. Stock-based compensation expense related to equity options was approximately \$275,000 and \$548,000 for the three and six months ended June 30, 2018, respectively. Stock-based compensation expense related to equity options was approximately \$240,000 and \$480,000 for the three and six months ended June 30, 2017, respectively. Stock-based compensation expense related to options to purchase shares of the Company's Common Stock issued to certain members of the Company's Board of Directors in return for their service (disclosed more fully below) was approximately \$98,000 and \$160,000 for the three and six months ended June 30, 2018, respectively. Stock-based compensation expense related to options to purchase shares of the Company's Common Stock issued to certain members of the Company's Board of Directors in return for their service was approximately \$35,000 and \$70,000 for the three and six months ended June 30, 2017, respectively.

ASC No. 718 requires the use of a valuation model to calculate the fair value of stock-based awards. The Company has elected to use the Black-Scholes option-valuation model, which incorporates various assumptions including volatility, expected life, and interest rates. The Company is required to make various assumptions in the application of the Black-Scholes option-valuation model. The Company has determined that the best measure of expected volatility is based on the historical weekly volatility of the Company's Common Stock. Historical volatility factors utilized in the Company's Black-Scholes computations for the six months ended June 30, 2018 and 2017 ranged from 51% to 84%. The Company has elected to estimate the expected life of an award based upon the SEC approved "simplified method" noted under the provisions of Staff Accounting Bulletin No. 110. The expected term used by the Company during the six months ended June 30, 2018 and 2017 was 5.17 years. The difference between the actual historical expected life and the simplified method was immaterial. The interest rate used is the risk-free interest rate and is based upon U.S. Treasury rates appropriate for the expected term. The interest rate used in the Company's Black-Scholes calculations for the six months ended June 30, 2018 and 2017 was 2.6%. Dividend yield is zero, as the Company does not expect to declare any dividends on the Company's Common Stock in the foreseeable future.

In addition to the key assumptions used in the Black-Scholes model, the estimated forfeiture rate at the time of valuation is a critical assumption. The Company has estimated an annualized forfeiture rate of approximately 0% for corporate officers, 4.1% for members of the Board of Directors and 6.0% for all other employees. The Company reviews the expected forfeiture rate annually to determine if that percent is still reasonable based on historical experience.

A summary of the activity under the Company's stock option plans is as follows:

	Options	Weighted-Average Exercise Price
Balance at December 31, 2017	6,093,512	\$ 1.23
Granted	1,455,500	\$ 1.71
Expired/Cancelled	(59,162)	\$ 1.39
Exercised	(148,757)	\$ 1.00
Balance at June 30, 2018	7,341,093	\$ 1.33

The intrinsic value of options exercisable at June 30, 2018 was approximately \$742,000. The aggregate intrinsic value for all options outstanding as of June 30, 2018 was approximately \$744,000. The weighted-average grant-date per share fair value of options granted during the three and six months ended June 30, 2018 was \$0.75 and \$0.97, respectively. The weighted-average grant-date per share fair value of options granted during the three and six months ended June 30, 2017 was \$0.53 and \$0.56, respectively. At June 30, 2018, the total remaining unrecognized compensation cost related to unvested stock options amounted to approximately \$1,515,000, which will be recognized over a weighted-average period of 2.3 years.

In January 2018, the Company issued an aggregate of 324,000 options to purchase shares of the Company's Common Stock to certain members of the Company's Board of Directors in return for their service on the Board from January 1, 2018 through December 31, 2018. Such options vest at the rate of 27,000 options per month on the last day of each month during the 2018 year. The options have an exercise price of \$1.75 per share and a term of 10 years. Pursuant to this issuance, the Company recorded compensation expense of \$98,000 and \$160,000 during the three and six months ended June 30, 2018 based on the grant-date fair value of the options determined using the Black-Scholes option-valuation model.

Stock-based compensation related to equity options, including options granted to certain members of the Company's Board of Directors, has been classified as follows in the accompanying condensed consolidated statements of operations (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Cost of revenue	\$ 5	\$ 5	\$ 11	\$ 10
General and administrative	246	165	462	329
Sales and marketing	63	55	123	110
Research and development	58	50	112	101
Total	\$ 372	\$ 275	\$ 708	\$ 550

NOTE 7. FAIR VALUE ACCOUNTING

The Company accounts for fair value measurements in accordance with ASC 820, “Fair Value Measurements and Disclosures,” which defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements.

ASC 820 establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy under ASC 820 are described below:

- Level 1 Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.
- Level 2 Applies to assets or liabilities for which there are inputs other than quoted prices included within Level 1 that are observable for the asset or liability such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical assets or liabilities in markets with insufficient volume or infrequent transactions (less active markets); or model-derived valuations in which significant inputs are observable or can be derived principally from, or corroborated by, observable market data.
- Level 3 Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (supported by little or no market activity).

The following table sets forth the Company’s financial assets and liabilities measured at fair value by level within the fair value hierarchy. As required by ASC 820, assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement.

(\$ in thousands)	Fair Value at June 30, 2018			
	Total	Level 1	Level 2	Level 3
Assets:				
Pension assets	\$ 1,754	\$ 1,754	\$ —	\$ —
Totals	\$ 1,754	\$ 1,754	\$ —	\$ —

(\$ in thousands)	Fair Value at December 31, 2017			
	Total	Level 1	Level 2	Level 3
Assets:				
Pension assets	\$ 1,806	\$ 1,806	\$ —	\$ —
Totals	\$ 1,806	\$ 1,806	\$ —	\$ —

NOTE 8. RELATED PARTY TRANSACTIONS

Lines of Credit

The Company has certain Lines of Credit extended by certain members of the Company’s Board of Directors. For a more detailed discussion of the Company’s Lines of Credit, see Note 5, “Lines of Credit.” As of June 30, 2018, the Company had borrowed \$5,500,000 under the terms of the Goldman LOC and \$500,000 under the terms of the New Crocker LOC. Each of Messrs. Goldman and Crocker are members of the Board of Directors of the Company.

Series A Financing

Messrs. Miller and Goldman, Wayne Wetherell, the Company’s Chief Financial Officer, Robert T. Clutterbuck and Charles Frischer, two directors appointed as members of the Company’s Board of Directors in connection with the Series A Financing during 2017, purchased an aggregate of 1,450 Series A Preferred in connection with the Series A Financing resulting in gross proceeds of \$1,450,000 to the Company. Messrs. Goldman, Clutterbuck and Frischer also exchanged an aggregate 11,364 shares of Series E Preferred, Series F Preferred and Series G Preferred for 11,364 shares of Series A Preferred in connection with the Series A Financing.

