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, 2017

OR

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

FOR THE TRANSITION PERIOD FROM ________ TO ________

Commission file number 000-24389

VASCO Data Security International, Inc.
(Exact Name of Registrant as Specified in Its Charter)

DELAWARE	**36-4169320**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**

1901 South Meyers Road, Suite 210
Oakbrook Terrace, Illinois 60181
(Address of Principal Executive Offices)(Zip Code)

(630) 932-8844
(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 ,a smaller reporting company, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

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

There were 40,166,582 shares of Common Stock, $.001 par value per share, outstanding at July 29, 2017.

VASCO Data Security International, Inc.
Form 10-Q
For The Quarterly Period Ended June 30, 2017

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This report contains trademarks of VASCO Data Security International, Inc. and its subsidiaries, which include VASCO, the VASCO "V" design, Digipass as a Service, MYDIGIPASS.COM, DIGIPASS, VACMAN, aXsGUARD, IDENTIKEY, Cronto, and eSignLive.

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VASCO Data Security International, Inc.
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands)

	June 30, 2017 (unaudited)	December 31, 2016
ASSETS		
Current assets		
Cash and equivalents	$ 56,402	$ 49,345
Short term investments	99,814	94,856
Accounts receivable, net of allowance for doubtful accounts of $650 in 2017 and $535 in 2016	28,315	36,693
Inventories, net	17,675	17,420
Prepaid expenses	3,642	3,249
Other current assets	4,655	5,596
Total current assets	210,503	207,159
Property and equipment		
Furniture and fixtures	5,918	5,547
Office equipment	14,030	13,028
	19,948	18,575
Accumulated depreciation	(16,658)	(15,294)
Property and equipment, net	3,290	3,281
Goodwill	55,763	54,409
Intangible assets, net of accumulated amortization	42,212	46,549
Other assets	17,212	15,872
Total assets	$ 328,980	$ 327,270
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 8,377	$ 8,915
Deferred revenue	30,588	36,364
Accrued wages and payroll taxes	11,227	10,894
Income taxes payable	1,881	4,594
Other accrued expenses	5,193	5,464
Deferred compensation	824	1,729
Total current liabilities	58,090	67,960
Other long-term liabilities	9,489	1,878
Deferred income taxes	821	853
Total liabilities	68,400	70,691
Stockholders' equity		
Preferred stock: 500 shares authorized, none issued and outstanding at June 30, 2017 or December 31, 2016	0	0
Common stock: $.001 par value per share, 75,000 shares authorized; 40,165 and 40,097 shares issued and outstanding at June 30, 2017 and December 31, 2016, respectively	40	40
Additional paid-in capital	88,358	87,481
Accumulated income	179,234	178,551
Accumulated other comprehensive loss	(7,052)	(9,493)
Total stockholders' equity	260,580	256,579
Total liabilities and stockholders' equity	$ 328,980	$ 327,270

See accompanying notes to unaudited condensed consolidated financial statements.

VASCO Data Security International, Inc.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)
(unaudited)

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Revenue				
Product and license	$34,472	$45,804	$66,032	$ 84,535
Services and other	11,222	8,489	21,626	16,525
Total revenue	45,694	54,293	87,658	101,060
Cost of goods sold				
Product and license	11,045	15,714	20,585	28,525
Services and other	2,601	2,028	5,113	3,881
Total cost of goods sold	13,646	17,742	25,698	32,406
Gross profit	32,048	36,551	61,960	68,654
Operating costs				
Sales and marketing	15,339	15,659	29,043	28,528
Research and development	6,320	6,242	12,176	11,807
General and administrative	8,588	9,062	16,441	17,392
Amortization of purchased intangible assets	2,201	2,202	4,399	4,427
Total operating costs	32,448	33,165	62,059	62,154
Operating income (loss)	(400)	3,386	(99)	6,500
Interest income, net	340	166	630	275
Other income, net	373	252	588	614
Income before income taxes	313	3,804	1,119	7,389
Provision for income taxes	203	979	436	2,365
Net income	$ 110	$ 2,825	$ 683	$ 5,024
Basic income per share	$ 0.00	$ 0.07	$ 0.02	$ 0.13
Diluted income per share	$ 0.00	$ 0.07	$ 0.02	$ 0.13
Weighted average common shares outstanding:				
Basic	39,797	39,710	39,783	39,695
Diluted	39,842	39,769	39,843	39,762

See accompanying notes to unaudited condensed consolidated financial statements.

VASCO Data Security International, Inc.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands, unaudited)

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Net income	$ 110	$ 2,825	$ 683	$5,024
Other comprehensive income - Cumulative translation adjustment	1,786	(1,247)	2,430	(433)
Pension Adjustment , net of tax	6	0	11	0
Comprehensive income	$ 1,902	$ 1,578	$3,124	$4,591

See accompanying notes to unaudited condensed consolidated financial statements.

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VASCO Data Security International, Inc.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(unaudited)

	Six months ended June 30, 2017	Six months ended June 30, 2016
Cash flows from operating activities:		
Net income	$ 683	$ 5,024
Adjustments to reconcile net income to net cash provided:		
Depreciation and amortization	5,258	5,275
Loss on asset disposal	0	14
Deferred tax expense (benefit)	(1,134)	(2,726)
Stock-based compensation	1,076	2,943
Changes in assets and liabilities:		
Accounts receivable, net	9,560	(3,065)
Inventories, net	(255)	2,699
Other current assets	102	324
Accounts payable	(748)	(891)
Income taxes payable	(2,740)	1,310
Accrued expenses	(435)	(953)
Deferred compensation	(906)	(944)
Deferred revenue	1,682	5,889
Other long-term liabilities	(177)	(7)
Net cash provided by operating activities	11,966	14,892
Cash flows from investing activities:		
Purchase of short term investments	(99,459)	(70,096)
Maturities of short term investments	95,000	14,876
Additions to property and equipment	(716)	(1,793)
Additions to intangible assets	(40)	(12)
Other assets	0	(83)
Net cash used in investing activities	(5,215)	(57,108)
Cash flows from financing activities:		
Tax payments for restricted stock issuances	(199)	(1,000)
Net cash used in financing activities	(199)	(1,000)
Effect of exchange rate changes on cash	505	271
Net increase (decrease) in cash	7,057	(42,945)
Cash and equivalents, beginning of year	49,345	78,522
Cash and equivalents, end of period	$ 56,402	$ 35,577

See accompanying notes to unaudited condensed consolidated financial statements.

VASCO Data Security International, Inc.
Notes to Condensed Consolidated Financial Statements
(All amounts are in thousands, except per share data)
(Unaudited)

Unless otherwise noted, references in this Quarterly Report on Form 10-Q to "VASCO," "company," "we," "our," and "us," refer to VASCO Data Security International, Inc. and its subsidiaries.

Note 1—Summary of Significant Accounting Policies

Nature of Operations

VASCO Data Security International, Inc. ("VASCO") and its wholly owned subsidiaries design, develop, market and support hardware and software security systems that manage and secure access to information assets. VASCO has operations in Austria, Australia, Belgium, Brazil, Canada, China, France, Japan, The Netherlands, Singapore, Switzerland, the United Arab Emirates, the United Kingdom, and the United States ("U.S.").

In accordance with ASC 280, Segment Reporting, our operations are reported as a single operating segment.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements include the accounts of VASCO and its subsidiaries and have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission regarding interim financial reporting. Accordingly, they do not include all of the information and notes required by generally accepted accounting principles for complete financial statements and should be read in conjunction with the audited consolidated financial statements included in the company's Annual Report on Form 10-K for the year ended December 31, 2016.

In the opinion of management, the accompanying unaudited condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements, and include all adjustments, consisting only of normal recurring adjustments, necessary for the fair presentation of the results of the interim periods presented. All significant intercompany accounts and transactions have been eliminated. The operating results for the interim periods presented are not necessarily indicative of the results expected for a full year.

Revision of Previously Issued Financial Statements

Cost of goods sold, gross profit and operating expenses for the three and six months ended June 30, 2016 reflected in the statements of operations have been revised from amounts previously reported to correct immaterial errors previously disclosed in Note 1, Revision of Previously Issued Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2016. Specifically, for the three and six months ended June 30, 2016, cost of goods sold increased by $1,974 and $3,798 and gross profit and operating expenses each decreased from the respective amounts previously reported by $1,974 and $3,798, respectively.

In addition, in accordance with SEC requirements, revenue is presented in two categories, Product and License Revenue and Service and Other Revenue. Product and License Revenue includes hardware products and software licenses. Service and Other Revenue includes software as a service ("SaaS") solutions, maintenance and support, and professional services. Additional adjustments were made to present cost of goods sold consistent with these two categories.

Principles of Consolidation

The consolidated financial statements include the accounts of VASCO and its wholly owned subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation.

Estimates and Assumptions

The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Foreign Currency Translation and Transactions

The financial position and results of the operations of the majority of the company's foreign subsidiaries are measured using the local currency as the functional currency. Accordingly, assets and liabilities are translated into U.S. Dollars using current exchange rates as of the balance sheet date. Revenue and expenses are translated at average exchange rates prevailing during the year. Translation adjustments arising from differences in exchange rates are charged or credited to other comprehensive income. Gains and losses resulting from foreign currency transactions are included in the consolidated statements of operations in other income, net.

The financial position and results of operations of our operations in Canada, Singapore and Switzerland are measured in U.S. Dollars. For these subsidiaries, gains and losses that result from foreign currency transactions are included in the consolidated statements of operations in other income, net.

For the three and six month periods ended June 30, 2017, foreign currency transactions resulted in a loss of $23 and $47, respectively, compared to gains of $64 and $262 for the same periods in 2016.

Revenue Recognition

We recognize revenue in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 985-605, *Software – Revenue Recognition*, ASC 985-605-25, *Revenue Recognition – Multiple Element Arrangements,* and Staff Accounting Bulletin 104.

Product and License Revenue includes hardware products and software licenses. Services and Other includes software as a service ("SaaS"), maintenance and support, and professional services.

Revenue is recognized when there is persuasive evidence that an arrangement exists, delivery has occurred, the fee is fixed or determinable and collection of the revenue is probable.

In multiple-element arrangements, some of our products are accounted for under the software provisions of ASC 985-605 and others under the provisions that relate to the sale of non-software products.