NOTE 9. CONTINGENT LIABILITIES

Employment Agreements

The Company has employment agreements with its Chief Executive Officer and its Chief Technical Officer. The Company may terminate the agreements with or without cause. Subject to the conditions and other limitations set forth in each respective employment agreement, each executive will be entitled to the following severance benefits if the Company terminates the executive's employment without cause or in the event of an involuntary termination (as defined in the employment agreements) by the Company or by the executive:

Under the terms of the agreement, the Chief Executive Officer will be entitled to the following severance benefits if we terminate his employment without cause or in the event of an involuntary termination: (i) a lump sum cash payment equal to twenty-four months' base salary; (ii) continuation of fringe benefits and medical insurance for a period of three years; and (iii) immediate vesting of 50% of outstanding stock options and restricted stock awards. In the event that the Chief Executive Officer's employment is terminated within six months prior to or thirteen months following a change of control (as defined in the employment agreements), the Chief Executive Officer is entitled to the severance benefits described above, except that 100% of the Chief Executive Officer's outstanding stock options and restricted stock awards will immediately vest.

Under the terms of the employment agreement with our Chief Technical Officer, this executive will be entitled to the following severance benefits if we terminate his employment without cause or in the event of an involuntary termination: (i) a lump sum cash payment equal to six months of base salary; and (ii) continuation of their fringe benefits and medical insurance for a period of six months. In the event that his employment is terminated within six months prior to or thirteen months following a change of control (as defined in the employment agreements), he is entitled to the severance benefits described above, except that 100% of his outstanding stock options and restricted stock awards will immediately vest.

Effective September 15, 2017, the employment agreements for the Company's Chief Executive Officer and Chief Technical Officer were amended to extend the term of each executive officer's employment agreement until December 31, 2018.

Litigation

There is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the executive officers of the Company or any of our subsidiaries, threatened against or affecting the Company, our Common Stock, any of our subsidiaries or of the Company's or our subsidiaries' officers or directors in their capacities as such, in which an adverse decision could have a material adverse effect.

Leases

The Company's corporate headquarters are located in San Diego, California, where we occupy 9,927 square feet of office space. This facility's lease was renewed in September 2017 through October 2018 at a cost of approximately \$30,000 per month. In addition to our corporate headquarters, we also occupied the following spaces at June 30, 2018:

- 1,508 square feet in Ottawa, Province of Ontario, Canada, at a cost of approximately \$3,000 per month until the expiration of the lease on March 31, 2021;
- 9,720 square feet in Portland, Oregon, at a cost of approximately \$22,000 per month until the expiration of the lease on February 28, 2023; and
- 304 square feet of office space in Mexico City, Mexico, at a cost of approximately \$3,000 per month until November 30, 2018.

At June 30, 2018, future minimum lease payments are as follows:

(\$ in thousands)	
2018 (six months)	\$ 274
2019	282
2020	289
2021	271
2022	271
Thereafter	46
Total	\$ 1,433

Rental expense incurred under operating leases for the six months ended June 30, 2018 and 2017 was approximately \$348,000 and \$256,000, respectively.

In July 2018, the Company entered in a new leasing arrangement for 8,511 square feet of office space for its San Diego headquarters. The new lease commences on November 1, 2018 and terminates on April 30, 2025. Annual base rent over the lease term approximates \$361,000 per year (which is not included in the future minimum lease payment totals above).

NOTE 10. SUBSEQUENT EVENTS

As described in Note 9, in July 2018, the Company entered into a new lease for 8,511 square feet of office space for the Company's corporate headquarters in San Diego California. This facilities lease commences on November 1, 2018 and runs through April 30, 2025. Approximate annual rent over the life of the lease approximates \$361,000.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All forward-looking statements included in this report are based on information available to us as of the date hereof and we assume no obligation to update any forward-looking statements. Forward-looking statements involve known or unknown risks, uncertainties and other factors, which may cause our actual results, performance or achievements, or industry results to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include but are not limited to those items discussed under "Risk Factors" in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017, and in Item 1A of Part II of this Quarterly Report on Form 10-Q.

The following discussion of the financial condition and results of operations should be read in conjunction with the condensed consolidated financial statements included elsewhere within this Quarterly Report. Fluctuations in annual and quarterly results may occur as a result of factors affecting demand for our products, such as the timing of new product introductions by us and by our competitors and our customers' political and budgetary constraints. Due to such fluctuations, historical results and percentage relationships are not necessarily indicative of the operating results for any future period.

Overview

The Company is a pioneer and leader in the emerging market for biometrically enabled software-based identity management solutions. Using those human characteristics that are unique to us all, we create software that provides a highly reliable indication of a person's identity. Our "flagship" product is our patented IWS Biometric Engine®. Scalable for small city business or worldwide deployment, our IWS Biometric Engine is a multi-biometric software platform that is hardware and algorithm independent, enabling the enrollment and management of unlimited population sizes. It allows a user to utilize one or more biometrics on a seamlessly integrated platform. Our products are used to manage and issue secure credentials, including national IDs, passports, driver licenses and access control credentials. Our products also provide law enforcement with integrated mug shot, LiveScan fingerprint and investigative capabilities. We also provide comprehensive authentication security software using biometrics to secure physical and logical access to facilities or computer networks or Internet sites. Biometric technology is now an integral part of all markets we address and all of our products are integrated into the IWS Biometric Engine.

Critical Accounting Policies and Estimates

The discussion and analysis of our consolidated financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). The preparation of these consolidated financial statements in accordance with GAAP requires us to utilize accounting policies and make certain estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingencies as of the date of the consolidated financial statements and the reported amounts of revenue and expense during a fiscal period. The Securities and Exchange Commission ("SEC") considers an accounting policy to be critical if it is important to a company's financial condition and results of operations, and if it requires significant judgment and estimates on the part of management in its application.

Significant estimates include the evaluation of our ability to continue as a going concern, the allowance for doubtful accounts receivable, deferred tax asset valuation allowances, recoverability of goodwill, assumptions used in the Black-Scholes model to calculate the fair value of share based payments, assumptions used in the application of fair value methodologies to calculate the fair value differential of the Preferred Stock Exchange, assumptions used in the application of revenue recognition policies and assumptions used in the application of fair value methodologies to calculate the fair value of pension assets and obligations.