In our typical multiple-element arrangement, the primary deliverables include:

1. a client component (i.e., an item that is used by the person being authenticated in the form of either a new standalone hardware device or software that is downloaded onto a device the customer already owns),
2. host system software that is installed on the customer's systems (i.e., software on the host system that verifies the identity of the person being authenticated) or licenses for additional users on the host system software, if the host system software had been installed previously, and
3. post contract support ("PCS") in the form of maintenance on the host system software or support.

Our multiple-element arrangements may also include other items that are usually delivered prior to the recognition of any revenue and incidental to the overall transaction, such as initialization of the hardware device, customization of the hardware device itself or the packaging in which it is delivered, deployment services where we deliver the device to our customer's end-use customer or employee and, in some limited cases, professional services to assist with the initial implementation of a new customer.

In multiple-element arrangements that include a hardware client device, we allocate the selling price among all elements, delivered and undelivered, based on our internal price lists and the percentage of the selling price of that element, per the price list, to the total of the estimated selling price of all of the elements per the price list. Our internal price lists for both delivered and undelivered elements were determined to be reasonable estimates of the selling price of each element based on a comparison of actual sales made to the price list.

In multiple-element arrangements that include a software client device, we account for each element under the standards of ASC 985-605 related to software. When software client device and host software are delivered elements, we use the Residual Method (ASC 605-25) for determining the amount of revenue to recognize for token and software licenses if we have vendor-specific objective evidence ("VSOE") for all of the undelivered elements. Any discount provided to the customer is applied fully to the delivered elements in such an arrangement. VSOE for undelivered elements is established using the "bell curve method." Under this method, we conclude VSOE exists when a substantial majority of PCS renewals are within a narrow range of pricing. The estimated selling price of PCS items is based on an established percentage of the user license fee attributable to the specific software. In sales arrangements where VSOE of fair value has not been established, revenue for all elements is deferred and amortized over the life of the arrangement.

For transactions other than multiple-element arrangements, we recognize revenue as follows:

1. *Product and License Revenue:* Revenue from the sale of computer security hardware or the license of software is recorded upon shipment or, if an acceptance period is allowed, at the latter of shipment or customer acceptance. No significant obligations or contingencies exist with regard to delivery, customer acceptance or rights of return at the time revenue is recognized.
2. *SaaS:* We generate SaaS revenues from our cloud services offerings. SaaS revenues include fees from customers for access to the eSignLive suite of solutions. Our standard customer arrangements generally do not provide the customer with the right to take possession of the software supporting the cloud-based application service at any time. As such, these arrangements are considered service contracts and revenue is recognized ratably over the service period of the contract.

3. *Maintenance and Support Agreements:* Maintenance and support agreements generally call for us to provide software updates and technical support, respectively, to customers. Revenue on maintenance and technical support is deferred and recognized ratably over the term of the applicable maintenance and support agreement.

4. *Professional Services:* We provide professional services to our customers. Revenue from such services is recognized during the period in which the services are performed.

We recognize revenue from sales to distributors and resellers on the same basis as sales made directly to customers. We recognize revenue when there is persuasive evidence that an arrangement exists, delivery has occurred, the fee is fixed or determinable and collection of the revenue is probable.

For large-volume transactions, we may negotiate a specific price that is based on the number of users of the software license or quantities of hardware supplied. The per unit prices for large-volume transactions are generally lower than transactions for smaller quantities and the price differences are commonly referred to as volume-purchase discounts.

All revenue is reported on a net basis, excluding any sales taxes or value added taxes.

Long-term deferred revenue of $7,491 is included in Other long-term liabilities at June 30, 2017.

Cash and Cash Equivalents

Cash and cash equivalents are stated at cost plus accrued interest, which approximates fair value. Cash equivalents are high-quality short term money market instruments and commercial paper, with original maturities of three months or less. Cash is held by a number of U.S. and non-U.S. commercial banks and money market investment funds.

Short Term Investments

Short term investments are stated at cost plus accrued interest, which approximates fair value. Short term investments consist of bank certificates of deposit and high quality commercial paper with original maturities of more than three and less than twelve months.

Accounts Receivable and Allowance for Doubtful Accounts

The creditworthiness of customers (including distributors and resellers) is reviewed prior to shipment. A reasonable assurance of collection is a requirement for revenue recognition. Verification of credit and/or the establishment of credit limits are part of the customer contract administration process. Credit limit adjustments for existing customers may result from the periodic review of outstanding accounts receivable. The company records trade accounts receivable at invoice values, which are generally equal to fair value.

We maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make payments for goods and services. We analyze accounts receivable balances, customer credit-worthiness, current economic trends and changes in our customer payment timing when evaluating the adequacy of the allowance for doubtful accounts. The allowance is based on a specific review of all significant past-due accounts. If the financial condition of our customers deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required.

Inventories, net

Inventories, consisting principally of hardware and component parts, are stated at the lower of cost or net realizable value. Cost is determined using the first-in-first-out (FIFO) method. We write down inventory when it appears that the carrying cost of the inventory may not be recovered through subsequent sale of the inventory. The company analyzes the quantity of inventory on hand, the quantity sold in the past year, the anticipated sales volume in the form of sales to new customers as well as sales to previous customers, the expected sales price and the cost of making the sale when evaluating the valuation of our inventory. If the sales volume or sales price of a specific model declines significantly, additional write downs may be required.

Property and Equipment

Property and equipment are stated at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the related assets ranging from three to seven years. Additions and improvements are capitalized, while expenditures for maintenance and repairs are charged to operations as incurred. Gains or losses resulting from sales, disposals, or retirements are recorded as incurred, at which time related costs and accumulated depreciation are removed from the accounts.

Long Term Investments

Included in Other Assets are minority equity investments in companies we believe may be beneficial in executing our strategy. At June 30, 2017 and December 31, 2016, investments were $4,073. In accordance with ASC 325, the investments are recorded at cost and evaluated for impairment annually or whenever events or changes in circumstances indicate that the carrying value may not be recoverable.

Cost of Goods Sold

Included in product cost of goods sold are direct product costs. Cost of goods sold related to service revenues are primarily costs related to SaaS solutions, including personnel and equipment costs, and personnel costs of employees providing professional services and maintenance and support.

Research and Development Costs

Costs for research and development, principally the design and development of hardware, and the design and development of software prior to the determination of technological feasibility, are expensed as incurred on a project-by-project basis.

Software Development Costs

We capitalize software development costs in accordance with ASC 985-20, *Costs of Software to be Sold, Leased, or Marketed*. Research costs and software development costs, prior to the establishment of technological feasibility, determined based upon the creation of a working model, are expensed as incurred. Our software capitalization policy defines technological feasibility as a functioning beta test prototype with confirmed manufacturability (a working model), within a reasonably predictable range of costs. Additional criteria include receptive customers, or potential customers, as evidenced by interest expressed in a beta test prototype, at some suggested selling price. Our policy is to amortize capitalized costs by the greater of (a) the ratio that current gross revenue for a product bears to the total of current and anticipated future gross revenue for that product or (b) the straight-line method over the remaining estimated economic life of the product, generally two to five years, including the period being reported on. No software development costs were capitalized during the three months and six months ended June 30, 2017.

Income Taxes

We account for income taxes under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. We measure deferred tax assets and liabilities using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. We recognize the effect of a change in tax rates on deferred tax assets and liabilities in income in the period that includes the enactment date.

We monitor our potential income tax exposures as required by ASC 740-10, *Income Taxes*.

We have significant foreign tax credit, net operating loss, and other deductible carryforwards in certain jurisdictions available to reduce the liability on future taxable income. A valuation reserve has been provided to offset some of these future benefits because we have not determined that their realization is more likely than not.

Fair Value of Financial Instruments

At June 30, 2017 and December 31, 2016, our financial instruments were cash equivalents, short term investments, accounts receivable, accounts payable and accrued liabilities. The estimated fair value of our financial instruments has been determined using level one inputs as defined in ASC 820, *Fair Value Measurements and Disclosures*. The fair values of the financial instruments were not materially different from their carrying amounts at June 30, 2017 and December 31, 2016.

Accounting for Leases

All of our leases are operating leases. Rent expense on facility leases is charged evenly over the life of the lease, regardless of the timing of actual payments.

Goodwill and Other Intangibles

Intangible assets arising from business combinations such as acquired technology, customer relationships, and other intangible assets, are originally recorded at fair value. Intangible assets other than patents with definite lives are amortized over the useful life, generally three to seven years for proprietary technology and five to twelve years for customer relationships. Patents are amortized over the life of the patent, generally 20 years in the U.S.

Goodwill represents the excess of purchase price over the fair value of net identifiable assets acquired in a business combination. We assess the impairment of goodwill and intangible assets with indefinite lives each November or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. The Company's impairment assessment begins with a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. The qualitative assessment includes comparing the overall financial performance of the reporting units against the planned results used in the last quantitative goodwill impairment test. Additionally, each reporting unit's fair value is assessed in light of certain events and circumstances, including macroeconomic conditions, industry and market considerations, cost factors, and other relevant entity- and reporting unit specific events. The selection and assessment of qualitative factors used to determine whether it is more likely than not that the fair value of a reporting unit exceeds the carrying value involves significant judgments and estimates. If it is determined under the qualitative assessment that it is more likely than not that the fair value of a reporting unit is less than its carrying value, then a two-step quantitative impairment test is performed. Under the first step, the estimated fair value of the reporting unit is compared with its carrying value (including goodwill). If the fair value of the reporting unit exceeds its carrying value, step two does not need to be performed. If the estimated fair value of the reporting unit is less than its carrying value, an indication of goodwill impairment exists for the reporting unit and the enterprise must perform step two of the impairment test (measurement). Under step two, an impairment loss is recognized for any excess of the carrying amount of the reporting unit's goodwill over the implied fair value of that goodwill. The implied fair value of goodwill is determined by allocating the fair value of the reporting unit in a manner similar to a purchase price allocation in acquisition accounting. The residual amount after this allocation is the implied fair value of the reporting unit goodwill. Fair value of the reporting unit under the two-step assessment is determined using a combination of both income and market-based variation approaches. The inputs and assumptions to valuation methods used to estimate the fair value of reporting units involves significant judgments.

In accordance with ASC 350, we consider the company to be two reporting units, the operations of eSignLive and the remainder of our operations.

Stock-Based Compensation

We have stock-based employee compensation plans, described in Note 6. ASC 718-10, *Stock Compensation* requires us to estimate the fair value of restricted stock granted to employees, directors and others and to record compensation expense equal to the estimated fair value. Compensation expense is recorded on a straight-line basis over the vesting period. Forfeitures are recorded as incurred.