Critical accounting policies are those that, in management's view, are most important in the portrayal of our financial condition and results of operations. Other than the adoption of ASC 606 "Revenue from Contracts with Customers," management believes there have been no material changes during the six months ended June 30, 2018 to the critical accounting policies discussed in the Management's Discussion and Analysis of Financial Condition and Results of Operations section of our Annual Report on Form 10-K for the year ended December 31, 2017. See Note 2 "Significant Accounting Policies and Basis of Presentation" for a detailed discussion of this critical accounting policy.

Results of Operations

This management's discussion and analysis of financial condition and results of operations should be read in conjunction with the condensed consolidated financial statements and related notes contained elsewhere in this Quarterly Report.

Comparison of the Three Months Ended June 30, 2018 to the Three Months Ended June 30, 2017**Product Revenue**

Net Product Revenue (dollars in thousands)	Three Months Ended June 30,		\$ Change	% Change
	2018	2017		
Software and royalties	\$ 871	\$ 319	\$ 552	173%
Percentage of total net product revenue	74%	78%		
Hardware and consumables	\$ 122	\$ 39	\$ 83	213%
Percentage of total net product revenue	10%	10%		
Services	\$ 189	\$ 49	\$ 140	286%
Percentage of total net product revenue	16%	12%		
Total net product revenue	\$ 1,182	\$ 407	\$ 775	190%

Software and royalty revenue increased 173% or approximately \$552,000 during the three months ended June 30, 2018 as compared to the corresponding period in 2017. This increase is attributable to higher identification project related revenue of approximately \$597,000 and higher law enforcement project related revenue of approximately \$82,000, offset by lower sales of boxed identity management software sold through our distribution channel of approximately \$7,000 and lower royalty revenue of approximately \$120,000. The increase in identification project related revenue is reflective of additional software licenses sold into existing identification projects caused by increased end-user utilization. The decrease in boxed identity management software sold through our distribution channel reflects lower procurement from two of our channel partners and the decrease in royalty revenue results primarily from revenue recognition timing differences due to the adoption of ASC 606 – Revenue from Contracts with Customers effective January 1, 2018 combined with lower reported usage from certain customers.

Revenue from the sale of hardware and consumables increased approximately \$83,000 during the three months ended June 30, 2018 as compared to the corresponding period in 2017 due to an increase in project related solutions containing hardware and consumables.

Services revenue is comprised primarily of software integration services, system installation services and customer training. Such revenue increased approximately \$140,000 during the three months ended June 30, 2018 as compared to the corresponding period of 2017 due to an increase in the service element of project related work completed during the three months ended June 30, 2018.

We believe that the period-to-period fluctuations of identity management software revenue in project-oriented solutions are largely due to the timing of government procurement with respect to the various programs we are pursuing. Government procurement initiatives, implementations and pilots are frequently delayed and extended and we cannot predict the timing of such initiatives.

During the three months ended June 30, 2018, we continued our efforts to move the Biometric Engine into cloud and mobile markets, and expand our end-user market into non-government sectors, including commercial, consumer and healthcare applications. Our approach to the markets we serve is to partner with larger integrators as resellers who have both the infrastructure and resources to sell into the worldwide market. We rely upon these partners for guidance as to when they expect revenue for our products to begin to ramp. In the second quarter we saw additional customers implement GoVerify ID®, our cloud based mobile biometric authentication software as a service. Management believes that additional implementations will occur throughout the remainder of the year ended December 31, 2018, resulting in increased identities under management.

Maintenance Revenue

Maintenance Revenue (dollars in thousands)	Three Months Ended June 30,		\$ Change	% Change
	2018	2017		
Total maintenance revenue	\$ 703	\$ 653	\$ 50	8%

Maintenance revenue was approximately \$703,000 for the three months ended June 30, 2018, as compared to approximately \$653,000 for the corresponding period in 2017. Identity management maintenance revenue generated from identification software solutions was approximately \$381,000 for the three months ended June 30, 2018 as compared to approximately \$308,000 during the comparable period in 2017. Law enforcement maintenance revenue was approximately \$322,000 and \$345,000 for the three months ended June 30, 2018 and 2017, respectively. The increase of \$73,000 in identification software maintenance revenue for the three months ended June 30, 2018 as compared to the corresponding period of 2017 is due to the expansion of our installed base. The decrease of \$23,000 in law enforcement maintenance revenue reflects the expiration of certain maintenance contracts.

We anticipate growth of our maintenance revenue through the retention of existing customers combined with the expansion of our installed base resulting from the completion of project-oriented work; however, we cannot predict the timing of this anticipated growth.

Cost of Product Revenue

Cost of Product Revenue: (dollars in thousands)	Three Months Ended June 30,		\$ Change	% Change
	2018	2017		
Software and royalties	\$ 2	\$ 6	\$ (4)	(67)%
Percentage of software and royalty product revenue	0%	2%		
Hardware and consumables	\$ 77	\$ 18	\$ 59	328%
Percentage of hardware and consumables product revenue	63%	46%		
Services	\$ 60	\$ 12	\$ 48	400%
Percentage of services product revenue	32%	24%		
Total product cost of revenue	\$ 139	\$ 36	\$ 103	286%
Percentage of total product revenue	12%	9%		

The cost of hardware and consumable product revenue increased approximately \$59,000 for the three months ended June 30, 2018 as compared to the corresponding period in 2017 due primarily to higher hardware and consumable product revenue of approximately \$83,000 during the 2018 period.

The cost of services revenue increased approximately \$48,000 during the three months ended June 30, 2018 as compared to the corresponding period in 2017 due primarily to higher service revenue of approximately \$140,000. In addition to changes in costs of services product revenue caused by revenue level fluctuations, costs of services can vary as a percentage of service revenue from period to period depending upon both the level and complexity of professional service resources utilized in the completion of the service element.

Cost of Maintenance Revenue

Maintenance cost of revenue (dollars in thousands)	Three Months Ended June 30,		\$ Change	% Change
	2018	2017		
Total maintenance cost of revenue	\$ 167	\$ 214	\$ (47)	(22)%
Percentage of total maintenance revenue	24%	33%		

Cost of maintenance revenue decreased approximately \$47,000 during the three months ended June 30, 2018 as compared to the corresponding period in 2017. This decrease is reflective of lower maintenance labor costs incurred during the three months ended June 30, 2018 as compared to the corresponding period in 2017 due primarily to the composition of engineering resources used in the provision of maintenance services and reductions in headcount in our customer support department.