Retirement Benefits

We record annual expenses relating to our pension benefit plans based on calculations which include various actuarial assumptions, including discount rates, assumed asset rates of return, compensation increases, and turnover rates. We review our actuarial assumptions on an annual basis and make modifications to the assumptions based on current rates and trends. The effects of gains, losses, and prior service costs and credits are amortized over the average service life. The funded status, or projected benefit obligation less plan assets, for each plan, is reflected in our consolidated balance sheets using a December 31 measurement date.

Warranty

Warranties are provided on the sale of certain of our products and an accrual for estimated future claims is recorded at the time revenue is recognized. We estimate the cost based on past claims experience, sales history and other considerations. We regularly assess the adequacy of our estimates and adjust the amounts as necessary. Our standard practice is to provide a warranty on our hardware products for either a one or two year period after the date of purchase. Customers may purchase extended warranties covering periods from one to four years after the standard warranty period. We defer the revenue associated with the extended warranty and recognize it into income on a straight-line basis over the extended warranty period. We have historically experienced minimal actual claims over the warranty period.

Recently Issued Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers (ASU 2014-09), which supersedes nearly all existing revenue recognition guidance under U.S. GAAP. The core principle of ASU 2014-09 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration to which an entity expects to be entitled for those goods or services. The standard creates a five-step model to achieve its core principle: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the separate performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. In addition, entities must disclose sufficient information to enable users of financial statements to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. Qualitative and quantitative disclosures are required about: (i) the entity's contracts with customers; (ii) the significant judgments, and changes in judgments, made in applying the guidance to those contracts; and (iii) any assets recognized from the costs to obtain or fulfill a contract with a customer.

ASU 2014-09 is effective for annual periods beginning after December 15, 2016, and interim periods within such annual periods, using either of the following transition methods: (i) a full retrospective approach reflecting the application of the standard in each prior reporting period with the option to elect certain practical expedients, or (ii) an approach with the cumulative effect of initially adopting ASU 2014-09 recognized at the date of adoption. In August 2015, the FASB issued Accounting Standards Update No. 2015-14, *Revenue from Contracts with Customers: Deferral of Effective Date* deferring the new revenue standard one year and allowing adoption as of the original effective date.

In March 2016, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customers: Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*, which provides guidance on assessing whether an entity is a principal or an agent in a revenue transaction and whether an entity reports revenue on a gross or net basis.

In April 2016, the FASB issued ASU No. 2016-10, *Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing*, which provides guidance on identifying performance obligations and accounting for licenses of intellectual property.

In May 2016, the FASB issued ASU No. 2016-12, *Revenue from Contracts with Customers: Narrow-scope Improvements and Practical Expedients*, which makes narrow-scope amendments to ASU No. 2014-09 and provides practical expedients to simplify the transition to the new standard and clarify certain aspects of the standard.

In December 2016, FASB issued ASU No. 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*, which makes narrow-scope amendments to ASU No. 2014-09.

We are currently evaluating the impact of the new revenue recognition guidance including any impacts on associated processes, systems, and internal controls. Our evaluation includes determining the unit of account (i.e., performance obligations) and standalone selling price of each performance obligation. Standalone selling prices under the new guidance may not be substantially different from our current methodologies of establishing fair value on multiple element arrangements. Based on initial assessments, we have identified certain arrangements where revenue may be recognized earlier as compared to current practice. We expect to recognize term license revenue upon delivery, rather than over the term of the arrangement. We expect to capitalize certain sales commissions upon adoption of the new standard and are currently in the process of evaluating the period over which to amortize these capitalized costs. We continue to evaluate the impact of this guidance and subsequent amendments on our consolidated financial position, results of operations, and cash flows, and any preliminary assessments are subject to change. We will adopt this guidance as of the first quarter of 2018. We expect to adopt the cumulative effect transition method.

We adopted ASU 2015-11, *Inventory (Topic 330) – Simplifying the Measurement of Inventory* as of January 1, 2017. ASU 2015-11 requires measurement of inventory at the lower of cost or net realizable value, defined as estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. Adoption of ASU 2015-11 did not have a significant impact on our financial statements.

In February 2016, The FASB issued Accounting Standards Update No. 2016-02, *Leases*, which among other things, requires lessees to recognize most leases on balance sheet. ASU 2016-02 is effective for annual and interim periods in fiscal years beginning after December 15, 2018 and mandates a modified retrospective transition method. We are currently evaluating the impact of ASU 2016-02 on our consolidated financial statements.

In January 2017, The FASB issued ASU No. 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business.* ASU 2017-01 defines a business in the context of a set of transferred assets and activities. ASU 2017-01 is effective for annual and interim periods in fiscal years beginning after December 15, 2017 and applied prospectively. Early adoption is permitted. The Company is currently evaluating the effect the guidance will have on the Company's financial statements.

In January 2017, the FASB issued ASU 2017-04, *Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment.* ASU 2017-04 eliminates Step 2 of the goodwill impairment test, requiring determination of the implied fair value of goodwill by allocating the reporting unit fair value to assets and liabilities as if the reporting unit was acquired in a business acquisition. Updated guidance is effective beginning January 1, 2020 and will be applied on a prospective basis. Early adoption is permitted. We are currently evaluating the impact of this updated guidance.

In March 2017, the FASB issued ASU No. 2017-07, *Compensation – Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost.* The updated accounting guidance requires changes to the presentation of the components of net periodic benefit cost on the income statement by requiring service cost be presented with other employee compensation costs and other components of net periodic pension cost be presented outside of any subtotal of operating income. The ASU also stipulates that only the service costs component of net benefit cost is eligible for capitalization. The guidance is effective for interim and annual periods beginning after December 15, 2017. The Company is currently evaluating the effect the guidance will have on the Company's financial statements.

Note 2 – Inventories, net

Inventories, net, consisting principally of hardware and component parts, are stated at the lower of cost or net realizeable value. Cost is determined using the FIFO method.

Inventories, net are comprised of the following:

	June 30, 2017	December 31, 2016
Component parts	$ 6,354	$ 8,360
Work-in-process and finished goods	11,321	9,060
Total	$17,675	$ 17,420

Note 3 – Goodwill

Goodwill activity for the six months ended June 30, 2017 consisted of the following:

Net balance at December 31, 2016	$54,409
Additions	0
Net foreign currency translation	1,354
Net balance at June 30, 2017	$55,763

Certain portions of goodwill are denominated in local currencies and are subject to currency fluctuations.

Note 4 – Intangible Assets

Intangible asset activity for the six months ended June 30, 2017 is detailed in the following table.

	Capitalized Technology	Customer Relationships	Other	Total Intangible Assets
Net balance at December 31, 2016	11,392	24,774	10,383	46,549
Additions	0	0	40	40
Net foreign currency translation	12	10	0	22
Amortization expense	(2,230)	(1,039)	(1,130)	(4,399)
Net balance at June 30, 2017	$ 9,174	$ 23,745	$ 9,293	$ 42,212
June 30, 2017 balance at cost	$ 38,337	$ 27,802	$13,297	$ 79,436
Accumulated amortization	(29,163)	(4,057)	(4,004)	(37,224)
Net balance at June 30, 2017	$ 9,174	$ 23,745	$ 9,293	$ 42,212

Certain intangible assets are denominated in local currencies and are subject to currency fluctuations.

Note 5 – Income Taxes

Our estimated annual tax rate for 2017 before discrete items is expected to be 22%. This is lower than the U.S. statutory rate of 34% primarily due to income in foreign jurisdictions taxed at lower rates, partially offset by valuation allowances on taxable losses, primarily in Canada. Our effective tax rate for the second quarter was 65%. The effective rate in the second quarter was impacted by the mix of earnings in various jurisdictions and the low pre-tax income. Our ultimate tax rate will depend on the mix of earnings in various jurisdictions.

Our estimated annual tax rate for 2016 before discrete items was expected to be 26% in the second quarter. This was lower than the U.S. statutory rate primarily due to income in foreign jurisdictions taxed at lower rates, partially offset by valuation allowances on taxable losses. Discrete items related to a measurement period adjustment and changes to tax rates on deferred tax liabilities increased the full-year 2016 effective rate to 29%. The effective tax rate for the second quarter was 26%.

At December 31, 2016, we had foreign tax credit carryforwards of $7,027 for future U.S. tax returns. These foreign tax credits expire in 2023 through 2026. We have not provided a valuation reserve for the foreign tax credits as we believe it is more likely than not that they will be realized.

At December 31, 2016, we had deferred tax assets of $16,655 resulting from foreign and state NOL carryforwards of $58,110 and other foreign deductible carryforwards of $16,817. At December 31, 2016, we had a valuation allowance of $6,192 against deferred tax assets related to certain carryforwards.

Note 6 – Long-Term Compensation Plan and Stock Based Compensation

Under the VASCO Data Security International, Inc. 2009 Equity Incentive Plan ("2009 Equity Incentive Plan"), we awarded 237 shares of restricted stock in the first quarter of 2017 consisting of 126 unissued shares subject to future performance criteria and 111 issued shares. During the second quarter of 2017, we awarded an additional 23 shares of restricted stock consisting of 14 unissued shares subject to future performance criteria and 9 issued shares. The market value of the 120 issued restricted shares of $1,764 at the date of grant is being amortized over the vesting period of one to four years. The market value of the 140 unissued shares subject to performance criteria of $2,046 at the date of grant is being amortized over the vesting period of three years.

The following table details long-term compensation plan and stock-based compensation expense for the three and six months ended June 30, 2017 and 2016:

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Restricted stock	$532	$1,396	$1,076	$2,943
Long-term compensation plan	300	449	856	935
Total Non-Cash Compensation	$832	$1,845	$1,932	$3,878

Note 7 – Common Stock and Earnings per Share

In connection with the 2009 Equity Incentive Plan, during the six months ended June 30, 2017, we issued 131 total shares of restricted common stock, 120 shares for awards granted in 2017 and 11 performance shares related to awards provisioned in prior years.

Basic earnings per share is based on the weighted average number of shares outstanding and excludes the dilutive effect of common stock equivalents. Diluted earnings per share is based on the weighted average number of shares outstanding and includes the dilutive effect of common stock equivalents to the extent they are not anti-dilutive. The details of the earnings per share calculations for the three and six months ended June 30, 2017 and 2016 follow:

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Net income	$ 110	$ 2,825	$ 683	$ 5,024
Weighted average common shares outstanding:				
Basic	39,797	39,710	39,783	39,695
Incremental shares with dilutive effect:				
Restricted stock awards	45	59	60	67
Diluted	39,842	39,769	39,843	39,762
Basic income (loss) per share	$ 0.00	$ 0.07	$ 0.02	$ 0.13
Diluted income (loss) per share	$ 0.00	$ 0.07	$ 0.02	$ 0.13

Note 8 – Contingencies

During the second quarter of 2015, our management became aware that certain of our products which were sold by our European subsidiary to a third-party distributor may have been resold by the distributor to parties in Iran, potentially including parties whose property and interests in property may be blocked pursuant to Executive Order 13224, Executive Order 13382 or that may be identified under Section 560.304 of 31 C.F.R. Part 560 as the "Government of Iran".