Product Gross Profit

Product gross profit (dollars in thousands)	Three Months Ended June 30,		\$ Change	% Change
	2018	2017		
Software and royalties	\$ 869	\$ 313	\$ 556	178%
Percentage of software and royalty product revenue	100%	98%		
Hardware and consumables	\$ 45	\$ 21	\$ 24	114%
Percentage of hardware and consumables product revenue	37%	54%		
Services	\$ 129	\$ 37	\$ 92	249%
Percentage of services product revenue	68%	76%		
Total product gross profit	\$ 1,043	\$ 371	\$ 672	181%
Percentage of total product revenue	88%	91%		

Software and royalty gross profit increased 178% or approximately \$556,000 for the three months ended June 30, 2018 from the corresponding period in 2017 due primarily to higher software and royalty revenue of approximately \$552,000 combined with lower software and royalty cost of revenue of \$4,000 for the same period. In addition to changes in costs of software and royalty product revenue caused by revenue level fluctuations, costs of products can vary as a percentage of product revenue from period to period depending upon level of software customization and third-party software license content included in product sales during a given period.

Services gross profit increased approximately \$92,000 for the three months ended June 30, 2018 as compared to the corresponding period in 2017 due to higher service revenue of approximately \$140,000 for the three months ended June 30, 2018 as compared to the corresponding period in 2017, combined with higher costs of service revenue of approximately \$48,000 for the three months ended June 30, 2018 as compared to the corresponding period in 2017.

Maintenance Gross Profit

Maintenance gross profit (dollars in thousands)	Three Months Ended June 30,		\$ Change	% Change
	2018	2017		
Total maintenance gross profit	\$ 536	\$ 439	\$ 97	22%
Percentage of total maintenance revenue	76%	67%		

Gross profit related to maintenance revenue increased 22% or approximately \$97,000 for the three months ended June 30, 2018 as compared to the corresponding period in 2017. This increase reflects higher maintenance revenue of approximately \$50,000 due to the expansion of our installed base combined with lower cost of maintenance revenue of approximately \$47,000 due primarily to headcount reductions combined with lower maintenance labor costs incurred during the same period due to the composition of engineering resources used in the provision of maintenance services.

Operating Expense

Operating expense (dollars in thousands)	Three Months Ended June 30,		\$ Change	% Change
	2018	2017		
General and administrative	\$ 987	\$ 965	\$ 22	2%
Percentage of total net revenue	52%	90%		
Sales and marketing	\$ 816	\$ 702	\$ 114	16%
Percentage of total net revenue	43%	66%		
Research and development	\$ 1,865	\$ 1,556	\$ 309	20%
Percentage of total net revenue	99%	1,320%		
Depreciation and amortization	\$ 11	\$ 17	\$ (6)	(35)%
Percentage of total net revenue	1%	2%		

General and Administrative Expense

General and administrative expense is comprised primarily of salaries and other employee-related costs for executive, financial, and other infrastructure personnel. General legal, accounting and consulting services, insurance, occupancy and communication costs are also included with general and administrative expense. The dollar increase of approximately \$22,000 during the three months ended June 30, 2018 as compared to the corresponding period in 2017 is comprised of the following major components:

- Decrease in personnel related expense of approximately \$15,000 due to headcount decreases;
- Increases in professional services of approximately \$94,000, which includes higher Board of Director fees of approximately \$72,000 due to two additional members and compensation to a member of the advisory board, higher patent-related fees of approximately \$5,000, higher auditing fees of approximately \$19,000 and higher general corporate expense of approximately \$2,000, offset by lower legal fees of approximately \$1,000 and lower investor relations fees of approximately \$3,000;
- Increase in travel, insurances, licenses, dues, rent, and office related costs of approximately \$22,000;
- Decrease in financing expense of approximately \$98,000; and
- Increase in stock-based compensation expense of approximately \$19,000.

We continue to focus our efforts on achieving additional future operating efficiencies by reviewing and improving upon existing business processes and evaluating our cost structure. We believe these efforts will allow us to continue to gradually decrease our level of general and administrative expense expressed as a percentage of total revenue.

Sales and Marketing

Sales and marketing expense consists primarily of the salaries, commissions, other incentive compensation, employee benefits and travel expense of our sales, marketing, and business development functions. The dollar increase of approximately \$114,000 during the three months ended June 30, 2018 as compared to the corresponding period in 2017 is primarily comprised of the following major components:

- Increase in personnel related expense of approximately \$110,000 driven primarily by headcount increases;
- Increase in contractor and contract services of approximately \$14,000 resulting from decreased utilization of certain sales consultants of approximately \$34,000, offset by increased marketing dues and subscription expense and contract services of approximately \$48,000;
- Decrease in travel, trade show expense and office related expense of approximately \$16,000;
- Increase in stock-based compensation expense of approximately \$8,000; and
- Decrease in our Mexico sales office expense and other of approximately \$2,000.

Research and Development

Research and development expense consists primarily of salaries, employee benefits and outside contractors for new product development, product enhancements, custom integration work and related facility costs. Such expense increased approximately \$309,000 for the three months ended June 30, 2018 as compared to the corresponding period in 2017 due primarily to the following major components:

- Increase in personnel related expense of approximately \$126,000 due to headcount increases;
- Increase in contractor fees and contract services of approximately \$148,000 for services related to the accelerated development of mobile identity management applications;
- Increase in stock based-compensation expense of approximately \$7,000; and
- Increase in office related expense and engineering tools, supplies and other of approximately \$28,000.

Our level of expenditures in research and development reflects our belief that to maintain our competitive position in markets characterized by rapid rates of technological advancement, we must continue to invest significant resources in new systems and software development as well as continue to enhance existing products.

Depreciation and Amortization

During the three months ended June 30, 2018 and 2017, depreciation and amortization expense was approximately \$11,000 and \$17,000, respectively. The relatively small amount of depreciation and amortization reflects the relatively small property and equipment carrying value. The decrease is reflective of the full depreciation of certain fixed assets.

Interest Expense, Net

For the three months ended June 30, 2018, we recognized interest expense of approximately \$197,000 and interest income of approximately \$13,000. For the three months ended June 30, 2017, we recognized interest expense of approximately \$165,000 and interest income of approximately \$1,000. Interest expense for the three months ended June 30, 2018 is comprised of approximately \$2,000 of amortization expense of deferred financing fees related to the Goldman LOC, interest expense of approximately \$134,000 of coupon interest on debt outstanding under the Lines of Credit, and approximately \$61,000 related to the amortization of beneficial conversion feature related to the Lines of Credit.

Comparison of the Six Months Ended June 30, 2018 to the Six Months Ended June 30, 2017

Product Revenue

	Six Months Ended June 30,		\$ Change	% Change
	2018	2017		
Net Product Revenue				
(dollars in thousands)				
Software and royalties	\$ 955	\$ 508	\$ 447	88%
Percentage of total net product revenue	74%	74%		
Hardware and consumables	\$ 122	\$ 86	\$ 36	42%
Percentage of total net product revenue	10%	13%		
Services	\$ 202	\$ 86	\$ 116	135%
Percentage of total net product revenue	16%	13%		
Total net product revenue	\$ 1,279	\$ 680	\$ 599	88%

Software and royalty revenue increased 88% or approximately \$447,000 during the six months ended June 30, 2018 as compared to the corresponding period in 2017. This increase is attributable to higher identification project related revenue of approximately \$579,000 and higher law enforcement project related revenue of approximately \$78,000, offset by lower sales of boxed identity management software sold through our distribution channel of approximately \$47,000 and lower royalty revenue of approximately \$163,000. The increase in identification project related revenue and law enforcement project revenue is reflective of additional software licenses sold into existing identification projects caused by increased end-user utilization. The decrease in boxed identity management software sold through our distribution channel reflects lower procurement from two of our channel partners and the decrease in royalty revenue results primarily from revenue recognition timing differences due to the adoption of ASC 606 – Revenue from Contracts with Customers effective January 1, 2018 combined with lower reported usage from certain customers.

Revenue from the sale of hardware and consumables increased approximately \$36,000 during the six months ended June 30, 2018 as compared to the corresponding period in 2017 due to an increase in project related solutions containing hardware and consumables and a decrease in replacement hardware procurement by our customers.

Services revenue is comprised primarily of software integration services, system installation services and customer training. Such revenue increased approximately \$116,000 during the six months ended June 30, 2018 as compared to the corresponding period of 2017 due to an increase in the service element of project related work completed during the six months ended June 30, 2018.

We believe that the period-to-period fluctuations of identity management software revenue in project-oriented solutions are largely due to the timing of government procurement with respect to the various programs we are pursuing. Government procurement initiatives, implementations and pilots are frequently delayed and extended and we cannot predict the timing of such initiatives.

During the six months ended June 30, 2018, we continued our efforts to move the Biometric Engine into cloud and mobile markets, and expand our end-user market into non-government sectors, including commercial, consumer and healthcare applications. Our approach to the markets we serve is to partner with larger integrators as resellers who have both the infrastructure and resources to sell into the worldwide market. We rely upon these partners for guidance as to when they expect revenue for our products to begin to ramp. In the second quarter we saw additional customers implement GoVerify ID®, our cloud based mobile biometric authentication software as a service. Management believes that additional implementations will occur throughout the remainder of the year ended December 31, 2018, resulting in increased identities under management.

Maintenance Revenue

Maintenance Revenue (dollars in thousands)	Six Months Ended June 30,		\$ Change	% Change
	2018	2017		
Total maintenance revenue	\$ 1,322	\$ 1,309	\$ 13	1%

Maintenance revenue was approximately \$1,322,000 for the six months ended June 30, 2018, as compared to approximately \$1,309,000 for the corresponding period in 2017. Identity management maintenance revenue generated from identification software solutions was approximately \$675,000 for the six months ended June 30, 2018 as compared to approximately \$613,000 during the comparable period in 2017. Law enforcement maintenance revenue was approximately \$647,000 and \$696,000 for the six months ended June 30, 2018 and 2017, respectively. The increase of \$62,000 in identification software maintenance revenue for the six months ended June 30, 2018 as compared to the corresponding period of 2017 reflects the expansion of our installed base and the decrease of \$49,000 in law enforcement maintenance revenue reflects the expiration of certain maintenance contracts.

We anticipate growth of our maintenance revenue through the retention of existing customers combined with the expansion of our installed base resulting from the completion of project-oriented work; however, we cannot predict the timing of this anticipated growth.

Cost of Product Revenue

Cost of Product Revenue: (dollars in thousands)	Six Months Ended June 30,		\$ Change	% Change
	2018	2017		
Software and royalties	\$ 8	\$ 17	\$ (9)	(53)%
Percentage of software and royalty product revenue	1%	3%		
Hardware and consumables	\$ 82	\$ 55	\$ 27	49%
Percentage of hardware and consumables product revenue	67%	64%		
Services	\$ 75	\$ 18	\$ 57	317%
Percentage of services product revenue	37%	21%		
Total product cost of revenue	\$ 165	\$ 90	\$ 75	83%
Percentage of total product revenue	13%	13%		

The cost of software and royalty product revenue decreased approximately \$9,000 despite higher software and royalty revenue for the six months ended June 30, 2018 as compared to the corresponding period in 2017 due to the 2018 period containing significant software license revenue with no associated customization costs.

The cost of hardware and consumable product revenue increased approximately \$27,000 for the six months ended June 30, 2018 as compared to the corresponding period in 2017 due primarily to higher hardware and consumable product revenue of approximately \$36,000 during the 2018 period.

The cost of services revenue increased approximately \$57,000 during the six months ended June 30, 2018 as compared to the corresponding period in 2017 due primarily to higher service revenue of approximately \$116,000 combined with the write-off of approximately \$15,000 in non-recoverable project costs incurred due to implementation difficulties combined with the composition of labor resources utilized in the completion of the service element. In addition to changes in costs of services product revenue caused by revenue level fluctuations, costs of services can vary as a percentage of service revenue from period to period depending upon both the level and complexity of professional service resources utilized in the completion of the service element.

Cost of Maintenance Revenue

Maintenance cost of revenue (dollars in thousands)	Six Months Ended June 30,		\$ Change	% Change
	2018	2017		
Total maintenance cost of revenue	\$ 390	\$ 423	(33)	(8)%
Percentage of total maintenance revenue	30%	32%		

Cost of maintenance revenue decreased approximately \$33,000 during the six months ended June 30, 2018 as compared to the corresponding period in 2017. This decrease is reflective of lower maintenance labor costs incurred during the six months ended June 30, 2018 as compared to the corresponding period in 2017 due primarily to the composition of engineering resources used in the provision of maintenance services and reductions in headcount in our customer support department.