We ceased shipping to such distributor. In addition, the Audit Committee of the Company's Board of Directors initiated an internal review of this matter with the assistance of outside counsel. As a precautionary matter, concurrent initial notices of voluntary disclosure were submitted on June 25, 2015 to each of the U.S. Department of the Treasury, Office of Foreign Assets Control ("OFAC"), and the U.S. Department of Commerce, Bureau of Industry and Security ("BIS").

The Audit Committee with the assistance of outside counsel completed their review in 2015. On December 15, 2015, we filed a letter with BIS (Office of Export Enforcement) with the conclusion that the products supplied to the distributor were not subject to United States Export Control jurisdiction. The Office of Export Enforcement issued a "no action" letter, concluding the voluntary self-disclosure process under the Export Administration Regulations.

On January 13, 2016, we filed a letter with OFAC, with the conclusions that VASCO and its subsidiaries made no direct sales to Iran or any party listed by OFAC as a Specially Designated National over the five-year period under review (i.e., June 1, 2010 to June 30, 2015). The letter further noted that the investigation did not identify any involvement on the part of senior management officials of VASCO, and to the contrary, noted that VASCO executive management officials had sought to implement procedures and provided notices to VASCO's sales personnel to prevent the diversion of VASCO products to unauthorized destinations and end users.

We have not received any response to the letter to OFAC and we cannot predict when OFAC will conclude their review of our voluntary self-disclosures. Based upon the OFAC guidelines for monetary penalties, in the fourth quarter of 2015, we accrued $900 for potential penalties if they are assessed by OFAC. Ultimately no penalty may be assessed or the penalty may be less or greater than the accrual, but in any event we do not believe that the final settlement will have a material adverse impact on our business.

On July 28, 2015 a putative class action complaint was filed in the United States District Court for the Northern District of Illinois, captioned Linda J. Rossbach v. Vasco Data Security International, Inc., et al., case number 1:15-cv-06605, naming VASCO and certain of its current and former executive officers as defendants and alleging violations under the Securities Exchange Act of 1934, as amended. The suit was purportedly filed on behalf of a putative class of investors who purchased VASCO securities between April 28, 2015 and July 28, 2015, and seeks to recover damages allegedly caused by the defendants' alleged violations of the federal securities laws and to pursue remedies under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 and Rule 10b-5 promulgated thereunder. The complaint seeks certification as a class action and unspecified compensatory damages plus interest and attorneys' fees. Pursuant to a September 1, 2015 scheduling order entered by the court, the lead plaintiff, once appointed, will have sixty days to file an amended complaint or notify the defendants that the lead plaintiff intends to rely on the current complaint. On January 30, 2017, the appointed lead plaintiff filed an amended complaint in which the allegations regarding OFAC related matters were dropped and replaced with allegations regarding public disclosures made by the defendants in April 2015 as compared to public statements made in July 2015, generally regarding the strength of the Company's business and its future prospects. This case is now referred to by the name of the new lead plaintiff, Bunk. The defendants filed a motion to dismiss the Bunk complaint on March 31, 2017. Although the ultimate outcome of litigation cannot be predicted with certainty, the Company believes that this lawsuit is without merit and intends to defend against the action vigorously. VASCO is indemnifying Messrs. Hunt, Valcke, and Bown for this matter.

On October 9, 2015, a derivative complaint was filed in the United States District Court for the Northern District of Illinois, captioned Elizabeth Herrera v. Hunt, et al., case number 1:15-cv-08937, naming VASCO's Board of Directors and certain of its current and former executive officers as individual defendants and the Company as a nominal defendant. The plaintiff in the Herrera case voluntarily dismissed the action on July 12, 2017. Two additional complaints, captioned Beth Seltzer v. Hunt, et al., case number 2015-ch-15541, and William Hooper v. Hunt, et al., case number 2016-ch-04054, were filed on October 22, 2015 and March 22, 2016, respectively, in the Circuit Court of Cook County, Illinois naming the same defendants.

The complaints assert, among other things, that the individual defendants breached their fiduciary duties by making material misstatements in, and omitting material information from, the Company's public disclosures and by failing to maintain adequate internal controls and properly manage the Company. Among other things, the complaints seek unspecified compensatory damages and injunctive relief.

On October 29, 2015, a defendant removed the Seltzer action to the United States District Court for the Northern District of Illinois. Thereafter, the plaintiff led a motion to remand the action back to the Circuit Court of Cook County, Illinois, which was denied on February 3, 2016. On February 9, 2016, the court granted an agreed motion for voluntary dismissal of the Seltzer action, which dismissed the action with prejudice as to the named plaintiff's individual claims. As for the Hooper action, the court granted a stay on June 8, 2016 and on July 18, 2017, the plaintiff in Hooper amended the complaint to largely mirror the amended complaint in Bunk.

In February 2017, we learned that one of our integrated reseller customers, and certain of its end customers, were named as defendants in a patent infringement lawsuit in Japan related to our CRONTO technology. We have indemnification obligations in favor of our customer and are working with them to defend such suit. We believe there are strong grounds to argue that the plaintiff's patent is invalid and we are defending our technology vigorously. However, the outcome of this suit is uncertain. If the plaintiff were able to succeed in this case and impede our ability to sell, and our customers' ability to use, products utilizing our CRONTO technology, then such result could have a material adverse impact on our business and results of operations.

On March 14, 2017, a complaint was filed in the United States District Court for the District of Massachusetts, captioned StrikeForce Technologies, Inc. v. Vasco Data Security International, Inc., et al., claiming VASCO infringed on certain patent rights of the plaintiff. On May 8, 2017, VASCO answered the complaint denying the allegations of patent infringement. The parties are currently engaged in early motion practice in the case. The plaintiff has also brought suit against various other companies in the cybersecurity industry. Although the ultimate outcome of litigation cannot be predicted with certainty, the Company believes that this lawsuit is without merit and intends to defend itself vigorously.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations (in thousands, except headcount, ratios, time periods and percentages)

Unless otherwise noted, references in this Quarterly Report on Form 10-Q to "VASCO," "company," "we," "our," and "us" refer to VASCO Data Security International, Inc. and its subsidiaries.

Cautionary Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q, including Management's Discussion and Analysis of Financial Condition and Results of Operations and Quantitative and Qualitative Disclosures About Market Risk contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended and Section 27A of the Securities Act of 1933, as amended concerning, among other things, our expectations regarding the prospects of, and developments and business strategies for, VASCO and our operations, including the development and marketing of certain new products and services and the anticipated future growth in certain markets in which we currently market and sell our products and services or anticipate selling and marketing our products or services in the future. These forward-looking statements (1) are identified by use of terms and phrases such as "expect", "believe", "will", "anticipate", "emerging", "intend", "plan", "could", "may", "estimate", "should", "objective", "goal", "possible", "potential", "projected" and similar words and expressions, but such words and phrases are not the exclusive means of identifying them, and (2) are subject to risks and uncertainties and represent our present expectations or beliefs concerning future events. VASCO cautions that the forward-looking statements are qualified by important factors that could cause actual results to differ materially from those in the forward-looking statements. These additional risks, uncertainties and other factors have been described in greater detail in our Annual Report on Form 10-K for the year ended December 31, 2016 and include, but are not limited to, (a) risks of general market conditions, including currency fluctuations and the uncertainties resulting from turmoil in world economic and financial markets, (b) risks inherent to the computer and network security industry, including rapidly changing technology, evolving industry standards, increasingly sophisticated hacking attempts, increasing numbers of patent infringement claims, changes in customer requirements, price competitive bidding, and changing government regulations, and (c) risks specific to VASCO, including, demand for our products and services, competition from more established firms and others, pressures on price levels and our historical dependence on relatively few products, certain suppliers and certain key customers. These risks, uncertainties and other factors include the risk that VASCO will not integrate eSignLive into the global business of VASCO successfully and the amount of time and expense spent and incurred in connection with the integration; the risk that the revenue synergies, cost savings and other economic benefits that VASCO anticipates as a result of the acquisition are not fully realized or take longer to realize than expected. Thus, the results that we actually achieve may differ materially from any anticipated results included in, or implied by these statements. Except for our ongoing obligations to disclose material information as required by the U.S. federal securities laws, we do not have any obligations or intention to release publicly any revisions to any forward-looking statements to reflect events or circumstances in the future or to reflect the occurrence of unanticipated events.

General

The following discussion is based upon our consolidated results of operations for the three and six months ended June 30, 2017 and 2016 (percentages in the discussion, except for returns on average net cash balances, are rounded to the closest full percentage point) and should be read in conjunction with our consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

We design, develop and market digital solutions for identity, security, and business productivity that protect and facilitate transactions online, via mobile devices, and in-person. We are a global leader in providing anti-fraud and digital transaction management solutions to financial institutions and other businesses. Our solutions secure access to data, assets, and applications for global enterprises; provide tools for application developers to easily integrate security functions into their web-based and mobile applications; and facilitate digital transactions involving the signing, sending, and managing of documents. Our core technologies, multi-factor authentication and transaction signing, strengthen the process of preventing hacking attacks against online and mobile transactions to allow companies to transact business safely with remote customers.

Our solutions include both open standards-based and proprietary solutions, some of which are patented products and services used for authentication, e-signing transactions and documents, and identity management.

Our primary product and service lines consist of four categories:

On-premises Solutions

- VACMAN Controller: Core host system software authentication platform.

- IDENTIKEY Authentication Server and Appliances: Software that adds full server functionality to the VACMAN core authentication platform.
- eSignLive: Electronic signature and document management solution.
- IDENTIKEY Risk Manager (IRM): Risk analysis solution that enables a proactive, real-time approach to fraud prevention.

Client-based Anti-fraud Solutions

- DIGIPASS Hardware Authenticators: A broad family of multi-application hardware authenticators in a variety of form factors and feature sets to meet the diverse security needs of clients across multiple vertical markets.
- DIGIPASS Software-based Solutions: Authenticators operating on non-VASCO devices, such as PCs, mobile phones, and tablets. Software authenticators include DIGIPASS for Apps, and DIGIPASS for Mobile.