Product Gross Profit

Product gross profit (dollars in thousands)	Six Months Ended June 30,		\$ Change	% Change
	2018	2017		
Software and royalties	\$ 947	\$ 491	\$ 456	93%
Percentage of software and royalty product revenue	99%	97%		
Hardware and consumables	\$ 40	\$ 30	\$ 10	33%
Percentage of hardware and consumables product revenue	33%	35%		
Services	\$ 127	\$ 68	\$ 59	87%
Percentage of services product revenue	63%	79%		
Total product gross profit	\$ 1,114	\$ 589	\$ 525	89%
Percentage of total product revenue	87%	87%		

Software and royalty gross profit increased 93% or approximately \$456,000 for the six months ended June 30, 2018 from the corresponding period in 2017 due primarily to higher software and royalty revenue of approximately \$447,000 combined with lower software and royalty cost of revenue of \$9,000 for the same period. In addition to changes in costs of software and royalty product revenue caused by revenue level fluctuations, costs of products can vary as a percentage of product revenue from period to period depending upon level of software customization and third -party software license content included in product sales during a given period.

Services gross profit increased approximately \$59,000 for the six months ended June 30, 2018 as compared to the corresponding period in 2017 due to higher service revenue of approximately \$116,000 for the six months ended June 30, 2018 as compared to the corresponding period in 2017, combined with higher costs of service revenue of approximately \$57,000 for the six months ended June 30, 2018 as compared to the corresponding period in 2017. These higher costs reflect the write-off of approximately \$15,000 in non-recoverable project costs incurred due to implementation difficulties.

Maintenance Gross Profit

Maintenance gross profit (dollars in thousands)	Six Months Ended June 30,		\$ Change	% Change
	2018	2017		
Total maintenance gross profit	\$ 932	\$ 886	\$ 46	5%
Percentage of total maintenance revenue	70%	68%		

Gross profit related to maintenance revenue increased 5% or approximately \$46,000 for the six months ended June 30, 2018 as compared to the corresponding period in 2017. This increase reflects higher maintenance revenue of approximately \$13,000 due to the expansion of our installed base combined with lower cost of maintenance revenue of approximately \$33,000 due to headcount reductions in our customer service department combined with lower maintenance labor costs incurred during the same period due to the composition of engineering resources used in the provision of maintenance services.

Operating Expense

Operating expense (dollars in thousands)	Six Months Ended June 30,		\$ Change	% Change
	2018	2017		
General and administrative	\$ 2,190	\$ 1,934	\$ 256	13%
Percentage of total net revenue	84%	97%		
Sales and marketing	\$ 1,680	\$ 1,463	\$ 217	15%
Percentage of total net revenue	65%	74%		
Research and development	\$ 3,664	\$ 3,096	\$ 568	18%
Percentage of total net revenue	141%	156%		
Depreciation and amortization	\$ 24	\$ 38	\$ (14)	(37)%
Percentage of total net revenue	1%	2%		

General and Administrative Expense

General and administrative expense is comprised primarily of salaries and other employee-related costs for executive, financial, and other infrastructure personnel. General legal, accounting and consulting services, insurance, occupancy and communication costs are also included with general and administrative expense. The dollar increase of approximately \$256,000 during the six months ended June 30, 2018 as compared to the corresponding period in 2017 is comprised of the following major components:

- Decrease in personnel related expense of approximately \$13,000 due to reductions in headcount;
- Increases in professional services of approximately \$273,000, which includes higher Board of Director fees of approximately \$99,000 due to additional members, higher patent-related fees of approximately \$16,000, higher auditing fees of approximately \$141,000, higher contractor fees of approximately \$19,000, and higher general corporate expense of approximately \$11,000, offset by lower legal fees of approximately \$7,000 and lower investor relations fees of approximately \$6,000;
- Increase in travel, insurances, licenses, dues, rent, office related costs and other of approximately \$51,000;
- Decrease in financing expense of approximately \$98,000; and
- Increase in stock-based compensation expense of approximately \$43,000.

We continue to focus our efforts on achieving additional future operating efficiencies by reviewing and improving upon existing business processes and evaluating our cost structure. We believe these efforts will allow us to continue to gradually decrease our level of general and administrative expense expressed as a percentage of total revenue.

Sales and Marketing

Sales and marketing expense consists primarily of the salaries, commissions, other incentive compensation, employee benefits and travel expense of our sales, marketing, and business development functions. The dollar increase of approximately \$217,000 during the six months ended June 30, 2018 as compared to the corresponding period in 2017 is primarily comprised of the following major components:

- Increase in personnel related expense of approximately \$233,000 driven primarily by headcount increases;
- Decrease in contractor and contract services of approximately \$3,000 resulting from decreased utilization of certain sales consultants of approximately \$61,000, offset by increased marketing dues and subscription expense and contract services of approximately \$58,000;
- Decrease in travel, trade show expense and office related expense of approximately \$30,000;
- Increase in stock-based compensation expense of approximately \$13,000; and
- Increase in our Mexico sales office expense and other of approximately \$4,000.

Research and Development

Research and development expense consists primarily of salaries, employee benefits and outside contractors for new product development, product enhancements, custom integration work and related facility costs. Such expense increased approximately \$568,000 for the six months ended June 30, 2018 as compared to the corresponding period in 2017 due primarily to the following major components:

- Increase in personnel related expense of approximately \$159,000 due to headcount increases;
- Increase in contractor fees and contract services of approximately \$313,000 for services related to the accelerated development of mobile identity management applications;
- Increase in stock based-compensation expense of approximately \$11,000; and
- Increase in rent, office related expense and engineering tools and supplies of approximately \$85,000.

Our level of expenditures in research and development reflects our belief that to maintain our competitive position in markets characterized by rapid rates of technological advancement, we must continue to invest significant resources in new systems and software development as well as continue to enhance existing products.

Depreciation and Amortization

During the six months ended June 30, 2018 and 2017, depreciation and amortization expense was approximately \$24,000 and \$38,000, respectively. The relatively small amount of depreciation and amortization reflects the relatively small property and equipment carrying value. The decrease is reflective of the full depreciation of certain fixed assets.

Interest Expense, Net

For the six months ended June 30, 2018, we recognized interest expense of approximately \$386,000 and interest income of approximately \$30,000. For the six months ended June 30, 2017, we recognized interest expense of approximately \$266,000 and interest income of approximately \$2,000. Interest expense for the six months ended June 30, 2018 is comprised of approximately \$4,000 of amortization expense of deferred financing fees related to the Goldman LOC, interest expense of approximately \$263,000 of coupon interest on debt outstanding under the Lines of Credit, and approximately \$119,000 related to the amortization of beneficial conversion feature related to the Lines of Credit.

LIQUIDITY AND CAPITAL RESOURCES AND GOING CONCERN

Historically, our principal sources of cash have included customer payments from the sale of our products, proceeds from the issuance of common and preferred stock and proceeds from the issuance of debt, including our Lines of Credit. Our principal uses of cash have included cash used in operations, payments relating to purchases of property and equipment and repayments of borrowings. We expect that our principal uses of cash in the future will be for product development, including customization of identity management products for enterprise and consumer applications, further development of intellectual property, development of Software-as-a-Service (“SaaS”) capabilities for existing products as well as general working capital and capital expenditure requirements. We expect that, as our revenue grows, our sales and marketing and research and development expense will continue to grow, albeit at a slower rate and, as a result, we will need to generate significant net revenue to achieve and sustain income from operations.

Series A Financing

On September 18, 2017, the Company consummated the Series A Financing and Preferred Stock Exchange. As a result of the Series A Financing, the Company generated net proceeds to the Company of approximately \$10.9 million. As a result of the Preferred Stock Exchange, the holders of all outstanding Exchanged Preferred, agreed to cancel their Exchanged Preferred in exchange for the same number of shares of Series A Preferred, resulting in the issuance to the holders of Exchanged Preferred of an aggregate total of 20,021 shares of Series A Preferred.

Lines of Credit

On March 9, 2016, the Company and Goldman entered into the fourth amendment (the “*Fourth Amendment*”) to the convertible promissory note and line of credit previously issued by the Company to Goldman on March 27, 2013 (the “*Goldman LOC*”). The Fourth Amendment (i) provides the Company with the ability to borrow up to \$5.0 million under the terms of the Goldman LOC; (ii) permits Goldman to convert the outstanding principal, plus any accrued but unpaid interest due under the Goldman LOC (the “*Outstanding Balance*”), into shares of the Company’s Common Stock for \$1.25 per share; and (iii) extends the maturity date of the Goldman LOC to June 30, 2017.

In addition, on March 9, 2016, the Company and Charles Crocker, also a director of the Company (“*Crocker*”), entered into a new line of credit and promissory note (the “*New Crocker LOC*”), in the principal amount of \$500,000. The New Crocker LOC accrues interest at a rate of 8% per annum and matures on the earlier to occur of June 30, 2017 or such date that the Company consummates a debt and/or equity financing resulting in net proceeds to the Company of at least \$3.5 million. All outstanding amounts due under the terms of the New Crocker LOC are convertible into shares of the Company’s Common Stock at \$1.25 per share.

On December 27, 2016, in connection with the consummation of the Series G Financing, the Company and Goldman agreed to enter into the Fifth Amendment (the “*Line of Credit Amendment*”) to the Goldman Line of Credit to provide the Company with the ability to borrow up to \$5.5 million under the terms of the Goldman Line of Credit. In addition, the Maturity Date, as defined in the Goldman Line of Credit, was amended to be December 31, 2017. The Line of Credit Amendment was executed on January 23, 2017.

In addition, on January 23, 2017, the Company and Crocker amended the New Crocker LOC to extend the maturity date thereof to December 31, 2017.

On May 10, 2017, Goldman and Crocker agreed to further extend the maturity dates of the Lines of Credit to December 31, 2018.

As of June 30, 2018, we have aggregate borrowings outstanding under our Lines of Credit of \$6,000,000 and related accrued unpaid interest of approximately \$791,000. These amounts are due on December 31, 2018.

Going Concern

At June 30, 2018, we had a working capital deficit of approximately \$5,278,000. Our principal sources of liquidity at June 30, 2018 consisted of cash of \$2,213,000 and \$672,000 of trade accounts receivable.

Considering our projected cash requirements, and assuming we are unable to generate incremental revenue, our available cash will be insufficient to satisfy our cash requirements for the next twelve months from the date of this filing. These factors raise substantial doubt about our ability to continue as a going concern. To address our working capital requirements, management intends to seek additional equity and/or debt financing through the issuance of additional debt and/or equity securities, or may seek strategic or other transactions intended to increase shareholder value. There are currently no formal committed financing arrangements to support our projected cash shortfall, including commitments to purchase additional debt and/or equity securities, or other agreements, and no assurances can be given that we will be successful in raising additional debt and/or equity securities, or entering into any other transaction that addresses our ability to continue as a going concern.

In view of the matters described in the preceding paragraph, recoverability of a major portion of the recorded asset amounts shown in the accompanying consolidated balance sheet is dependent upon continued operations of the Company, which, in turn, is dependent upon the Company's ability to continue to raise capital and generate positive cash flows from operations. However, the Company operates in markets that are emerging and highly competitive. There is no assurance that the Company will be able to obtain additional capital, operate at a profit or generate positive cash flows in the future.

These condensed consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts and classifications of liabilities that might be necessary should the Company be unable to continue as a going concern.

Operating Activities

We used net cash of \$5,236,000 in operating activities for the six months ended June 30, 2018 as compared to net cash used of \$5,005,000 during the comparable period in 2017. During the six months ended June 30, 2018, net cash used in operating activities consisted of net loss of \$5,869,000 and a decrease in working capital and other assets and liabilities of \$230,000. Those amounts were offset by approximately \$863,000 of non-cash costs, including \$717,000 in stock-based compensation, \$122,000 in debt issuance cost amortization and beneficial conversion feature amortization and \$24,000 in depreciation and amortization. During the six months ended June 30, 2018, we used cash of \$102,000 from increases in current assets and used cash of \$128,000 through reductions in current liabilities and deferred revenue, excluding debt.

Investing Activities

Net cash used in investing activities was \$7,000 for the six months ended June 30, 2018 as compared to net cash generated by investing activities of \$49,000 for the six months ended June 30, 2017. For the six months ended June 30, 2018, we used cash of \$7,000 to fund capital expenditures of leasehold improvements. For the six months ended June 30, 2017, we generated cash of \$50,000 from the sale of one of our non-utilized trademarks and used cash to fund capital expenditures of computer equipment, software and furniture and fixtures of approximately \$1,000.

Financing Activities

During the six months ended June 30, 2018, we generated cash of approximately \$149,000 from the exercise of 148,757 options resulting in the issuance of 148,757 shares of Common Stock. During the six months ended June 30, 2018, we used cash of approximately \$25,000 for the payment of dividends on our Series B Preferred stock. For the six months ended June 30, 2017, we generated cash of \$3,350,000 from borrowings under our Lines of Credit and generated approximately \$227,000 from the exercise of 322,000 option resulting in the Issuance of 322,000 shares of Common Stock. For the six months ended June 30, 2017, we used cash of approximately \$25,000 for the payment of dividends on our Series B Preferred stock.