Cloud Solutions

- eSignLive: Electronic signature and document management solution provided on a SaaS basis.
- MYDIGIPASS: Cloud-based identity solution for e-government and eID services.

Developer Tools

- DIGIPASS for Apps: Enables user authentication and fraud detection in mobile applications and protects mobile applications from reverse engineering and cloning.

Our security solutions are sold worldwide through our direct sales force, as well as through distributors, resellers and systems integrators. Our sales force is able to offer each customer a choice of an on-site implementation using our traditional on-premises model or a cloud implementation for some solutions using our services platform.

Our product offerings, including authentication, anti-fraud, and electronic signature solutions, provide a flexible and affordable means of establishing trust in users, their devices, and the transactions that they are conducting. Many of our authentication products calculate dynamic passwords, also known as one-time passwords ("OTP") that authenticate users logging into applications and onto corporate networks. In addition, our anti-fraud products can be used to enable electronic signatures to protect electronic transactions and the integrity of the contents of such transactions.

Industry Growth: We do not believe that there are accurate measurements of the total industry's size or the industry's growth rate. We believe, however, the market for authentication, anti-fraud, and electronic signature solutions will continue to grow driven by new government regulations, growing awareness of the impact of cyber-crime, and the growth in commerce transacted electronically. The issues driving the growth are global issues and the rate of adoption in each country is a function of that country's culture, the competitive position of businesses operating in that country, the country's overall economic conditions and the degree to which businesses and consumers within the country use technology.

Economic Conditions: Our revenue may vary significantly with changes in the economic conditions in the countries in which we currently sell products. With our current concentration of revenue in Europe and specifically in the banking and finance vertical market, significant changes in the economic outlook for the European Banking market may have a significant effect on our revenue.

There continues to be significant global economic uncertainty, including Europe, our most important market. While the European Union and European Central Bank continue to implement programs in response to changing economic conditions, Europe continues to struggle with sovereign debt issues and weakening currencies. As a result, Europe may continue to face difficult economic conditions in 2017. Should the sovereign debt issue escalate, economic difficulties may negatively impact the global economy and our business.

During June 2016, voters in the United Kingdom passed a referendum providing for withdrawal from the European Union. While customer revenues from the United Kingdom and transactions denominated in British pounds are not significant, uncertainty surrounding withdrawal of the United Kingdom from the European Union may be a negative influence on normal ordering patterns within the European Banking market.

The European Banking market has been challenged by weak economic conditions and increased regulatory and risk mandates. Strategic priorities of many banks include improving efficiencies, and addressing regulatory and risk issues. To improve efficiencies, many banks have significantly reduced headcount while pursuing enhanced online and mobile customer services. Bank regulation periodically addresses enhanced cyber and data security. We believe our products are well positioned for online and mobile offerings and provide enhanced security, however, economic conditions, reduced headcount, and the transitioning of priorities may cause disruption in normal ordering patterns.

In the second quarter and first half of 2017, revenue from our Europe, Middle East and Africa ("EMEA") region comprised 48% and 46%, respectively of total revenue and decreased 10% compared to the same periods in 2016.

Cybersecurity: Our use of technology is increasing and is critical in three primary areas of our business:

1. Software and information systems that we use to help us run our business more efficiently and cost effectively;
2. Our products for integration into customer software applications contain technology incorporating the use of secret numbers and encryption technology; and
3. Products and services that process information through our servers (or in the cloud from our customers' perspective).

We believe that the risks and consequences of potential incidents in each of the above areas are different.

In the case of the information systems we use to help us run our business, we believe that an incident could disrupt our ability to take orders or deliver product to our customers, but such a delay in these activities would not have a material impact on our overall results. To minimize this risk, we actively use various forms of security and monitor the use of our systems regularly to detect potential incidents as soon as possible.

In the case of products integrated into customer software applications, we believe that the risk of a potential cyber incident is minimal. We offer customers the ability to either create the secret numbers themselves or have us create the numbers on their behalf. When asked to create the numbers, we do so in a secure environment with limited physical access and store the numbers on a system that is not connected to any other network, including other VASCO networks, and similarly, is not connected to the internet.

In the case of our products and services that include the active daily processing of the customer information on our servers or servers managed by others in a hosted environment, we believe a cyber incident could have a material impact on our future business. We also believe that these products may be more susceptible to cyber-attacks than our other products since it involves the active processing of customer information. A cyber incident involving these products in the future could substantially impair our ability to grow the business and we could suffer significant monetary and other losses and significant reputational harm.

To minimize the risk, we review our security procedures on a regular basis. Our reviews include the processes and software programs currently in use as well as new forms of cyber incidents and new or updated software programs that may be available in the market that would help mitigate the risk of incidents. Certain insurance coverages may apply to certain cyber incidents. Overall, we expect the cost of securing our networks will increase in future periods, whether through increased staff, systems or insurance coverage.

Income Taxes: Our effective tax rate reflects our global structure related to the ownership of our intellectual property ("IP"). All our IP in our traditional authentication business is owned by two subsidiaries, one in the U.S. and one in Switzerland. These two subsidiaries have entered into agreements with most of the other VASCO entities under which those other entities provide services to our U.S. and Swiss subsidiaries on either a percentage of revenue or on a cost plus basis or both. Under this structure, the earnings of our service provider subsidiaries are relatively constant. These service provider companies tend to be in jurisdictions with higher effective tax rates. Fluctuations in earnings tend to flow to the U.S. company and the Swiss company. Earnings flowing to the U.S. company are expected to be taxed at a rate of 35% to 40%, while earnings flowing to the Swiss company are expected to be taxed at a rate ranging from 10% to 12%.

With the majority of our revenues being generated outside of the U.S., our consolidated effective tax rate is strongly influenced by the effective tax rate of our foreign operations. Changes in the effective rate related to foreign operations reflect changes in the geographic mix of where the earnings are realized and the tax rates in each of the countries in which it is earned. The statutory tax rates for the primary foreign tax jurisdictions range from 8% to 34%.

The geographic mix of earnings of our foreign subsidiaries will primarily depend on the level of our service provider subsidiaries' pretax income, which is recorded as an expense by the U.S. and Swiss subsidiaries and the benefit that is realized in the U.S. and Switzerland through the sales of product. The level of pretax income in our service provider subsidiaries is expected to vary based on:

1. the staff, programs and services offered on a yearly basis by the various subsidiaries as determined by management, or
2. the changes in exchange rates related to the currencies in the service provider subsidiaries, or
3. the amount of revenues that the service provider subsidiaries generate.

For items 1 and 2 above, there is a direct impact in the opposite direction on earnings of the U.S. and Swiss entities. Any change from item 3 is generally expected to result in a larger change in income in the U.S. and Swiss entities in the direction of the change (increased revenues expected to result in increased margins/pretax profits and conversely decreased revenues expected to result in decreased margins/pretax profits).

In addition to the provision of services, the intercompany agreements transfer the majority of the business risk to our U.S. and Swiss subsidiaries. As a result, the contracting subsidiaries' pretax income is reasonably assured while the pretax income of the U.S. and Swiss subsidiaries varies directly with our overall success in the market.

In November 2015, we acquired eSignLive, a foreign company with substantial IP and net operating loss and other tax carryforwards. The tax benefit of the carryforwards, net of deferred tax liabilities, has been fully reserved as realization has not been deemed more likely than not.

Comparison of Results for the Three and Six Months Ended June 30, 2017 and 2016

Currency Fluctuations: In the second quarter and first six months of 2017, approximately 80% and 78%, respectively, of our revenue was generated outside the United States. While the majority of our revenues are generated outside of the United States, the majority of our revenue in the second quarter and first six months of 2017 was denominated in U.S. Dollars. We estimate that 63% of our revenues for the second quarter and first six months of 2017 were denominated in U.S. Dollars. In addition, in the second quarter and first six months of 2017, approximately 75% and 74%, respectively, of our operating expenses were incurred outside of the United States. As a result, changes in currency exchange rates, especially the Euro to U.S. Dollar exchange rate and the Canadian Dollar to U.S. Dollar exchange rate, can have a significant impact on revenue and expenses.

In general, to minimize the net impact of currency fluctuations on operating income, we attempt to denominate an amount of billings in a currency such that it would provide a hedge against the operating expenses being incurred in that currency. We expect that changes in currency rates may also impact our future results if we are unable to match amounts of revenue with our operating expenses in the same currency. If the amount of our revenue denominated in Euros continues as it is now or declines, we do not expect that we will be able to balance fully the exposures of currency exchange rates on revenue and operating expenses.

The U.S. Dollar, on average, strengthened against the Euro approximately 3% for the second quarter and first half of 2017, as compared to the same periods in 2016. We estimate that the change in currency rates in 2017 compared to 2016 resulted in a decrease in revenue of approximately $303 and $1,098 for the quarter and six months ended June 30, 2017, respectively, compared to the same periods in 2016 and a decrease in operating expenses of approximately $507 and $1,152 for the second quarter and six months ended June 30, 2017 compared to the same periods in 2016.

The financial position and the results of operations of most of our foreign subsidiaries, with the exception of our subsidiaries in Canada, Switzerland and Singapore, are measured using the local currency as the functional currency. Accordingly, assets and liabilities are translated into U.S. Dollars using current exchange rates as of the balance sheet date. Revenues and expenses are translated at average exchange rates prevailing during the period. Translation adjustments arising from differences in exchange rates generated other comprehensive income of $1,786 and $2,430 for the second quarter and first six months of 2017, and other comprehensive loss of $1,247 and $433 for the second quarter and first six months of 2016. These amounts are included as a separate component of stockholders' equity. The functional currency for our subsidiaries in Canada, Switzerland and Singapore is the U.S. Dollar.

Gains and losses resulting from foreign currency transactions are included in the consolidated statements of operations in other income, net. Foreign exchange transaction losses aggregating $24 in the second quarter of 2017 compare to gains of $64 in the second quarter of 2016. Foreign exchange transaction losses aggregating $47 in the first six months of 2017 compare to transaction gains of $262 in the first six months of 2016.

Revenue

Revenue by Geographic Regions: We classify our sales by customer location in three geographic regions: 1) EMEA, which includes Europe, Middle East and Africa; 2) the Americas, which includes sales in North, Central, and South America; and 3) Asia Pacific (APAC), which also includes Australia, New Zealand, and India. The breakdown of revenue in each of our major geographic areas was as follows:

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Three months ended June 30:

	EMEA	Americas	APAC	Total
Total Revenue:				
2017	$21,726	$11,416	$12,552	$45,694
2016	$24,181	$ 8,705	$21,407	$54,293
Percent of Total:				
2017	48%	25%	27%	100%
2016	45%	16%	39%	100%

Six months ended June 30:

	EMEA	Americas	APAC	Total
Total Revenue:				
2017	$40,096	$23,540	$24,022	$ 87,658
2016	$44,695	$16,229	$40,136	$101,060
Percent of Total:				
2017	46%	27%	27%	100%
2016	44%	16%	40%	100%

Total revenue of $45,694 for the second quarter of 2017 decreased $8,599, or 16%, from the second quarter of 2016. For the first six months of 2017, total revenue of $87,658 decreased $13,402 or 13% from the first six months of 2016.

Revenue generated in EMEA during the second quarter of 2017 was $21,726, or 10% lower than the second quarter of 2016. For the first six months of 2017, revenue generated in EMEA was $40,096, or 10% lower than the first six months of 2016. The decrease is primarily caused by lower hardware revenues partially offset by improved non-hardware revenues.

Revenue generated in the Americas for the second quarter of 2017 was $11,416, or 31%, higher than the second quarter of 2016. For the first six months of 2017, revenue generated in the Americas was $23,540, or 45% higher than the first six months of 2016. The increase for the first quarter and first six months of 2017 compared to the same period in 2016 was primarily due to increased revenues from non-hardware products, including eSignLive.

Revenue generated in the Asia Pacific region during the second quarter of 2017 was $12,552, or 41%, lower than the second quarter of 2016. For the first six months of 2017, revenue was $24,022, or 40% lower than the first six months of 2016. The revenue decline for both periods was attributed to lower hardware revenues.

We believe comparison of revenues between periods is heavily influenced by the timing of orders and shipments reflecting the transactional nature of our business. As a result of the volatility in our business, we believe that the overall strength of our business is best evaluated over a longer term where the impact of transactions in any given period is not as significant as in a quarter-over-quarter comparison.

Gross Profit and Operating Expenses

The following table sets forth, for the periods indicated, certain consolidated financial data as a percentage of revenue for the three and six months ended June 30, 2017 and 2016:

	Three months ended June 30, 2017	Three months ended June 30, 2016	Six months ended June 30, 2017	Six months ended June 30, 2016
Revenue				
Products	75.4%	84.4%	75.3%	83.6%
Services and other	24.6%	15.6%	24.7%	16.4%
Total revenue	100.0%	100.0%	100.0%	100.0%
Cost of goods sold				
Products	24.2%	28.9%	23.5%	28.2%
Services and other	5.7%	3.8%	5.8%	3.9%
Total cost of goods sold	29.9%	32.7%	29.3%	32.1%
Gross profit	70.1%	67.3%	70.7%	67.9%
Operating costs:				
Sales and marketing	33.6%	28.8%	33.1%	28.2%
Research and development	13.8%	11.5%	13.9%	11.7%
General and administrative	18.8%	16.7%	18.8%	17.2%
Amortization of purchased intangible assets	4.8%	4.1%	5.0%	4.4%
Total operating costs	71.0%	61.1%	70.8%	61.5%
Operating income	-0.9%	6.2%	-0.1%	6.4%
Interest income	0.7%	0.3%	0.7%	0.3%
Other income (expense)	0.8%	0.5%	0.7%	0.6%
Income before income taxes	0.6%	7.0%	1.3%	7.3%
Provision for income taxes	0.4%	1.8%	0.5%	2.3%
Net income	0.2%	5.2%	0.8%	5.0%

Gross Profit

Gross profit for the quarter ended June 30, 2017 was $32,048, a decrease of $4,503, or 12%, from the quarter ended June 30, 2016. Gross profit as a percentage of revenue (gross profit margin) was 70% for the quarter ended June 30, 2017, as compared to 67% for the quarter ended June 30, 2016. The increase in gross profit as a percentage of revenue for the first quarter of 2017 compared to 2016 primarily reflects a decrease low margin cardreaders as a portion of total revenues, an increase in software solutions as a percentage of total revenues, and an increase in sales of higher margin hardware devices.

Gross profit for the six months ended June 30, 2017 was $61,960, a decrease of $6,694, or 10%, from the comparable period in 2016. Gross profit as a percentage of revenue (gross profit margin) was 71% for the six months ended June 30, 2017 and 68% for the six months ended June 30, 2016. The increase in gross profit as a percentage of revenue for the first half of 2017 compared to 2016 primarily reflects the same factors noted above for the comparison of the second quarter of 2016 to the second quarter of 2015.

The majority of our inventory purchases are denominated in U.S. Dollars. Our sales are denominated in various currencies including the Euro. As the U.S. Dollar strengthened against the Euro in the second quarter and first half of 2017 compared to the same periods of 2016, revenue from sales made in Euros decreased, as measured in U.S. Dollars, without a corresponding change in the cost of goods sold. The impact of changes in currency rates are estimated to have decreased revenue by approximately $303 in the second quarter and decreased revenue by approximately $1,098 in the first six months of 2017. Had currency rates in 2017 been equal to rates in 2016, the gross profit margin would have been approximately 0.2 percentage points higher for the second quarter of 2017 and 0.3 percentage points higher for the first six months of 2017.

Operating Expenses

Our operating expenses are generally based on anticipated revenue levels and are fixed over short periods of time. As a result, small variations in revenue may cause significant variations in quarter-to-quarter comparisons of operating income or operating income as a percentage of revenue.

Operating expenses for the quarter and six months ended June 30, 2017 were $32,448 and $62,059, respectively, a decrease of $717, or 2%, from the second quarter of 2016, and a decrease of $95, or 0.2%, from the six months ended June 30, 2016.

Generally, the most significant factor driving our operating expenses is headcount. Direct compensation and benefit plan expenses generally represent between 55% and 65% of our operating expenses. In addition, a number of other expense categories are directly related to headcount. We attempt to manage our headcount within the context of the economic environments in which we operate and the investments we believe we need to make for our infrastructure to support future growth and for our products to remain competitive. For the second quarter and first six months of 2017, average headcount was 4% and 7% higher, respectively, than the same periods in 2016.

Historically, operating expenses can be impacted by changes in foreign exchange rates. As noted above, we estimate that the change in currency rates in 2017 compared to 2016 resulted in an decrease in operating expenses of approximately $507 for the three months ended June 30, 2017 and a decrease of $1,152 for the six months ended June 30, 2017, compared to the same periods in 2016.

The comparison of operating expenses can also be impacted significantly by costs related to our stock-based and long-term incentive plans. Operating expenses for the second quarter and first six months of 2017 included $832 and $1,932, respectively, of expenses related to long-term incentive plan costs compared to $1,845 and $3,878 of long-term incentive plan costs for the second quarter and first six months of 2016, respectively.

Sales and Marketing Expenses

Sales and marketing expenses for the quarter ended June 30, 2017 were $15,339, a decrease of $320, or 2%, from the second quarter of 2016. Sales and marketing expenses for the six months ended June 30, 2017, were $29,043, an increase of $515, or 2%, from the same period of 2016. This modest increase for the first six month of 2017 reflects an increase in overall headcount partially offset by a reduction of marketing expenses.

Average full-time sales, marketing, support, and operating employee headcount for the three and six months ended June 30, 2017 was 309 and 305, respectively, compared to 291 and 280 for the three and six months ended June 30, 2016, respectively. Headcount was 6% higher for the second quarter of 2017 compared to the second quarter of 2016, and 9% higher for the six months ended June 30, 2017 when compared to the same period in 2016.

Research and Development Expenses

Research and development expenses for the quarter ended June 30, 2017, were $6,320, an increase of $78, or 1%, from the second quarter of 2016. Research and development costs for the six months ended June 30, 2017, were $12,176, an increase of $369, or 3%, from the same period of 2016. The marginal increase in research and development for both periods reflected the impact of R&D tax credits, despite the increase in overall headcount for the period.

Average full-time research and development employee headcount for the three and six months ended June 30, 2017 was 225 and 226, respectively, compared to 227 and 221 for the second quarter and six months ended June 30, 2016, respectively. Headcount was approximately 1% lower, and 3% higher for the second quarter and first six months of 2017, respectively, when compared to the same periods in 2016.

General and Administrative Expenses

General and administrative expenses for the quarter ended June 30, 2017, were $8,588, a decrease of $474, or 5%, from the second quarter of 2016. General and administrative expenses for the six months ended June 30, 2017, were $16,441, a decrease of $951, or 5%, compared to the same period of 2016. The decrease in general and administrative expenses in the first quarter and six months of 2017 compared to the same periods in 2016, primarily reflected the decrease in long-term incentive plan expenses.

Average full-time general and administrative employee headcount for the three and six months ended June 30, 2017 was 91 and 89, compared to 84 and 81 for both the three and six months ended June 30, 2016, respectively. Average headcount for the second quarter and first six months of 2017 was 9% higher compared to the same periods in 2016.

Amortization of Intangible Assets

Amortization of intangible assets for three and six months ended June 30, 2017 was $2,201 and $4,399, respectively, a decrease of $1 and $28 for the comparable periods in 2016.

Interest Income

Consolidated net interest income was $340 and $630 for the three and six months ended June 30, 2017, as compared to $166 and $275 for the same periods in 2016. The increase in interest income for 2017 compared to the same periods in 2016 reflects an increase in the average interest rate earned on invested balances and an increase in the average invested balance.

Other Income, Net

Other income (expense) primarily includes exchange gains (losses) on transactions that are denominated in currencies other than our subsidiaries' functional currencies, subsidies received from foreign governments in support of our research and development in those countries and other miscellaneous non-operational, non-recurring expenses.

Other income for the three and six months ended June 30, 2017 was $373 and $588, respectively, compared to $252 and $614 for the comparable periods of 2016. Other income included exchange losses of $23 and $47 for the three and six months ended June 30, 2017 compared to exchange gains of $64 and $262 for the same periods in 2016.

Income Taxes

Income tax expense for the three and six months ended June 30, 2017 was $203 and $436, respectively, a decrease of $776 and $1,929 from the same periods in 2016. The decrease in tax expense in 2017 from 2016 is primarily attributable to lower pretax income.

Our estimated annual tax rate for 2017 before discrete items is expected to be 22%. This is lower than the U.S. statutory rate primarily due to income in foreign jurisdictions taxed at lower rates partly offset by valuation allowances on taxable losses, primarily Canada. Our ultimate tax rate will depend on the mix of earnings in various jurisdictions.