Debt

At June 30, 2018, the Company had \$6,000,000 in outstanding debt under the terms of the Lines of Credit, and \$791,000 in accrued but unpaid interest, as compared to \$6,000,000 in outstanding debt and \$527,000 in related accrued but unpaid interest at December 31, 2017.

Contractual Obligations

Total contractual obligations and commercial commitments as of June 30, 2018 are summarized in the following table (in thousands):

	Payment Due by Year				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Operating lease obligations	\$ 1,433	274	842	317	—
Lines of credit payable to related parties	\$ 6,791	6,791	—	—	—
Total	\$ 8,224	7,065	842	317	—

Real Property Leases

Our corporate headquarters are located in San Diego, California, where we occupy 9,927 square feet of office space. This facility's lease was renewed in September 2017 through October 2018 at a cost of approximately \$30,000 per month. In addition to our corporate headquarters, we also occupied the following spaces at June 30, 2018:

- 1,508 square feet in Ottawa, Province of Ontario, Canada, at a cost of approximately \$3,000 per month until the expiration of the lease on March 31, 2021;
- 9,720 square feet in Portland, Oregon, at a cost of approximately \$22,000 per month until the expiration of the lease on February 28, 2023; and
- 304 square feet of office space in Mexico City, Mexico, at a cost of approximately \$3,000 per month until November 30, 2018.

At June 30, 2018, future minimum lease payments are as follows:

(\$ in thousands)	
2018 (six months)	\$ 274
2019	\$ 282
2020	\$ 289
2021	\$ 271
2022	\$ 271
Thereafter	\$ 46
Total	\$ 1,433

As more fully described in Note 10 to these condensed consolidated financial statements, in July 2018, the Company entered in a new leasing arrangement for 8,511 square feet of office space for its San Diego headquarters. The new lease commences on November 1, 2018 and terminates on April 30, 2025. Annual base rent over the lease term approximates \$361,000 per year (which is not included in the above future minimum lease payment totals).

Inflation

We do not believe that inflation has had a material impact on our historical operations or profitability.

Off-Balance Sheet Arrangements

At June 30, 2018, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance, special purpose or variable interest entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. In addition, we did not engage in trading activities involving non-exchange traded contracts. As a result, we are not exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in such relationships. We do not have relationships and transactions with persons or entities that derive benefits from their non-independent relationship with us or our related parties except as disclosed elsewhere in this Quarterly Report.

Recently Issued Accounting Standards

Please refer to the section "Recently Issued Accounting Standards" in Note 2 of our Notes to the Condensed Consolidated Financial Statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Each of our contracts requires payment in U.S. dollars. We therefore do not engage in hedging transactions to reduce our exposure to changes in currency exchange rates, although in the event any future contracts are denominated in a foreign currency, we may do so in the future. As a result, our financial results are not affected by factors such as changes in foreign currency exchange rates.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of the design and operations of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as of June 30, 2018. Based on this evaluation, the Company's Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures are effective to ensure that information required to be disclosed in the reports submitted under the Securities and Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, including to ensure that information required to be disclosed by the Company is accumulated and communicated to management, including the principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Controls Over Financial Reporting

The Company's Chief Executive Officer and Chief Financial Officer have determined that there have been no changes, in the Company's internal control over financial reporting during the period covered by this report identified in connection with the evaluation described in the above paragraph that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II

ITEM 1. LEGAL PROCEEDINGS

None.

ITEM 1A. RISK FACTORS

Our results of operations and financial condition are subject to numerous risks and uncertainties described in our Annual Report on Form 10-K for our fiscal year ended December 31, 2017, filed on March 19, 2018, including the risk that we may be unable to extend approximately \$6.7 million of debt outstanding under our Lines of Credit as of June 30, 2018, which debt matures on December 31, 2018. You should carefully consider these risk factors in conjunction with the other information contained in this Quarterly Report. Should any of these risks materialize, our business, financial condition and future prospects could be negatively impacted. As of August 9, 2018, there have been no material changes to the disclosures made in the above referenced Form 10-K.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

(a)	EXHIBITS
31.1	Certification of the Principal Executive Officer pursuant to Rule 13a-14(a) and 15d-14(a)
31.2	Certification of the Principal Financial and Accounting Officer pursuant to Rule 13a-14(a) and 15d-14(a)
32.1	Certification by the Principal Executive Officer and Principal Financial and Accounting Officer pursuant to 18 U.S.C. 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
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

SIGNATURES

In accordance with the requirements of the Exchange Act, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: August 9, 2018

IMAGEWARE SYTEMS, INC

By: /s/ S. James Miller
S. James Miller
Chief Executive Officer, Chairman and Director
(Principal Executive Officer)

Date: August 9, 2018

By: /s/ Wayne Wetherell
Wayne Wetherell
Chief Financial Officer
(Principal Financial and Accounting Officer)

Certification pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 and pursuant to Rule 13a-14(a) and Rule 15d-14 under the Securities Exchange Act of 1934

I, S. James Miller, Jr., Chief Executive Officer of the Company, certify that:

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

Date: August 9, 2018

ImageWare Systems, Inc.

By: /s/ S. James Miller, Jr.
S. James Miller, Jr.
Chief Executive Officer
(Principal Executive Officer)

Certification pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 and pursuant to Rule 13a-14(a) and Rule 15d-14 under the Securities Exchange Act of 1934

I, Wayne Wetherell, Chief Financial Officer of the Company, certify that:

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

Date: August 9, 2018

ImageWare Systems, Inc.

By: /s/ Wayne Wetherell
Wayne Wetherell
Chief Financial Officer (Principal Financial Officer)

CERTIFICATION

S. James Miller, Chief Executive Officer of ImageWare Systems, Inc. (the “*Company*”), and Wayne Wetherell, Chief Financial Officer of the Company, each hereby certifies pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the “*Exchange Act*”), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. Section 1350) that, to the best of his knowledge:

1. The Quarterly Report on Form 10-Q of the Company for the period ended June 30, 2018 fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act; and

2. The information contained in the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2018 fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Quarterly Report and the results of operations of the Company for the period covered by the Quarterly Report.

IN WITNESS WHEREOF, the undersigned have set their hands hereto as of the 9th day of August, 2018.

/s/ S. James Miller
S. James Miller
Chief Executive Officer

/s/ Wayne Wetherell
Wayne Wetherell
Chief Financial Officer
(Principal Financial and Accounting Officer)

A signed original of this written statement required by Section 906 has been provided to ImageWare Systems, Inc. and will be retained by ImageWare Systems, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.