Our estimated annual tax rate for 2016 before discrete items was expected to be 26% in the second quarter. This was lower than the U.S. statutory rate primarily due to income in foreign jurisdictions taxed at lower rates, partly offset by valuation allowances on taxable losses. Discrete items related to a measurement period adjustment and changes to tax rates on deferred tax liabilities increased the full-year 2016 effective rate to 29% and increased the first half effective rate to 32%.

At December 31, 2016, we had foreign tax credit carryforwards of $7,027 for future U.S. tax returns. These foreign tax credits expire in 2023 through 2026. We have not provided a valuation reserve for the foreign tax credits as we believe it is more likely than not that they will be realized.

At December 31, 2016, we had deferred tax assets of $16,655 resulting from foreign and state NOL carryforwards of $58,110 and other foreign deductible carryforwards of $16,817. At December 31, 2016, we had a valuation allowance of $6,192 against deferred tax assets related to certain carryforwards.

Liquidity and Capital Resources

At June 30, 2017, we had net cash balances (total cash, cash equivalents and restricted cash less bank borrowings) of $56,402 and short-term investments of $99,814. At December 31, 2016, we had net cash balances of $49,345 and short-term investments of $94,856. We had no outstanding debt or restricted cash at June 30, 2017, or December 31, 2016.

Short-term investments at June 30, 2017, and December 31, 2016, consisting of high quality commercial paper with maturities of less than nine months, were held by our U.S. and Swiss entities and issued by domestic and foreign corporations.

Our working capital at June 30, 2017 was $152,413, an increase of $13,214 or 9% from $139,199 at December 31, 2016. The increase in the combined balance of cash and short-term investments as well as the increase in working capital at June 30, 2017 from December 31, 2016 primarily reflects the benefit of cash flow from operations for 2017.

As of June 30, 2017, we held $34,672 of cash and short-term investments in banks outside of the United States. Of that amount, $34,274 is not subject to repatriation restrictions, but may be subject to taxes upon repatriation.

We believe that our financial resources are adequate to meet our operating needs over the next twelve months.

Recently Issued Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers (ASU 2014-09), which supersedes nearly all existing revenue recognition guidance under U.S. GAAP. The core principle of ASU 2014-09 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration to which an entity expects to be entitled for those goods or services. The standard creates a five-step model to achieve its core principle: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the separate performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. In addition, entities must disclose sufficient information to enable users of financial statements to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. Qualitative and quantitative disclosures are required about: (i) the entity's contracts with customers; (ii) the significant judgments, and changes in judgments, made in applying the guidance to those contracts; and (iii) any assets recognized from the costs to obtain or fulfill a contract with a customer.

ASU 2014-09 is effective for annual periods beginning after December 15, 2016, and interim periods within such annual periods, using either of the following transition methods: (i) a full retrospective approach reflecting the application of the standard in each prior reporting period with the option to elect certain practical expedients, or (ii) an approach with the cumulative effect of initially adopting ASU 2014-09 recognized at the date of adoption. In August 2015, the FASB issued Accounting Standards Update No. 2015-14, *Revenue from Contracts with Customers: Deferral of Effective Date* deferring the new revenue standard one year and allowing adoption as of the original effective date.

In March 2016, the FASB issued ASU No.2016-08, *Revenue from Contracts with Customers: Principal versus Agent Considerations (Reporting Revenue Gross versus Net),* which provides guidance on assessing whether an entity is a principal or an agent in a revenue transaction and whether an entity reports revenue on a gross or net basis.

In April 2016, the FASB issued ASU No. 2016-10, *Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing,* which provides guidance on identifying performance obligations and accounting for licenses of intellectual property.

In May 2016, the FASB issued ASU No. 2016-12, *Revenue from Contracts with Customers: Narrow-Scope Improvements and Practical Expedients,* which makes narrow-scope amendments to ASU No. 2014-09 and provides practical expedients to simplify the transition to the new standard and clarify certain aspects of the standard.

In December 2016, the FASB issued ASU No. 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers,* which makes narrow-scope amendments to ASU No. 2014-09.

We are currently evaluating the impact of the new revenue recognition guidance including any impacts on associated processes, systems, and internal controls. Our evaluation includes determining the unit of account (i.e., performance obligations) and standalone selling price of each performance obligation. Standalone selling prices under the new guidance may not be substantially different from our current methodologies of establishing fair value on multiple element arrangements. Based on initial assessments, we have identified certain arrangements where revenue may be recognized earlier as compared to current practice. We expect to recognize term license revenue upon delivery, rather than over the term of the arrangement. We expect to capitalize certain sales commissions upon adoption of the new standard and are currently in the process of evaluating the period over which to amortize these capitalized costs. We continue to evaluate the impact of this guidance and subsequent amendments on our consolidated financial position, results of operations, and cash flows, and any preliminary assessments are subject to change. We will adopt this guidance as of the first quarter of 2018. We expect to adopt the cumulative effect transition method.

We adopted ASU 2015-11, *Inventory (Topic 330) – Simplifying the Measurement of Inventory* as of January 1, 2017. ASU 2015-11 requires measurement of inventory at the lower of cost or net realizable value, defined as estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. Adoption of ASU 2015-11 did not have a significant impact on our financial statements.

In February 2016, The FASB issued Accounting Standards Update No. 2016-02, *Leases*, which among other things, requires lessees to recognize most leases on balance sheet. ASU 2016-02 is effective for annual and interim periods in fiscal years beginning after December 15, 2018 and mandates a modified retrospective transition method. We are currently evaluating the impact of ASU 2016-02 on our consolidated financial statements.

In January 2017, The FASB issued ASU No. 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business*. ASU 2017-01 defines a business in the context of a set of transferred assets and activities. ASU 2017-01 is effective for annual and interim periods in fiscal years beginning after December 15, 2017 and applied prospectively. Early adoption is permitted. The Company is currently evaluating the effect the guidance will have on the Company's financial statements.

In January 2017, the FASB issued ASU 2017-04, *Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment.* ASU 2017-04 eliminates Step 2 of the goodwill impairment test, requiring determination of the implied fair value of goodwill by allocating the reporting unit fair value to assets and liabilities as if the reporting unit was acquired in a business acquisition. Updated guidance requires goodwill impairment equal to the excess of the carrying value over the fair value of the respective reporting unit. Updated guidance is effective beginning January 1, 2020 and will be applied on a prospective basis. Early adoption is permitted. We are currently evaluating the impact of this updated guidance.

In March 2017, the FASB issued ASU No. 2017-07, *Compensation-Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost.* The updated accounting guidance requires changes to the presentation of the components of net periodic benefit cost on the income statement by requiring service cost be presented with other employee compensation costs and other components of net periodic pension cost be presented outside of any subtotal of operating income. The ASU also stipulates that only the service cost component of net benefit cost is eligible for capitalization. The guidance is effective for interim and annual periods beginning after December 15, 2017. The Company is currently evaluating the effect of the guidance will have on the Company's financial statements.

From time to time, new accounting pronouncements are issued by the FASB or other standard setting bodies that are adopted by us as of the specified effective date. Unless otherwise discussed, our management believes that the impact of recently issued standards that are not yet effective will not have a material impact on our consolidated financial statements upon adoption.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

There have been no material changes in our market risk during the three and six months ended June 30, 2017. For additional information, refer to "Item 7A. Quantitative and Qualitative Disclosures about Market Risk", included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

Item 4. Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, who, respectively, are our principal executive officer and principal financial officer, conducted an evaluation of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Securities Exchange Act of 1934, as amended, (the "Exchange Act")) as of the end of the period covered by this Quarterly Report on Form 10-Q. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure (i) the information required to be disclosed by us in our reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and (ii) information required to be disclosed by us in our reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that due to the material weakness in our internal control over financial reporting described below and further in our Annual Report on Form 10-K for the year ended December 31, 2016, our disclosure controls and procedures were not effective as of June 30, 2017.

Changes in Internal Controls

As discussed in our Annual Report on Form 10-K for the year ended December 31, 2016, Management identified control deficiencies that constituted a material weakness in our internal control over financial reporting as of December 31, 2016. The deficiencies related to the acquisition and integration of Silanis Technology, Inc.

The Company has implemented additional controls and is in the process of executing a remediation plan. Management expects remediation of the material weakness will be completed in fiscal year 2017.

Subject to the foregoing, there were no changes in our internal control over financial reporting during our quarter ended June 30, 2017 which were identified in connection with management's evaluation required by paragraph (d) of Rules 13a-15 and 15d-15 under the Exchange Act that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on the Effectiveness of Controls

Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives. However, our management, including our Chief Executive Officer and Chief Financial Officer, do not expect that our disclosure controls and procedures or internal control over financial reporting will prevent all error and all fraud. A control system, no matter how well designed and implemented, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company are detected. The inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple errors or mistakes. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of controls' effectiveness to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and may not be detected.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings.

In addition to the legal matters described below, we are, from time to time, involved in routine legal matters incidental to the conduct of our business, including legal matters such as to protect our intellectual property rights and resolve employment claims. We believe that the ultimate resolution of any such current routine matter will not have a material adverse effect on our continued financial position, results of operations or cash flows.

On January 10, 2011, we purchased our wholly-owned subsidiary, DigiNotar B.V., a private company organized and existing in The Netherlands from the shareholders ("Sellers"). On September 19, 2011, DigiNotar B.V. filed a bankruptcy petition under Article 4 of the Dutch Bankruptcy Act in the Haarlem District Court, The Netherlands. On September 20, 2011, the court declared DigiNotar B.V. bankrupt and appointed a bankruptcy trustee and a bankruptcy judge to manage all affairs of DigiNotar B.V. through the bankruptcy process. The trustee took over management of DigiNotar B.V.'s business activities and is responsible for the administration and liquidation of DigiNotar B.V. In connection with the bankruptcy of DigiNotar B.V., subsequent to September 20, 2011, a number of claims and counter-claims were filed with the courts in The Netherlands (collectively, the "Court") related to discontinued assets and discontinued liabilities and other available remedies.

On July 30, 2014, the Court issued a judgment in favor of VASCO for €4,108 ($5,176 at an exchange rate of 1.26 U.S. Dollars per Euro, all amounts in thousands) plus interest related to the Sellers' failure to achieve earn-out targets established in the purchase agreement, breach of certain representations and warranties under the share purchase agreement and reimbursement of certain costs incurred by VASCO as a result of such breach. The judgment was subject to additional legal proceedings.

In November 2014, all matters with the Sellers related to the sale of DigiNotar B.V. were settled for €2,263 ($2,854 at an exchange rate of 1.26 U.S. Dollars per Euro, all amounts in thousands). The funds were applied first in full satisfaction of the previously recorded contingent consideration due from escrow included in assets of discontinued operations and the remainder of $1,088 recorded as income from discontinued operations net of tax of $108.

In January 2015, we received a notice of potential claim by the trustee against all of the individuals who served as Directors of DigiNotar, both before and after our acquisition of DigiNotar. T. Kendall Hunt, Jan Valcke, and Clifford K. Bown were the Directors of DigiNotar following its purchase by VASCO. The basis for the potential claim from the trustee appears to be based primarily on the same arguments that VASCO presented in its case against the sellers, which were adjudicated in VASCO's favor. While we believe that we have strong defenses against the claim, we have also notified our provider of director and officer insurance should a claim be filed and we do not expect the resolution of the potential claim to have a material adverse effect on our business, financial condition or results of operations. VASCO is indemnifying Messrs. Hunt, Valcke, and Bown for this matter.

On July 28, 2015 a putative class action complaint was filed in the United States District Court for the Northern District of Illinois, captioned Linda J. Rossbach v. Vasco Data Security International, Inc., et al., case number 1:15-cv-06605, naming VASCO and certain of its current and former executive officers as defendants and alleging violations under the Securities Exchange Act of 1934, as amended. The suit was purportedly filed on behalf of a putative class of investors who purchased VASCO securities between April 28, 2015 and July 28, 2015, and seeks to recover damages allegedly caused by the defendants' alleged violations of the federal securities laws and to pursue remedies under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 and Rule 10b-5 promulgated thereunder. The complaint seeks certification as a class action and unspecified compensatory damages plus interest and attorneys' fees. Pursuant to a September 1, 2015 scheduling order entered by the court, the lead plaintiff, once appointed, will have sixty days to file an amended complaint or notify the defendants that the lead plaintiff intends to rely on the current complaint. On January 30, 2017, the appointed lead plaintiff filed an amended complaint in which the allegations regarding OFAC related matters were dropped and replaced with allegations regarding public disclosures made by the defendants in April 2015 as compared to public statements made in July 2015, generally regarding the strength of the Company's business and its future prospects. This case is now referred to by the name of the new lead plaintiff, Bunk. The defendants filed a motion to dismiss the Bunk complaint on March 31, 2017. Although the ultimate outcome of litigation cannot be predicted with certainty, the Company believes that this lawsuit is without merit and intends to defend against the action vigorously. VASCO is indemnifying Messrs. Hunt, Valcke, and Bown for this matter.

On October 9, 2015, a derivative complaint was filed in the United States District Court for the Northern District of Illinois, captioned Elizabeth Herrera v. Hunt, et al., case number 1:15-cv-08937, naming VASCO's Board of Directors and certain of its current and former executive officers as individual defendants and the Company as a nominal defendant. The plaintiff in the Herrera case voluntarily dismissed the action on July 12, 2017. Two additional complaints, captioned Beth Seltzer v. Hunt, et al., case number 2015-ch-15541, and William Hooper v. Hunt, et al., case number 2016-ch-04054, were filed on October 22, 2015 and March 22, 2016, respectively, in the Circuit Court of Cook County, Illinois naming the same defendants.

The complaints assert, among other things, that the individual defendants breached their fiduciary duties by making material misstatements in, and omitting material information from, the Company's public disclosures and by failing to maintain adequate internal controls and properly manage the Company. Among other things, the complaints seek unspecified compensatory damages and injunctive relief.

On October 29, 2015, a defendant removed the Seltzer action to the United States District Court for the Northern District of Illinois. Thereafter, the plaintiff filed a motion to remand the action back to the Circuit Court of Cook County, Illinois, which was denied on February 3, 2016. On February 9, 2016, the court granted an agreed motion for voluntary dismissal of the Seltzer action, which dismissed the action with prejudice as to the named plaintiff's individual claims. As for the Hooper action, the court granted a stay on June 8, 2016 and on July 18, 2017, the plaintiff in Hooper amended the complaint to largely mirror the amended complaint in Bunk.

In February 2017, we learned that one of our integrated reseller customers, and certain of its end customers, were named as defendants in a patent infringement lawsuit in Japan related to our CRONTO technology. We have indemnification obligations in favor of our customer and are working with them to defend such suit. We believe there are strong grounds to argue that the plaintiff's patent is invalid and we are defending our technology vigorously. However, the outcome of this suit is uncertain. If the plaintiff were able to succeed in this case and impede our ability to sell, and our customers' ability to use, products utilizing our CRONTO technology, then such result could have a material adverse impact on our business and results of operations.

On March 14, 2017, a complaint was filed in the United States District Court for the District of Massachusetts, captioned StrikeForce Technologies, Inc. v. Vasco Data Security International, Inc., et al., claiming VASCO infringed on certain patent rights of the plaintiff. On May 8, 2017, VASCO answered the complaint denying the allegations of patent infringement. The parties are currently engaged in early motion practice in the case. The plaintiff has also brought suit against various other companies in the cybersecurity industry. Although the ultimate outcome of litigation cannot be predicted with certainty, the Company believes that this lawsuit is without merit and intends to defend itself vigorously.

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

(c) The following table provides information about purchases by the Company of its shares of common stock during the three month period ended June 30, 2017:

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (2)	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs (2)
April 1, 2016 through April 30, 2016	1,241	$ 17.05	0	0
May 1, 2016 through May 31, 2016	32,072	$ 16.53	0	0
June 1, 2016 through June 30, 2016	1,628	$ 16.96	0	0

(1.) All transactions represent surrender of vested shares in satisfaction of mandatory minimum tax withholdings by grantees under the 2009 Equity Incentive Plan.

(2.) The Company has no publicly announced plans or programs to repurchase its shares.

Item 5. Other Information.

During the second quarter of 2015, our management became aware that certain of our products which were sold by our European subsidiary to a third-party distributor may have been resold by the distributor to parties in Iran, potentially including parties whose property and interests in property may be blocked pursuant to Executive Order 13224, Executive Order 13382 or that may be identified under Section 560.304 of 31 C.F.R. Part 560 as the "Government of Iran".

We ceased shipping to such distributor. In addition, the Audit Committee of the Company's Board of Directors initiated an internal review of this matter with the assistance of outside counsel. As a precautionary matter, concurrent initial notices of voluntary disclosure were submitted on June 25, 2015 to each of the U.S. Department of the Treasury, Office of Foreign Assets Control ("OFAC"), and the U.S. Department of Commerce, Bureau of Industry and Security ("BIS").

The Audit Committee with the assistance of outside counsel has completed their review. On December 15, 2015, we filed a letter with BIS (Office of Export Enforcement) with the conclusion that the products supplied to the distributor were not subject to United States Export Control jurisdiction. The Office of Export Enforcement issued a "no action" letter, concluding the voluntary self-disclosure process under the Export Administration Regulations.

In addition, on January 13, 2016, we filed a letter with OFAC, with the conclusions that VASCO and its subsidiaries made no direct sales to Iran or any party listed by OFAC as a Specially Designated National over the five-year period under review (i.e., June 1, 2010 to June 30, 2015). The letter further noted that the investigation did not identify any involvement on the part of senior management officials of VASCO, and to the contrary, noted that VASCO executive management officials had sought to implement procedures and provided notices to VASCO's sales personnel to prevent the diversion of VASCO products to unauthorized destinations and end users.

We have not received any response to the letter to OFAC and we cannot predict when OFAC will conclude their review of our voluntary self-disclosures. Based upon the OFAC guidelines for monetary penalties, in the fourth quarter of 2015, we accrued $900 for potential penalties if they are assessed by OFAC. Ultimately no penalty may be assessed or the penalty may be less or greater than the accrual, but in any event we do not believe that the final settlement will have a material adverse impact on our business.

Item 6. Exhibits.

Exhibit 31.1—Rule 13a-14(a)/15d-14(a) Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated August 3, 2017.

Exhibit 31.2—Rule 13a-14(a)/15d-14(a) Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated August 3, 2017.

Exhibit 32.1—Section 1350 Certification of Principal Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, dated August 3, 2017.

Exhibit 32.2—Section 1350 Certification of Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, dated August 3, 2017.

Exhibit 101.INS – XBRL Instance Document

Exhibit 101.SCH – XBRL Taxonomy Extension Schema Document

Exhibit 101.CAL – XBRL Taxonomy Extension Calculation Linkbase Document

Exhibit 101.LAB—XBRL Taxonomy Extension Label Linkbase Document

Exhibit 101.PRE – XBRL Taxonomy Extension Presentation Linkbase Document

Exhibit 101.DEF – XBRL Taxonomy Extension Definition Linkbase Document

* Certain exhibits, schedules and annexes have been omitted pursuant to Item 601(b)(2) of Regulation S-K. VASCO undertakes to furnish supplementally copies of any such omitted items upon request by the Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized, on August 3, 2017.

VASCO Data Security International, Inc.

/s/ Scott Clements
Scott Clements
Chief Executive Officer

/s/ Mark S. Hoyt
Mark S. Hoyt
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

EXHIBIT INDEX

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EXHIBIT 31.1

Certification of Principal Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Scott Clements, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of VASCO Data Security International, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting or caused such internal control over financial reporting to be designed under our supervision to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by the report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons fulfilling 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.

Dated: August 3, 2017

/s/ Scott Clements
Scott Clements
Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

Certification of Principal Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Mark S. Hoyt, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of VASCO Data Security International, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting or caused such internal control over financial reporting to be designed under our supervision to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by the report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons fulfilling 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.

Dated: August 3, 2017

/s/ Mark S. Hoyt
Mark S. Hoyt
Chief Financial Officer
(Principal Financial Officer and Principal
Accounting Officer)

EXHIBIT 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

I, Scott Clements, certify, based upon a review of the Quarterly Report on Form 10-Q for VASCO Data Security International, Inc. for the quarter ended June 30, 2017, that to the best of my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

/s/ Scott Clements
Scott Clements
Chief Executive Officer

August 3, 2017

EXHIBIT 32.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

I, Mark S. Hoyt, certify, based upon a review of the Quarterly Report on Form 10-Q for VASCO Data Security International, Inc. for the quarter ended on June 30, 2017, that to the best of my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

/s/ Mark S. Hoyt
Mark S. Hoyt
Chief Financial Officer

August 3, 2017